<table>
<thead>
<tr>
<th>Table of Contents</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brief Oral Presentations</td>
<td>1 – 205</td>
</tr>
<tr>
<td>Poster Presentations</td>
<td>206 – 408</td>
</tr>
<tr>
<td>Poster Workshop Presentations</td>
<td>409 – 433</td>
</tr>
<tr>
<td>Symposium Presentations</td>
<td>434 – 682</td>
</tr>
<tr>
<td>Video Presentations</td>
<td>683</td>
</tr>
<tr>
<td>Workshop Presentations</td>
<td>684 – 688</td>
</tr>
<tr>
<td>Invited Speakers’ Presentations</td>
<td>689 – 690</td>
</tr>
<tr>
<td>Masterclass Presentations</td>
<td>691 - 710</td>
</tr>
<tr>
<td>Author Index</td>
<td>711 – 741</td>
</tr>
</tbody>
</table>
Fathers who grew up in out-of-home placements: Impact on well-being and current family situation

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The study explores the current family situation and psychological stress of fathers who experienced trauma and different kinds of youth welfare services including out-of-home placement during their childhood. The main group consisted of n= 119 fathers and was compared to a group of n= 36 fathers whose families never received services from the child and youth welfare authority in Germany. Traumatic experiences were rated with the Maltreatment Classification Scale (Barnett, Manly, Cicchetti, 1993) using the Adult Attachment Interview (George, Kaplan & Main, 1985). The stress was assessed by the Brief-Symptom Inventory (Derogatis, 1993), and sociodemographic variables using a short interview. In the main group, a high correlation was found between trauma and current psychological stress, albeit the out-of-home care intervention or intensive home-support by child and youth welfare services. The higher stress level in the main group of fathers in contrast to the comparison group effects their current family situation, especially concerning the contact between fathers and children. Fathers with higher stress levels were less likely to be in contact with their children. Acting on the assumption that fathers are important for their children, the results implicate a heightened focus on earlier trauma-informed interventions in families with difficulties and out-of-home care settings, to reduce stress levels and prevent intergenerational transmission of problematic family experiences. Current child and youth welfare services, in particular out-of-home placements, should take these trauma-informed approaches and therapy into account.


Parent-infant interactions are related to preterm status and sensory processing

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Introduction and Aims: Preterm birth can have a substantial impact on the quality of parent-infant interactions. Sensory processing difficulties, common in preterm infants, are associated with poorer parent-infant interaction quality. However, there is a paucity of research examining the links between the quality of parent-infant interaction, preterm birth, and sensory processing difficulties. This study aimed to examine the associations between parent-infant interaction quality, preterm status, and infant sensory processing.

Material and Methods: 67 parent-infant dyads (12-months; 22 preterm, 45 full-term) participated in a 15-minute play interaction. Parents completed the Infant and Toddler Sensory Profile-2 questionnaire. Interaction quality was rated using the Parenting Interactions with Children: Checklist of Observations Linked to Outcomes.

Results: Preterm and full-term infants differed in sensory processing and interaction quality. Infant prematurity was associated with visual ($r = 0.37$, $p = 0.005$), touch ($r = 0.39$, $p = 0.002$), and movement ($rs = 0.32$, $p = 0.01$) sensory domains. Prematurity was also associated with parent interaction domains of responsivity ($rs = 0.43$, $p = 0.001$), teaching ($rs = 0.31$, $p = 0.02$), and interaction total score ($r = 0.34$, $p = 0.01$). Further, interaction quality was related to sensory registration ($rs = 0.38$, $p = 0.008$), auditory ($rs = 0.34$, $p = 0.02$), seeking ($rs = 0.29$, $p = 0.05$) and sensory behavioural scores ($rs = 0.52$, $p < 0.001$). Overall, interaction quality was predicted by infant prematurity and auditory scores, $R^2 = 0.15$, $F(1, 47) = 4.01$, $p = 0.02$.

Conclusions: Preterm infants differed from full-term peers in their sensory processing and parent-infant interactions. Preterm status was associated with less responsivity and teaching and predicted overall interaction quality. Poorer infant sensory processing was associated with less parental teaching, affection, and responsivity during interactions. These findings support the further examination of the relationship between preterm birth, sensory processing, and parent-infant interaction quality.
The LifeStories Project: Impact of infant institutionalization. A 60-year follow-up study

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Although well cared for in terms of nutrition, hygiene, and medical care, infants in institutional settings grew up under conditions of psychosocial deprivation, i.e. without sensitive caregiving and insufficient stimulation before 1981 under the legal context and historic care practices in Switzerland. In the late 1950-ies, 431 infants were tested on health and development as part of a population-based survey of infants placed in institutions in the canton of Zurich, Switzerland and compared with a community sample (n=445, Zurich Longitudinal Studies) of children growing up in families. Significant development delays were found in infants placed in institutions.

In a 60-year follow-up study, 83% of individuals were found through population registry (institutionalized = 127, response rate 52%; non-institutionalized = 202; response rate 60%) and assessed on their development, health and life trajectory. Initial survival analyses showed that individuals placed in institutions were more likely to have already passed away, particularly males (HR, 95% CI [0.88, 7.52], B = 0.94, p = .085). We also found that formerly institutionalized individuals scored lower on a range of outcomes compared to non-institutionalized individuals such as socio-economic indicators (B=0.43, p<.001), physical health (B=0.21, p=0.03), mental health (B=-0.09, p=0.01), satisfaction with life (B=0.3, p=0.01) and cognitive abilities (e.g. working memory B=0.89, p<.001).

Initial linear regression model analyses showed that longer duration of institutional stay was associated with worse outcomes (satisfaction with life: B=-1.69, p<.001; health: B=-0.79, p=0.068). On the other hand, individuals who received more family visits reported a higher income (B=0.94, p=0.011), had better cognitive abilities (e.g. similarities B=4.54, p=0.013) and higher satisfaction with life (B=0.73, p=0.053).

This 60-year follow-up is a unique opportunity to shed light onto the mystery of long-term adaptation and is relevant for the physical and mental health after infant institutionalization, a practice that is still very common around the world.
Subjectivity of the infant in family therapy: Perspectives of infant mental health experts (study prospectus)

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Background: Early relational trauma between parent and infant during critical periods of brain and psychological development represents a potentially cascading pattern of risk. Public health investments in well-targeted interventions are needed. Multiple relational interventions offer timely perinatal support to assist parents’ reflective functioning and caregiver sensitivity. However, most intervention formats are individual or dyadic, with very few family-based interventions that focus on infant mental health (IMH) in clinically indicated populations. Systemic, family-based interventions have been found efficacious for older children and their families, offering promise for their use in IMH.

Aims: We aim to collate IMH experts’ opinions regarding the opportunity and suitability of family treatment options that meaningfully include the infant. Further, we seek to understand the infant in social contexts beyond the dyad, emphasizing a whole-of-family perspective with a focus on value, benefits, and challenges.

Methods: We intend to recruit 16 international IMH experts to participate in one-on-one semi-structured online interviews, allowing for thematic analysis. To be eligible for the current study, experts are required to have more than five years’ IMH clinical and/or relevant research experience, and currently work in a clinical and/or research setting.

Results: Preliminary results highlight that “the need for family therapy in IMH is not only necessary but obvious” (Participant 1), labeling infant-family therapeutic work as “the next frontier in IMH” and “where the field needs to put our collective efforts” (Participant 5). Results motivate expanding family therapy graduate programs to more meaningfully appreciate the infant’s contributions to family therapy: “If you want family therapists to be more interested in the infant, you have to train them” (Participant 4).

Conclusions: Expansion and integration of the IMH field and family therapy appears necessary. Overlooking the infant in the family therapy context discounts the profound and lasting developmental progressions of infancy, and the infant’s meaningful communicative contributions.
Infant and Pre-school attachment, continuity and relationship to caregiving sensitivity: new and historic findings.

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Introduction and Aim: Here we report the prevalence and temporal stability of child attachment and parental caregiving behaviour, from infancy (1 year) to pre-school (4 years) in a new population cohort, and examine findings against the past decades of findings in community cohorts. Materials and Methods: We used observational data on attachment behaviour collected on third generation infant and toddler offspring within one of Australia’s longest running studies of social and emotional development. We also ran systematic reviews of historic findings. Results: At 1 year (n=314 dyads) and at 4 years (n=368 dyads) the proportion assessed Secure was 59% and 71%, respectively. The proportion assessed as Avoidant was 15% and 11%; Ambivalent 9% and 6%, and Disorganized was 17% and 12%, at 1 and 4 years, respectively. Continuity of attachment pattern was highest for the infant Secure group. Conclusions: Our contemporary estimates are consistent with historical trends from earlier community-based studies (since 1978), highlighting the stability of attachment behaviours in the context of notable secular change.
The Distance-Closeness Continuum as a Source of Resilience for Mothers Have Given Birth During COVID-19

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Background: In late 2019, COVID-19, began to spread worldwide. In February 2020, the virus reached Israel, and in March 2020, various social distancing restrictions were imposed on the public. Aims: Given various studies worldwide that drew a link between the pandemic and heightened anxiety and stress among women during pregnancy, this study explored the experiences of Israeli women who gave birth during COVID-19. It was designed to identify their narrative and address their sources of formal and informal support. Methods: This exploratory qualitative study thematically analyzed semi-structured interviews of 15 Israeli women who gave birth during the first-third COVID-19 waves (March 2020-March 2021). Findings: Three themes emerged: dilemmas around the experiences of pregnancy, childbirth and parenthood; duality and continuity between the need for protective family closeness and the fear that dictates social distance; and the role social media. Conclusions: The coping of women who have given birth during COVID-19 present a complex set of factors, including resilience, difficulties, concerns and uncertainties. These are discussed in the context of their coping along the distance-closeness continuum with reference to issues raised by the participants and further studies on mothers’ resilience during COVID-19. Implications to practice: We propose future interventions aimed at enhancing mothers’ the sense of resilience of women in this period of life under conditions of social distancing that will also contribute to the wellbeing of infants born during that period.
«Unfit» fathers? Paradoxical posture of street youth becoming parents.

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Our study explores the experience of young fathers (18-30 years old) living in precarious conditions, such as residential instability, substance abuse, run ins with the law, etc., now identified as at risk of mistreating their offspring after having been themselves under the care of youth protection services often since infancy.

To address this issue of transgenerational reproduction of high risk parenting, we conducted in a Montreal community organization (Dans La Rue) individual in-depth interviews (2 per participant) with 16 fathers having lost or being on the verge of losing the custody of their young children (most of them are under 2 years old). For two of them, interviews were conducted with the use of a concomitant "free genogram" (meaning that a projective dimension is added). All data was submitted to qualitative conceptual analysis, allowing a conceptualization of the phenomenon of paternity within this population.

So-called "accidental" births are in fact the result of pre-existing unconscious conflictual concerns which will ultimately affect every step of caring for the new-born and subsequent phases of child-rearing. Salient themes of filiation, transmission, wish for a child, obsessive questioning (unsolved conflicts), and affective expectations, highlight the particular cathexis of their offspring and their function within their own life trajectory. At work in the paradoxical desire to invest their child while reproducing a distance once experienced as deleterious to themselves is a complex interplay of representations of fatherhood in terms of social roles, paternal function and physical absence.

The current quasi exclusive focus on mothers at risk may unwittingly contribute to the ongoing reproduction of the absentee or «unfit» father, depriving generation after generation of new-borns. Our study is a first step towards identifying components of transgenerational transmission which can be addressed in clinical work with young fathers.
Psychosocial Correlates of Maternal-Fetal Attachment Anxiety for Second-Time Mothers and What We Should Know

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Introduction and Aim of the Study: Many women not only go through the transition to motherhood with the birth of their first child, but also another transition with the birth of their second child. Few studies address the concerns of second-time mothers, who report worrying about how they will care for two children or whether they will love the second baby as much as their first child. The current study examined mother-fetal attachment anxiety (MFAA) with their second baby, the psychosocial correlates (e.g., depression, marital distress, adult attachment insecurity) of mothers’ attachment anxiety to the baby, and the prediction of mother-infant bonding (MIB) postpartum.

Material and Methods: U.S. Mothers (89.6% White, N = 241) expecting their second baby participated in a longitudinal investigation starting in the last trimester (prenatal: P) and then 1, 4, 8, and 12 months postpartum. Mothers completed self-reports of MFAA, depression, marital quality, adult attachment, and security of the mother-firstborn (FB) attachment at P. Mothers also reported on MIB when babies were 1, 4, 8, and 12 months old.

Results: Most women reported little to no worry about attachment to the second baby (89.6%). Higher MFAA was, however, correlated with more depressive symptoms, more marital distress, an insecure mother-FB attachment, and adult attachment avoidance/ambivalence before birth. MFAA predicted less MIB (less warmth and closeness) at 1, 4 and 8 months after birth.

Conclusions: Women concerned about loving their second baby as much as their first appear to be surrounded by a network of attachment insecurity in relations with partner, firstborn, and infant, as well as mental health difficulties. Infant mental health providers working with women in the perinatal period should take note when second-time mothers express worries about loving their second baby as much as their first, and screen for maternal depression and anxiety symptoms.
Shared Pleasure in Mother-Infant Interactions in LMIC settings

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Positive shared emotions in infant–caregiver relationships build social, intellectual and psychological resources for the infant, which facilitates optimal growth and development.

Aims
The aims of the study were to determine the frequency and duration of SP moments in infants born to mothers with and without mental illness, to correlate SP with infant toddler development and the presence of sustained infant withdrawal.

Methods
Shared pleasure (SP) moments are defined as “the parent and the child sharing positive affect in synchrony”. SP sequences are analysed from free play video recordings of mother–infant interaction situations.

Results
The first study in a clinical setting (n=91) showed an overall low occurrence of SP moments (20%), although significantly more SP moments (p = 0.02) were recorded in mothers with no mental illnesses. There was a significant correlation between low occurrence of SP and higher rates of Infant withdrawal (p = 0.0002) using ADBB. Interestingly, in this sample of high-risk infants, those who experienced SP moments with their mothers at 6 months showed an improvement in cognitive (p = 0.052) and motor (0.007) scores at 18 months. In a study of SP in a community-based setting, 291 infants and mothers showed a much higher occurrence (82%) of SP. There were no associations with SP and any risk factors, including on- screens of substance use, intimate partner violence, or postpartum depression.

Conclusions
The high frequency of SP in a sample of high exposure to risk factors may suggest that SP in reciprocal interactions may only be disrupted in extreme cases(such as severe mental illness) and so may serve as an early red flag for screening if absent early in the interaction. In a LMIC such as South Africa, SP may be considered as a potential screening tool for early, culturally appropriate social connectedness.
The Construction of Coparenting in First-Time Parental Couples: Integrating their Representations and Interactions

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1
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The transition to parenthood is a period of transformation and adjustments for all the members of the new family, as relational dynamics emerge that influence its development and tend to remain stable during children's first years of life. Through a mixed and longitudinal methodology, the present study sought to identify the representations of coparenting of both members of the parental couple as well as their family interactions at three points in time. In-depth interviews were conducted with 17 heterosexual couples of legal age during the pregnancy and postpartum period of their first child. The Lausanne Trilogue Play was also administered to them on these occasions. The main results obtained revealed that the couples generally had stable trajectories over time: those that had cooperative interactions showed representations characterized by co-responsibility and an open communication style, whereas those with conflict-laden interactions featured traditional gender models and a tacit communicative style. It is necessary to promote co-responsibility and dialogue within couples in order promote more cooperative relational dynamics in the family.
How does the use of smartphones change for new mothers?

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Today’s adults are likely to use smartphones, which are pervasive in their abundance and persuasive in design. Using a smartphone during infant care is associated with suboptimal outcomes for the parent/child relationship, and therefore child development. Empirical information about the extent to which mothers’ smartphone use reflects an understanding of potential harm, and whether their smartphone perceptions, intentions and behaviours change at the transition to parenthood, has been lacking. To address this, we used a pre- and post-partum, matched-controlled observational design, in which first time mothers (n=65) and their nominated “research buddies (RB)” (n=29) were surveyed and used a screen-time tracking app (Moment) for seven days. Data were gathered in late pregnancy, and again at 6-8 weeks postpartum. Pregnant women and RB had mean phone use of 205 and 198 minutes/day (range: 37-562 mins/day, 61-660 minutes/day), respectively. Pregnant women and RB had mean daily phone pickups of 53 and 54 (range: 2-223 pickups/day, 5-142 pickups/day) respectively. Postpartum, both groups saw increases in both measures; the new mothers’ time on device increase being statistically significant (p<0.001). These measured increases contrast with a reduction in both groups’ scores on the Mobile Phone Problem Use Scale, 10 question version (MPPUS-10), a self-report scale assessing problematic smartphone use. For the new mothers, the average matched MPPUS-10 score saw a statistically significant reduction. This suggests that women’s perceptions of their smartphone use differed from their objectively measured use. These findings, along with other results, reinforce calls by other researchers regarding the need for guidelines for new parents about limiting smartphone use in infants' presence. This project includes this call for guidelines as part of a suite of recommendations to support new mothers in enjoying the benefits of smartphone use while minimising the potential for harm to the parent/infant relationship, and therefore to child development.
BRAC 0-2 Father’s Engagement Model: Patriarchal values of Fatherhood to Establish Support for Child Development

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We know that children thrive within safe, nurturing spaces which allow them to be curious and explore. Fathers play a vital role in fostering such an environment. In Bangladesh, as in many other countries in South Asia, fathers are considered ‘the head of the family and the primary decision makers who play very little part in caring for or spending time with their children. Rohingya communities are strongly patriarchal and these beliefs about fathers are firmly rooted.

Rohingya fathers living in humanitarian camps in Bangladesh have experienced and witnessed violence and brutality before fleeing their homeland. Patriarchal notions of fatherhood and masculinity have forced many Rohingya fathers to internalize their trauma and grief. Unresolved and unacknowledged feelings often manifest in harmful and dangerous ways, often towards themselves and towards their spouses and children. Gender-based violence, outbursts of anger towards children, and polygamy are common. BRAC recognizes it is essential to attend to the emotional care and wellbeing of fathers in programs of support for mothers and children. The Fathers’ Engagement intervention for fathers of children aged 0-2 years, is now an important component of BRAC’s Play to Learn Model.

BRAC’s 0-2 years Fathers’ Engagement intervention promotes the importance of fathers’ well-being in creating a safe, secure family environment in which their children can grow and thrive. The intervention encourages engagement and playful father-child interactions. It aims to demonstrate how in their role as fathers, these men can play an important role in fostering their children’s healthy development. The stories of the experience of some of the courageous fathers who have been involved will be shared.
Respect for indigenous knowledge through co-creating with communities: BRAC’s Approach to humanitarian work

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At the end of 2018, an estimated 15.9 million people across the globe were seeking refuge while living in situations of protracted displacement. Data from the United Nations High Commissioner for Refugees [UNHCR] determine such displacement now last an average of 26 years. Infants and young children healthy development cannot wait for settlement, and BRAC has committed to doing all it can to assist displaced communities care for their young children. From their work with displaced and refugee communities in Bangladesh and Uganda, BRAC has demonstrated the most effective interventions for a humanitarian context are community-driven and culturally responsive.

The communities are involved in every step of the process of designing and implementing every new program. Their voices are integrated into the content, building capacity within the community, the spatial designs, the implementation process of all BRAC early childhood programs, as well as in the research and monitoring. The work BRAC does is iterative, evidence-based, and scalable, and remains accountable to the community.

This presentation will describe some of the ways that BRAC and partners work with a community to co-create solutions that is effective, sustainable and meaningful for them. The ways that BRAC’s experience now informs an approach which ensures that the community’s culture, heritage, and knowledge are respected and protected and, as consequence will be discussed, and the early data confirms that healing and well-being are promoted will be presented.

Key lessons about the importance of respecting culture to build a nuanced understanding of the values of the community, and the rewards from doing so, will be shared through stories from our work with the displaced and Refugee communities now living in the camps of Bangladesh and Uganda.
“Orim” national intervention project in Israel:

Mothers’ adverse childhood experiences and mother-toddler relationships

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Introduction: Epidemiological research suggests that exposure to four or more adverse childhood experiences (ACEs) predicts poor health and mental health in adulthood. Research also shows that children of parents who were exposed to four or more ACEs are at increased risk of poor health, behavior problems, and poor academic achievements. However, most studies on the effects of ACEs on parents and their children were conducted in North America and were based on self-report questionnaires. Research of the effects of parents’ ACEs on observed parenting is scarce.

Aim: We aimed to begin and address these gaps by studying Jewish and Arab Israeli mothers and their toddlers. We hypothesized that in accordance with studies conducted in North America, mothers’ exposure to four or more ACEs would be associated with mothers’ reports of more behavior problems of toddlers and that mothers’ depressive and anxiety symptoms would mediate this link. We also expected that mothers’ exposure to four or more ACEs would be associated with lower maternal sensitivity and poorer quality of the home environment, as observed by trained coders.

Material and Methods: Participants were 187 mothers (20% Arab Israeli) and their toddlers (50% female; Mean age = 21.01 months) who were referred to a national early intervention project in Israel. Using self-report questionnaires, mothers reported their ACEs, their depressive and anxiety symptoms, and their toddlers’ behavior problems. We used observations to assess maternal sensitivity (Maternal Behavior Q-sort – Short Version) and the home environment (Home Observation for Measurement the Environment).

Results: Results supported the hypotheses, demonstrating the significant role ACEs play in early mother-child relationships

Conclusions: The importance of including the assessment of ACEs in research and practice with families of young children will be discussed.
Parents' cognitive biases and their child's externalizing behavior: study of bidirectional influences and CBMT's efficacy

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Introduction and Aim of the study
Child’s externalizing behavior (EB) are defined as the expression of anger, aggression, hyperactivity, impulsivity that interfere with the child’s general functioning.
A child’s behavior problems at age 3 increased harsh parenting and mothers’ withdrawal tactics at age 5, which, in turn, increased child’s emotional problems and EB at age 7. In the same way, a child’s EB predicts subsequent incompetent parenting and parents’ psychological distress.
Cognitive biases have been related to the perpetuation of symptoms in many psychological problems (e.g., depression). In terms of parenting, when assessing their child’s displaying EB, parents tend to recall more his/her negative behaviors than his/her positive ones. While promising, the presence of and relations between attention, interpretation, and memory biases in parents of children with EB problems have never been experimentally tested.
The objective of our study is to determine by experiment the relationship between parents’ cognitive biases (i.e., attentional, interpretation, and memory biases) and EB of their child.

Material and Methods
A dyadic approach will be used: Both parents participated in this study to test the Actor-Partner Interdependence Model (APIM) in cognitive biases within- and between-couple. Attentional bias was assessed by the Visual Probe Task, interpretation bias by a Scrambled Sentence Test, and memory bias by the Incidental Recall Task. Participants also completed the French version of the Highly Sensitive Person Scale, an adapted parent-report version of the Highly Sensitive Children scale, and the Parental Stress Scale as moderators.

Results
We expect parents of a child with higher EB to have a significantly higher level of cognitive biases. We also hypothesize that biased attention would have an indirect effect on memory through its influence on interpretation bias. In addition, we expect an interdependence of one parent’s cognitive biases on the other.
Results should be available by July.
Tuning in to Toddlers: Improvements in Emotional Availability Following an Emotion Socialisation Program

Ms Zoe Guest¹, Dr Christiane Kehoe², Associate Professor Karli Treyvaud¹, Associate Professor Bradley Wright¹, Professor Sophie Havighurst²

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Introduction and Aim: Both parent-child emotional availability and parent’s emotion socialisation behaviours influence children’s emotional development. During toddlerhood, parents may find it challenging to sensitively respond to their toddler’s increased need for autonomy, which is often coupled with a greater intensity in negative emotional expression. Parenting programs can assist by improving the parent’s ability to respond supportively to their child’s emotions, and could also improve aspects of the parent-child relationship. Tuning in to Toddlers (TOTS) was developed as a universal program to improve parents’ supportive reactions to children’s emotions; discussion of emotions; and, parental role-modelling of appropriate emotion expressiveness. Previous evaluation of TOTS has found improvements in parent-report questionnaires of emotion socialisation beliefs and behaviours, emotion regulation, empathy, and child behaviour as well as on biological measures of toddlers’ stress cortisol. The current study aimed to evaluate whether the TOTS program also led to improvements in observed emotional availability.

Methods: Parents of toddlers aged 18–36 months old were recruited through childcare centres and maternal child health centres in Melbourne, Australia and were allocated to either an intervention or a 15-month waitlist control condition in a cluster-randomized controlled design. Parents in the intervention group participated in 6 group sessions of TOTS. Baseline and 12-month post-intervention observational assessments for 99 mother-child dyads (intervention, n = 50; control, n = 49) were coded using the Emotional Availability Scales, fourth edition.

Results: Compared with controls, intervention mothers showed significant improvements in sensitivity (p = .004) and there was some evidence for improvements in child responsiveness (p = .092). There was less evidence for group differences in EAS subscales of structuring, non-intrusiveness, non-hostility, and child involvement.

Conclusion: This study provides preliminary evidence that an emotion socialisation program additionally impacts emotional availability in mother-child dyads. Evidence for conceptual similarity and clinical implications will be discussed.
Family wellbeing – trial of a web-based intervention to improve psychosocial resilience

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Background: Early childhood social, emotional and behavioural problems are associated with increased risk of many poor outcomes. Some of these early problems are founded in early parent-infant relationships and could potentially be prevented. Primary health care has a central role in preventive care during pregnancy and the early years of the child’s life. Scheduled antenatal care and child development assessments in Denmark are carried out in general practice and provide opportunities to identify vulnerability in parents, in their children and in the relationship between parent and child.

Aim: In the context of standardised antenatal and child development assessments focused on parental emotional wellbeing and family relationships, we investigate whether a web-based mentalisation resource signposted by GPs will improve parental mental health and child socio-emotional and language development.

Method: 70 General practices in two Danish administrative regions were invited. Practices were randomised to intervention or control arms. Each practice recruited up to 30 women consecutively at their first scheduled antenatal assessment. Both groups received one day training in structured consultations with a focus on parental psychosocial well-being, social support and parent-child interaction. Intervention arm clinicians received additional training enabling them to signpost patients towards a web resource (“robustbarn.dk”) designed to improve mentalisation skills at scheduled preventive consultations.

Results: 807 pregnant women were included from Nov 2019 to July 2021. Baseline characteristics and intervention content will be described.
Parents’ resolution of children’s diagnosis among asylum seekers from Eritrea and South Sudan in Israel

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Introduction: Parents’ resolution of their children’s diagnosis is considered a central process that parents go through when their child is diagnosed with a developmental disorder or a chronic illness. Several studies show parental resolution is associated with more sensitive caregiving and with children’s secure attachment. Yet, most studies were based on Western families, and little is known regarding processes that may shape parental resolution.

Aim: This study focused on parents who were asylum seekers from Eritrea and South Sudan in Israel. We examined whether parents’ resolution of their children’s diagnosis was related to the number of past traumatic events they experienced and their post-traumatic and migration stress levels. Alongside this, the role of resilience factors in parents’ environment was examined. We aimed to expand current research on parental resolution in different cultural-ecological contexts, as well as on parenting among asylum seekers in general and specifically in Israel.

Material and Methods: Participants were 51 parents (25 fathers; 88.2\% from Eritrea) of children with Autism, Global Developmental Delay, or Cognitive Impairment. Parents completed questionnaires that measured their resolution of their child’s diagnosis (Resolution of Diagnosis Questionnaire), exposure to traumatic events in the past (Harvard Trauma Questionnaire), post-traumatic symptoms (PTSD Checklist for DSM-5), and current migration stress levels (Refugee Post-Migration Stress Scale), as well as the extent to which they benefited from resilience factors (Connor-Davidson Resilience Scale-25).

Results: Controlling for the type of child diagnosis and time since receiving it, results showed that more past traumatic experiences, higher post-traumatic stress, and higher migration stress were each associated with lower parental resolution. However, resilience did not moderate any of these links.

Conclusions: The study reveals the links between parents’ resolution of children’s diagnosis and past trauma and stress. Implications for practice with parents who are asylum seekers will be discussed.
Attachment style in pregnant women: links with depression, attachment to the fetus and maternal representations

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Introduction and aims of the study – A woman’s attachment to her child develops during pregnancy. It is accompanied by representations of herself as a future mother as well as representations of her future baby. Pregnancy is a period of great vulnerability, which is reflected in the frequency and intensity of depressive symptoms. Attachment theory sheds interesting light on the experiences of pregnant women. The aim of this study was to determine to which extent the attachment styles of expectant mothers have an impact on their level of depression, their maternal representations and their prenatal attachment.

Methods - 212 pregnant women have been recruited during their maternity visits in two Parisian maternities. They completed the Relationship Scale Questionnaire, the Prenatal Attachment Inventory, the Edinburgh Postnatal Depression Scale, two scales of the Stern “R” Interview.

Results - Attachment styles can partially predict depressive symptomatology, maternal representations and prenatal attachment in pregnant women. According to the analyses, the more secure the attachment was, the more positive the maternal representations were. In addition, secure attachment was negatively related to depressive symptoms. The results also showed a positive correlation between fearful and preoccupied styles and depression scores. Finally, contrary to previous research, preoccupied attachment was positively correlated with prenatal attachment.

Conclusions - The attachment style of the pregnant woman plays a role in how she experiences her pregnancy, imagines her baby and projects herself as a mother. Depressive symptoms, maternal representations, and prenatal attachment are partially predicted by the attachment styles of the pregnant women. As indicators of the type of support they need, taking into account the attachment styles of pregnant women can allow for the proposal of adjusted care and can help the prevention of symptoms of psychological distress and the improvement of the experience of pregnancy.
eHealth screening for paternal perinatal mental health in Australia

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Introduction and Aim of the study: Although up to one in five mother and one in ten fathers may experience clinically significant levels of depression or anxiety before and after the birth only a limited number will seek treatment. In high income countries, mental health screening by health professionals has been established as part of routine care of mothers. However, screening fathers for depression and anxiety is not currently included as part of regular health care. Screening measures to detect fathers’ depression and anxiety have been developed but there has been little attention paid to the mechanism for conducting the screening. Since fathers, unlike mothers, do not routinely attend antenatal or postnatal health checks there is no equivalent face-to-face clinical setting where paternal mental health screening may be conducted.

Materials and methods: The SMS4dads text-based perinatal support program has enrolled over 10,000 fathers across Australia. The program provides 3 text messages per week from 16 weeks gestation until the infant reaches 48 weeks. The K10 distress scale, completed at registration, identifies distressed fathers and links them to a national perinatal mental health telephone line. Regular ‘mood checker’ interactive texts also offer connection to an online mental health service. The tracked behaviours of 3,261 fathers over 12 months are analysed to describe a screening pathway tailored to expectant and new fathers. Message delivery costs are calculated.

Results: Of the 3,621 fathers enrolled 29% reported moderate (16-21) distress, 12% (22-29) high and 4% (30-50) very high distress. Over this period 219 (6.7%) were escalated to mental health support. Feedback indicates high program acceptance and message delivery costs are approximately $24 (AUS) per participant.

Conclusion: Utilising an eHealth approach may enable cost-effective screening to identify and refer fathers with perinatal depression or anxiety.
Experiences of Reflective Practice in an Interdisciplinary Infant Mental Health Service

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Introduction and Aims
Reflective practice is considered essential for the relationship-based approach of infant mental health (IMH) work. Published empirical research on reflective practice in IMH is predominantly US-based, and focused on time-limited reflective supervision consultation programmes. This presentation will report on a currently ongoing qualitative two-phase multimodal research study with an arts-based component which explores Irish infant mental health practitioners’ experiences of reflective practice spaces.

This research examines: the professional and personal impacts of reflective practice in relational work with families in an area of high socioeconomic deprivation; the factors impacting on practitioners’ experiences of reflective practice (e.g., type of reflective practice, practitioner professional background and attitude towards reflective practice, training and experience in IMH work, organisational factors); and the challenges experienced in engaging in reflective practice in this setting.

Material and Methods
Participants are 8-10 infant mental health practitioners working in an Irish Prevention and Early Intervention programme for children and families living in an area of high socioeconomic deprivation. Staff in this programme have engaged in reflective practice supervision in various formats since 2016. This qualitative research uses a multimodal procedure: qualitative semi-structured individual interviews preceded by a participatory arts-based focus group. The visual and verbal data will be integrated and analysed using Interpretative Phenomenological Analysis (IPA). This method of analysis allows for in-depth exploration of the lived experience of the emotional, learning, professional, and personal aspects of reflective practice in this setting. Data collection will be completed by December 2022.

Results & Conclusions
Findings will be presented and discussed in the context of Irish and international infant mental health practice. The study aims to make recommendations on how reflective practice provision can most appropriately be embedded in a sustainable way when working with families living in areas of high socioeconomic deprivation.
Evaluation of a child-centred psychosocial healthcare intervention (KID-PROTEKT) for pregnant women and families with infants

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Introduction: Many pregnant women and families with infants are burdened by psychosocial risks that can have detrimental effects on children’s health and development. Increasingly, psychosocial screening and counselling are considered in gynaecologic and paediatric healthcare. KID-PROTEKT was developed as a child-centred psychosocial healthcare intervention in gynaecologic and paediatric practices to enhance the referrals of families with psychosocial needs to early support services.

Aim of the study: The aim of this study was to evaluate the effectiveness of KID-PROTEKT compared to the regular gynaecologic and paediatric outpatient healthcare. The main outcome was the referral rate to support services. We also examined the utilization of support, acceptance and feasibility of KID-PROTEKT.

Material and Methods: We conducted a multicentre, cluster randomized-controlled trial with three study arms, in which two variants of KID-PROTEKT were compared to the regular healthcare (treatment as usual). Qualified treatment comprised a qualification of healthcare providers (e.g. nurses, midwives, physicians) and the psychosocial assessment, whereas in supported treatment additionally a social worker was integrated into the practice. In total N = 24 gynaecologic and paediatric practices were randomized to one of three study arms and N = 8,458 pregnant women and families were enrolled in the study.

Conclusions: The findings of our study show that both versions of KID-PROTEKT are related to a higher proportion of referrals (8%) than the regular healthcare (3%). Next to a high acceptability by patients, healthcare providers and social workers, KID-PROTEKT appeared feasible in both gynaecologic and paediatric setting. Thus, the qualification of healthcare providers and a systematic psychosocial assessment can improve the identification of psychosocial needs and promote the access of children and their families to help. A social worker should be involved in cases with complex psychosocial needs.
Hospitalization for high-risk pregnancy and psychological and relational well-being from pregnancy to post-partum

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Introduction: Literature showed that hospitalization due to high-risk pregnancy has a significant impact on the psychological (Smorti et al., 2021) and relational (Mirzakhani et al., 2020) well-being of the woman during pregnancy, while less attention has been paid to the postnatal period. Aim of the study is to explore psychological and relational well-being in hospitalization women due to high-risk pregnancy, both during pregnancy and after childbirth.

Material and Methods. A total of 70 pregnant women (Mage = 33.06 SD 4.78) were recruited for the present study. The sample consists of two groups: 1) 44 women with low-risk pregnancy (LRP); 2) 26 women hospitalized due to high-risk pregnancy (WHHRP). Data was collected at two different times: at T1 (during pregnancy) the Italian versions of the Edinburgh Postnatal Depression Scale (EPDS; Benvenuti et al., 1999), the Prenatal Attachment Inventory (PAI; Della Vedova et al., 2008), and the Romance Qualities Scale (RQS; Ponti et al., 2010) were used to assess the level of depressive symptoms, prenatal attachment to unborn child, and the quality of romantic relationship; at T2 (3 months after childbirth) the level of depressive symptoms were again assessed using the EPDS. A series of univariate analyses of variance (ANOVAs) were carried out.

Results. During pregnancy WHHRP reported higher level of depressive symptoms (F(1, 68) = 8.17, p = .006) and conflict with partner (F(1, 68) = 4.36, p = .041) than LRP. Conversely, after childbirth no significant differences emerged between groups on the level of depressive symptoms (F(1, 68) = 3.00, p = .088).

Conclusions. Hospitalization due to high-risk pregnancy adversely affects psychological and relational well-being. However, three months after childbirth depressive symptoms decrease suggesting that the psychological discomfort during pregnancy was linked to the hospitalization and to the concerns about the risks related to the high-risk pregnancy.
Longitudinal Development of Parent-Child Interaction in Home Visiting: Examining the Moderating Effects of Parental Depression

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INTRODUCTION and AIM: Depression interferes with a caregiver's capacity to provide engaged and positive caregiving; decreasing the likelihood of positive affect and reciprocity in interactions (Lovejoy et al., 2000). Home visiting (HV) provides one avenue to improve child outcomes in families impacted by depression. Serving parents with depression in HV programs is common. This study examines how parent-child interactions change during HV, and whether those changes differ for those enrolling with depression.

MATERIAL and METHODS: Participants were enrolled in the Healthy Families America (N=601) in the southern US. Parents averaged age 21 (SD=4) and almost half were White (49%; 22% Black, 23% Hispanic, 4% other). Depression was measured with the Patient Health Questionnaire-2. For each home visit, HV staff record the percent of time of the visit focused on specific content and rated the quality of parent-child interaction observed. Functional Data Analysis was used to analyze parent trajectories of the observed parent-child interaction through time. To determine if there is an overall difference in the mean functional trajectories across depression conditions, a Functional Analysis of Variance (FANOVA) was used. FANOVA is an asymptotic version of the ANOVA F-test employing a numerical Monte Carlo procedure and a parametric bootstrap of 2000 samples. It allows for the use of all information in the trajectories.

RESULTS: There were significant differences in the trajectory of parent-child interaction scores for caregivers enrolling in HV with and without depression (Bootstrap p=.030). Caregivers without depression have parent-child interaction scores that increase and stabilize throughout services. Caregivers with depression have parent-child interaction scores that increase in the first 6 months of services but attenuate.

CONCLUSIONS: Parents who enter HV with depression may need additional supports to maintain positive gains in their parent-child behaviors as services progress. Findings also highlight the need for ongoing observation of interactions.
Supporting parents at home: early family-centered e-Care intervention for parents of infants with developmental disabilities

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Introduction and aim of the study. Infants with developmental disabilities (DDs) show emotional, cognitive, and socio-interactive dysregulation impacting caregiving behavior. Early video-feedback interventions (VFIs) are effective in promoting sensitive parenting, maternal mind-mindedness, and infants' development, even in case of DDs. In the light of limited resources of the healthcare systems, e-Care approaches may facilitate the delivery of VFIs. No study to date has tested the efficacy of an early family-centered VFI (eVFI) in this population. The ongoing Supporting Parenting at Home – Empowering Rehabilitation through Engagement (SPHERE) project is a RCT aimed at assessing the effectiveness of an early family-centered eVFI parenting support with dyads of 0-18-month-old infants diagnosed with DDs and their mothers.

Material and methods. Enrolled dyads are assigned to one of two arms (i.e., experimental vs. control) and undergo three assessment phases: T0, baseline; T1, immediate post-intervention; T2, 6-month follow-up. Mothers assigned to the experimental arm receive six weekly eVFI sessions. Mothers assigned to the control arm receive an informative booklet. For both arms, each assessment session includes an online questionnaire and a mother-child 15-minute interaction videotaped during a videoconference. Videotaped interactions were micro-analytically coded for maternal sensitivity, scaffolding strategies, and maternal mind-mindedness.

Results. Results of the pilot study showed that participants welcomed the experimental intervention, reporting high levels of satisfaction and moderated technical challenges. Observatory data showed that mothers of the experimental arm used more appropriate mind-related comments during the interaction after the intervention. Moreover, an improvement in maternal sensitivity and an increase in the use of scaffolding strategies were observed. Self-reported data showed an improvement in the infant’s temperament (i.e., higher levels of surgency/extraversion and orienting/regulation) of the experimental group.

Conclusions. The SPHERE project holds promises to test a new model of e-Care for infants with DDs that can reduce healthcare inequalities in services access.
Testing whether an adapted book sharing intervention can promote social-emotional development in infants and toddlers.

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Introduction: Book sharing interventions improve parent-child interaction quality and child language outcomes by supporting parents to engage with their children in stimulating and enriching ways that match their child’s interests. Despite these improvements and robust theoretical arguments, there is limited evidence that these interventions support early social emotional development, and where they do, effect sizes are small. Video-feedback interventions are consistently shown to promote parent sensitivity, which is linked with child social emotional outcomes. Aims: Adapt an evidence-based book sharing intervention to include video-feedback to enhance parental sensitivity and benefit child social emotional outcomes. Methods: 43 parents and their 10-24month old children participated in the adapted book sharing and video-feedback intervention. Videos of parents book sharing with their young children are collected before, during and after participation in the programme. Parent, child and joint interaction behaviours are coded from the pre- and post-test videos. Materials: The video coding scheme, based on the Ainsworth Sensitivity Scales, includes ratings of parent sensitivity, facilitations and intrusions, child attention, and reciprocity. Child social emotional outcomes are collected via the Brief Infant-Toddler Social Emotional Assessment (BITSEA). Parents are also interviewed on programme completion. Results: Preliminary findings suggest that parent-child reciprocity improves following the intervention, and that parents are more sensitive and less intrusive. Conclusions: The adapted book sharing intervention promotes parent sensitivity and improves parent-child interaction. Further analysis will explore whether improvements in child social emotional outcomes are related to changes in parent behaviour and parent-child interaction. Rapid qualitative framework analysis of parent interviews will explore parent perspectives on the impact of the programme on their relationships and interactions with their children. Full findings will be presented at the Congress.
Maternal trauma moderates the association between prenatal depression during the COVID-19 pandemic and infant development

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INTRODUCTION: An increase in prenatal depressive symptoms (PDS) has been documented during the COVID-19 pandemic (Berthelot et al., 2020; Tomfohr-Madsen et al., 2021), which has implications for infant development (Duguay et al., 2022; Provenzi et al., 2021). Given that maternal trauma (abuse and neglect during childhood) is also a known risk factor for perinatal psychological distress (Racine et al., 2021) and infant development (Garon-Bissonnette et al., 2022), this study aimed to evaluate whether maternal trauma moderated the association between PDS during the COVID-19 pandemic and infant socioemotional development at 6 months.

MATERIAL and METHODs: A sample of 216 mothers (Mage = 29.67 years, SD = 3.71) was recruited online during the COVID-19 mandatory confinement in Quebec, Canada from April 2nd to April 13th 2020 and was followed-up at 6 months postpartum. Depressive symptoms were assessed using the EPDS, maternal trauma with the CTQ, and infant socioemotional development with the ASQ:SE-2. Moderation analyses were performed using the PROCESS macro for SPSS.

RESULTS: Maternal trauma moderated the association between PDS and infant socioemotional development, even when controlling for maternal postnatal depressive symptoms, b = .39, 95% CI [.20; .2.46]. The association between PDS and developmental problems was only apparent in trauma-exposed mothers, b = 1.18, 95% CI [.15; 2.20] and not in women not reporting trauma, b = -.16, 95% CI [-.72; .41]. Together, maternal trauma and PDS explained 17% of the variance in infant development, R² = 0.17, p < .001.

DISCUSSION: Our findings suggest that the upsurge of PDS observed in pregnant women during the pandemic increased the risk of early developmental problems only in offspring of mothers who already had a history of adversity. Our results call for trauma-informed prenatal interventions with women who experienced distal and proximal stressors to mitigate the intergenerational effects of prenatal depression.
Emotional Availability and Digital Media Usage in Mothers and Preschool Children

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INTRODUCTION – Emotional availability (EA) refers to the dyad's capacity to share an emotionally healthy relationship and is seen as a cornerstone of sensitive parenting (Biringen, 2008). Previous research documented associations between EA and children's attachment classifications, emotional understanding, and school readiness. However, the relationship between EA and technology and digital media (TDM) usage remains unknown. In recent years TDM usage has risen considerably, and higher levels of parents' and children's TDM usage were found to be related to less family communication and more disturbances to parent-child playtime and meals.

AIM – The study aimed to examine associations between emotional availability and TDM usage in mothers and preschool children.

MATERIAL and METHODS – Participants were 89 mothers and their 3-to-6 years-old children. Emotional availability was observed and rated using the Emotional Availability Scales (Biringen, 2008) in free-play, social-play, and digital-device-play. We assessed TDM usage with three measurements: Children's screen media use and habits were evaluated with the SCREENS questionnaire (Klakk et al., 2020); We also asked mothers to report children’s TDM usage in various daily situations (e.g., before bedtime) and to report TDM usage for each hour during seven consecutive days, for herself and her child.

CONCLUSIONS – Our findings showed that mothers with higher EA reported lower levels of child and mother TDM usage, and their children used TDM in fewer situations. Associations between children's EA and TDM usage were not found. The study highlights the interplay between maternal EA and TDM usage, and supports the reduction of parents' and children's screen time while encouraging parent-child quality interactions.


Daycare as a safety net for asylum seekers’ children through the COVID-19 pandemic

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The primary source of support for them and their families was in the context of daycare.

Aims: The pandemic has called into question the ability of local educational staff to provide a sense of security and build resilience, for children and their families. This study explored participants' experiences during the pandemic.

Method: A qualitative exploratory, thematically analyzed study was conducted. In-depth, semi-structured, individual, and group interviews. The sample included 10 educational supervisors, 15 teachers-caregivers, and 10 mothers. Information was gathered on 70 children in different daycare centers.

Findings: Four themes were identified:
1. Children exhibited post-traumatic symptoms, developmental regression, and a breakdown in their ability to regulate their emotions and behavior.
2. Mothers and teachers also suffered traumatic symptoms and could not function as a safety net.
3. The collapse of the state social support system added to the risk factors.
4. Local initiatives by educators, supervisors, and social workers can provide invaluable support.

Conclusions and Implications: In the reality of mass trauma, the most useful tools were:

a. Supportive supervision for daycare stuff.
b. Educate the staff about trauma-informed practice.
c. Strengthen community initiatives.

Recommendation: Further research is recommended, in particular in the field of early childhood education, in the reality of a traumatic and stressful existence.
Benevolent Childhood Experiences and Social Support Promote Maternal Fetal Attachment Despite Adversity

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INTRODUCTION: From a developmental psychopathology perspective, risks such as childhood histories of maltreatment or experiences of intimate partner violence (IPV) can influence maternal perceptions of their children, beginning during pregnancy. Protective factors such as benevolent childhood experiences and social supports, however, may balance these risks. Understanding the interplay among distal and proximal risk and protective factors during pregnancy can shape intervention foci to support positive parenting as families navigate the transition into parenthood.

AIM: Drawn from a larger treatment evaluation study of the optimal timing and duration of Child-Parent Psychotherapy initiated either before or after children’s births, this study examined maternal prenatal perceptions of unborn children to better understand how risk and protective factors influence maternal-fetal attachment.

METHODS: Baseline data from the PROMISE treatment evaluation study sample of 168 economically-challenged pregnant people were examined to explore the interrelations among maltreatment (assessed with the Childhood Trauma Questionnaire), intimate partner violence (via the Conflict Tactics Scale-2), social support (Medical Outcomes Study Social Support Survey), and Benevolent Childhood Experiences (BCEs) in predicting Maternal Fetal Attachment (MFA, MFA Scale).

CONCLUSIONS: Contrary to predictions, maternal maltreatment histories and IPV did not have main effects in predicting MFA. BCEs and current social support consistently predict greater MFA, demonstrating promotive effects of interpersonal relationship quality, even in the presence of maternal childhood maltreatment and/or IPV. Thus, BCEs have a promotive effect, such that experiencing positive relationships in childhood has a main effect on maternal-fetal attachment, even in the presence of histories of or current trauma. Understanding the promotive effects of these “angels in the nursery” possesses clinical implications for strength-based approaches to intervention that have potential to foster positive parent-child relationships even before babies are born. The clinical and research implications of these findings will be discussed.
Child and parent factors associated with parent-child relationships after web-based early intervention following preterm birth.

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**Introduction and Aim of the Study**

Preterm birth increases the risk for suboptimal child and parent outcomes. Preventive early intervention for families may improve these outcomes. We previously reported positive effects for parent-child relationships following a web-based early intervention after preterm birth. Whether these positive effects are moderated by child, parent and group factors is unknown and important for targeted intervention dissemination. The aim was to examine whether child, parent, and group factors assessed pre- and post-intervention were associated with parent-child relationships at 24 months’ corrected age.

**Material and Methods**

Participants were 103 infants born <34 weeks’ gestation and their mothers recruited from the Royal Women’s Hospital, Melbourne, Australia. Families were randomly allocated to standard care or early intervention, which involved online modules completed over the first year of life and regular clinician support. Content focused on supporting child development, parental mental health, and the parent-child relationship. Parent-child relationship was assessed at 24 months’ corrected age using the Emotional Availability Scale (EAS), scored by assessors blind to treatment group. Child characteristics (e.g., gender, birthweight, gestational age) and social risk were collected at recruitment, and maternal characteristics (e.g., mental health) were assessed pre- and post-intervention (recruitment, 12 and 24 months’).

**Results**

At 24 months’ corrected age, EAS data was available for 70 dyads. In addition to association between intervention group and certain outcomes, higher birthweight was associated with more child involvement, and greater maternal sensitivity and non-intrusiveness (all p<.05). Multiple birth was associated with maternal non-intrusiveness and non-hostility. Models suggested little evidence for associations with maternal mental health at any time.

**Conclusions**

Child characteristics and intervention participation, but not maternal mental health, were associated with more optimal child and maternal relationship behaviours at 24 months after preterm birth. Tailoring early interventions to acknowledge child and parent characteristics should be investigated.
Fatherhood desire as a predictor of paternal mental health and father-infant bonding

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Introduction
A lack of desire to have children or hope to have another baby may be risk factors to men’s postpartum mental health and ability to form a strong bond with the infant. However, longitudinal studies are lacking where desire for children is assessed prior to conception.

Aim
The aim of this study was to prospectively investigate associations between men’s preconception desire for children and (1) postpartum symptoms of depression, anxiety and stress; and (2) father-infant bonds.

Material and Methods
Data were from 207 fathers of 255 infants (\(M = 29.94\) years, \(SD = 1.43\)) participating in the Australian longitudinal Men and Parenting Pathways (MAPP) study. Mental health was assessed with the 21-item Depression, Anxiety and Stress Scale (DASS-21) at each of 5 annual waves of data collection. Father-infant bonds were assessed with the Paternal Postpartum Attachment Scale (PPAS). The DASS-21 scales and the PPAS were separately regressed onto two indicators of future parenting plans (assessed prior to conception): the Desire to Have Children Scale (asked only of men not already fathers); and, a single item question, which asked all participants if they hoped for a child or another child in the future (Responses 1 = very much, 2 = moderately, 3 = a little, 4 = not at all).

Results/Conclusions
Men’s hope to have future children, whether a first or subsequent child, was negatively associated with postpartum depressive symptoms. Higher desire to have a child prior to conception predicted stronger father-infant bonding. No associations were found between hope or desire to have children and fathers’ symptoms of anxiety or stress. Pregnancy intentions are often asked of women to identify risk for postpartum mental health or bonding problems. Screening men for unintendedness or ambivalence around pregnancies is also of importance to identify men in need of parenting and mental health support.
Parents' and toddlers' use of emotion words: The predictive value of early childhood language development

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- **Introduction and Aim of the study**
From early on, children’s emotion development is influenced by the emotion socialization of parents. One way parents teach their children to cope with emotions is with emotion talk. Little is known about possible determinants. We expected the use of emotion talk by parents and children to be dependent on the language level of the child. Parents might intuitively adapt their own emotion talk to the language level, and specifically to the emotion talk, of their child.

- **Material and Methods**
Mothers (n = 65) reported on children’s language level with the LENA Developmental Snapshot questionnaire at 12, 18, and 24 months. The use of emotion words by mothers and children was measured with a self-developed online Zoom-task. Mother and child were shown illustrations displaying different emotion experiences whilst sat at home behind a computer screen. They were asked to have a conversation about these illustrations. These conversations were recorded. A path-analysis was used to investigate the relations between children’s language development over time and mothers’ and children’s use of emotion words.

- **Results**
Our results support the hypothesis that mothers adapt their emotion talk to the overall language level of their child as well as to the use of emotion words by children during the interaction. With higher child language levels indicating more use of emotion words. Children’s use of emotion words relates to the use of emotion words by their parents and their own language level.

- **Conclusions**
The outcomes of the study emphasize the bidirectional relation between mothers’ emotion socialization and child development. Future research, also as part of this longitudinal study, can focus on other determinants to get insight in how parents can optimally support the emotion development of their child.
Online intervention to prevent postnatal depression and anxiety in Chilean first-time mothers: A feasibility trial

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Introduction and Aim. Internet-based, preventive interventions targeting postnatal women may reduce the risk for developing symptoms of depression and anxiety. The goal of this study was to assess the feasibility, acceptability, perceived usefulness and preliminary effectiveness of the m-Health adaptation of “What Were We Thinking” (WWWT). This is a psychoeducational, preventive intervention that targets modifiable risk factors for the development of postnatal symptoms of depression and anxiety in first time mothers, which has previously showed effectiveness.

Material and Methods: A mixed-methods design was used. 116 first time mothers to a healthy infant between 4 to 10 weeks old, who received health care in the primary public health system were randomized into the experimental (EG) or control (CG) groups. All participants completed questionnaires on mental health, social support, and maternal self-efficacy upon recruitment and 4 months later. For the qualitative component, 12 women from the EG were interviewed.

Results: Our results show high feasibility and acceptability due to the high integrity of the intervention delivered, high perceived usefulness, low attrition rates and high follow up rates. Mixed-ANOVA didn’t show significant differences in depression, anxiety, perceived social support and maternal self-efficacy between groups. Results must be interpreted with caution due to the small sample size and the vulnerable profile of our participants.

Conclusion: Internet-based, mental health interventions targeting new mothers are promising, m-WWWT can be effectively delivered in the Chilean primary care system. This preliminary results may inform a larger RCT to examine the effectiveness of this m-Health intervention.
Evaluating the consequences of infant loss in rural Uganda and identifying pathways of intervention

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Introduction
Infant loss is a tragedy with social and emotional ramifications that may go unrecognized. A focus of maternal/child health programs in sub-Saharan Africa is maternal well-being, however most programs do not address infant loss as a potentially traumatic event with on-going consequences. Studies suggest that psycho-social intervention produced lower instances of complicated grief, lower depression scores, and improved day-to-day coping following stillbirth (Navidian & Saravani, 2018). Infant loss in rural Uganda is higher than the national average, and support is absent in the case of infant loss (UBOS, 2016).

Aim
Participatory community research was conducted in Magada, Uganda to identify maternal needs and perspectives and pathways of support.

Materials & Methods
Individual interviews were conducted with medical professionals (n=3) at the regional medical center that serves 11,000 people, and with community leaders (n=12). A focus group was conducted with parents & caregivers from the community (n=20 women, n=3 men). An additional focus group was held with mothers who had lost infants (n=12). Interview and focus group data was translated, and coded using ATLAS.ti software.

Results & Conclusion
The overall goal of desired intervention was all mothers are valued and supported at all stages of pregnancy, childbirth, & infant care. Needs identified included access to birth control, pre-natal care, transportation, and behavior change communication strategies about pregnancy, childbirth, and infant loss. Sustainable community approaches to improving maternal nutrition are needed. With these structures in place, support groups for mothers who have lost an infant at any stage could be therapeutic for individuals and the community.

References

Engaging Fathers in Perinatal Home Visitation: Physical Child Abuse Findings from a Randomized Controlled Trial

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Introduction and Aims:
Perinatal home visitation programs are expanding in a number of nations given a strengthening evidence base of their effectiveness in supporting infants’ development and in preventing child maltreatment. Such programs, however, have only begun to consider the important role of fathers. To address this gap, the Dads Matter study examined an enhancement strategy to optimize fathers’ positive involvement in support of their infants. Here, we focus on program impact upon mothers’ and fathers’ physical child abuse risk, and trace mediating pathways through which the intervention influences parenting.

Methods:
A multisite clustered randomized controlled trial was conducted with 17 home visiting teams serving 204 families across two study conditions: Dads Matter plus standard services, versus standard home visiting services alone. We examine outcomes of mothers’ and fathers’ self-reported physical child abuse risk at 4-months (immediately post-intervention), and at 12-month follow-up. Using structural equation modeling (SEM) and accounting for sample clustering and covariates, we examine the effect on physical child abuse, and trace hypothesized mediators including the quality of the home visitor-father relationship, parental partner support and abuse, and the timing of service initiation.

Results:
A high proportion of the families (either mother, father or both parents) (90%) were retained (n=183) to follow-up. The SEM mediational analyses indicated that the Dads Matter enhancement predicted improved home visitor relationships with fathers, but only for families receiving services initiated postnatally. The quality of the home visitor-father relationship predicted improved parents’ mutual support and reduced bidirectional mother-father partner abuse at 4-months, which in turn predicted lower maternal and paternal physical child abuse risk at 12-month follow-up.

Conclusions:
Dads Matter can augment the preventive benefit of home visitation on physical child abuse risk when such services are initiated postnatally, and operates through improved home visitor-father relationships, which strengthens the mother-father co-parenting dyad.
An Innovative Integrated Intervention to Treat Trauma, Substance Use, and Parenting

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Introduction and Study Aim:
Caregivers with a substance use disorder (SUD) represent a significant cause of entry into the child welfare system (CWS) and involve approximately 50-80% of cases. As a group, caregivers with a SUD are more likely to utilize a range of maladaptive parenting strategies that can negatively impact children’s development. Research has clearly established the need for integrated substance use, trauma, and parenting interventions, yet few of these programs exist and even fewer studies have been conducted to assess their efficacy. This study examines the effectiveness of a family focused treatment program that combined the Attachment, Regulation and Competency Model with dyadic, parent-child treatment for caregivers with addictions.

Methods: Clinicians administered validated clinical assessments to examine changes in clients depression, trauma, and anxiety symptoms between baseline and discharge. Validated clinical measures of parental stress and parental behaviors were also assessed. 421 clients were administered measures at each session for five timepoints in clinical sessions.

Results: Clients experienced a 22% reduction in reported depressive symptomatology (from 5.8 to 4.5) and a 52% reduction in anxiety symptoms (from 6.7 to 3.2), between the beginning and end of treatment. The UCLA-PTSD indicated higher post-traumatic symptomology across treatment for clients who started with high and low severity symptoms, 20.6 to 25. Scores on parenting attitudes and behavior measures also exhibited changes, including a 26% client reported increases in parental empathy (from 5.7 to 7.2).

Conclusion: Data analysis reveals positive trends for clients who received integrated substance use, trauma, and parenting treatment at this agency. Most clients reported reductions in their mental health symptoms and endorsed support for more effective parenting strategies between admission and discharge across all programs. This study provides support for a different approach to substance use disorder treatment that considers the unique needs of parents and children.
Not Just for Clients: A Model for Relationship Based Practice at the Organizational Level

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Introduction and Aim:
Long recognized as a key mechanism for change, relationship-based practice requires explicit attention to the clinician-client relationship. The vast literature on relationship-based practice, however, often examines client-clinician relationships outside of the organizational settings where most clinical work occurs. We identify strategies for creating an organizational parallel process for infant mental health work.

Methods:
This work is based on ethnographic observation and semi-structured interviews (N=73) about the implementation of The In-Home Recovery Program (IHRP). IHRP is an intensive, in-home program that combines substance use disorder and individual treatment, parent-child dyadic therapy, case management, and group treatment for parents with children under the age of 72 months in the child protection system. Data analysis utilized a rapid analysis approach, triangulating between field notes and interview data.

Results:
Close attention to building relationships across all stakeholders has been a key part of implementation and represents a parallel process by which the core tenets of the intervention are upheld and modeled. Multiple formal processes have been enacted to create relationship-based practice at the organizational level. These processes include: 1) regular meeting structures involving different constellations of stakeholders and partners; 2) integrated training in the intervention across organizations and roles; 3) explicit attention to points of relational stress or disagreement in monthly case conferences; 4) continuous quality improvement through a mixed-method evaluation that provides quarterly opportunities for formal reflection and; 5) clinical consultation and reflective supervision that considers relationships between team members, partners, and organizations to be as important as clinical processes with clients.

Conclusion:
The IHRP program is being implemented using a relationship-based organizational process that facilitates implementation. How organizations implement relationship-based interventions can offer a powerful model for clinical staff that can fuel investment in client relationships. It is important to attend to relationships at the organizational level.
Borderline Personality Disorder and parenting capacity: Understanding population characteristics and assessment recommendations

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Introduction: Many women and their partners who have children placed in out-of-home-care experience difficulties regulating emotion and interpersonal dysfunction which are core features of borderline personality disorder (BPD). There is limited research into the rates of parental BPD within child protection populations in Australia. BPD is highly stigmatised and has been associated with treatment pessimism among professionals, despite research indicating that psychological interventions can be effective in improving outcomes. Research into the characteristics of parents with BPD in child protection settings, implications for assessment of parenting capacity and recommendations around reunification decision-making is required.

Aim: This study aimed to explore parent characteristics and parenting capacity assessment recommendations of mother and fathers within families who attended SALHN CPS between March 2019 to June 2022. The sample was split to compare potential differences between two groups 1) consumers with a diagnosis of borderline personality disorder and/or parents high in borderline symptoms without a formal diagnosis and 3) those with low borderline symptoms.

Material and Methods: A retrospective case review audit of 150 parenting capacity assessments (N=253 parents) was conducted. The final sample included 107 parents who endorsed at least one borderline symptom on the Mclean’s Screening Instrument-BPD or had a formal diagnosis of BPD (71 mothers and 36 fathers). Demographic characteristics, adverse childhood experiences (ACEs) and parenting assessment outcomes were reported.

Conclusions: The audit revealed that the rate of BPD diagnosis was increased in relation to what typically occurs in general population and 40% of the participants endorsed five or more borderline symptoms on a self-report measure however, did not have a formal BPD diagnosis. Group comparisons across multiple child maltreatment risk factors including substance use, domestic violence, and their own trauma histories will be reported and implications for Care and Protection Orders and therapeutic recommendations will be discussed.
Introduction and Aim of the Study: The COVID-19 pandemic has highlighted the need to strengthen the public health workforce (Ramos, et al., 2022). A promising but overlooked approach to addressing this need is Infant/early childhood mental health consultation (IECMHC). IECMHC is designed to help staff reflect on and manage relationships with families and children, reduce stress and burnout, and increase job satisfaction. This presentation describes findings from a pilot of a new cross-system, embedded model of IECMHC in public health settings. The consultation model was implemented in public health centers in a large midwestern state intensively for 12 months, then intermittently for 3 months. The evaluation sought to understand the impact of IECMHC on staff’s reflective capacity, self-efficacy, skills, and relationships. Additionally, we examined organizational factors affecting implementation and impacts of the COVID-19 pandemic.

Materials and Methods: The study used a pre-post design using involving four public health settings in urban and rural areas. Methods included: consultant logs of activities; surveys, including standardized measures of burnout and reflective capacity; and qualitative interviews before, during, and after consultation.

Results: The IECMHC model was successfully implemented in public health settings, despite challenges of organizational structures, staff turnover, and COVID-19. There were no significant changes in standardized measures over time. However, improved reflective capacity and reflective supervision quality predicted reductions in staff emotional exhaustion. Qualitative data also showed positive changes in staff reflective capacity and communication with families.

Conclusions: Results provide helpful lessons for incorporating IECMHC into public health settings to strengthen the workforce to better meet the needs of families and young children.

Reference:
Promoting home visitor responsiveness to families through infant/early childhood mental health consultation

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Introduction and Aim of the study: Infant/early childhood mental health consultation (IECMHC) aims to strengthen early childhood provider capacity to support the social-emotional needs of children and families. In home visiting programs, consultants provide home visitors with strategies to help families create home environments that promote healthy child development (Goodson et al., 2013). Although research on IECMHC in early care and education programs shows positive effects (see Albritton et al., 2019), few have studied its effects in home visiting programs. We evaluated a cross-system, intensive model of IECMHC to understand its effects on staff and families. In home visiting programs, we examined IECMHC’s effect on home visitor practice, visit quality, and parenting.

Material and Methods: The evaluation used a matched-comparison group design involving 24 program sites, including six home visiting programs. Home visitors video recorded visits with different families four times over a 15-month period, resulting in 42 videos. We coded the visits using a standardized observational tool and created a new scale to measure IECMHC effects in visits. Parents completed surveys about parenting and their well-being. We used linear mixed modeling to test for group differences over time.

Results: Home visitors in the intervention group were more responsive to parents and elicited parents’ input on visit content more often than the comparison group. Parents whose home visitors received IECMHC reported higher satisfaction in their role as parents than the comparison group.

Conclusions: IECMHC shows promise for strengthening home visitor practice and visit quality.

References:


To repeat or not to repeat?

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A qualitative study of therapists’ experiences addressing intergenerational adversities in perinatal psychotherapy

Introduction:
There is substantial evidence that intergenerational transmission of trauma, violence, neglect, and abuse may have profound negative impact on the next generation. The complex work of addressing such generational adversities through perinatal psychotherapy is an understudied area. Especially noticeable is the lack of studies giving voice to the therapists involved. To explore the specificities of therapeutic work with intergenerational adversities in pregnancy and early childhood, we have conducted a study using individual interviews and a follow-up focus group with therapists in the perinatal field. The study is embedded within a larger Norwegian mixed-methods study on families with ACEs: “To repeat or not to repeat – how to interrupt intergenerational transmission of adversity in pregnancy and early childhood?”

Material and Methods:
A qualitative approach was chosen using semi-structured individual interviews and a follow-up focus group with seven therapists working in an infant mental health outpatient clinic. A reflexive thematic analysis was applied to analyze the data.

Results:
We identified one overarching and two main themes, with associated subthemes. The overarching theme was the reflective therapeutic functioning required to tailor treatment. The two main themes were 1) Alliance work when a caring system comes to therapy to fight generations of adversities, termed “A crowded therapy room”, and 2) The complex psychological, relational, and practical work of addressing generational adversities in perinatal psychotherapy, termed “Therapy in working clothes”.

Conclusions:
Preliminary findings indicate that the primary vehicle of change in perinatal psychotherapy is a safe therapeutic alliance to explore new ways of being and reflecting together, contrasting earlier parental experiences. Reflective therapeutic functioning seems key to navigate the complexities of perinatal psychotherapy. It is essential to ensure that changes reach the child in time, not compromising its safety and developmental needs.
The Impact of Speech and Language and Occupational Therapy Support in 75 Early Childhood Settings

Prof Emer Ring, Dr Lisha O'Sullivan

Introduction and Aim of the Study
In 2016, A Programme for Partnership Government in Ireland acknowledged that providing access to therapeutic services for children in education settings had the potential to impact significantly on children’s outcomes. Subsequently in 2018, the government allocated funding to establish a Demonstration Project (DP) in 150 sites (27,668 children) across early years, primary, post-primary and special school settings in Ireland and commissioned an independent evaluation focused on assessing the impact of the DP on children’s outcomes. THE DP adopted a tiered continuum of support. This paper reports on the impact of the DP in terms of the outcomes for children in early years settings.

Material and Methods
A multi-method ecological evaluation framework, underpinned by a methodical literature review, was developed combining both qualitative and quantitative measures. Surveys were conducted with managers and early childhood educators. Parents participated in telephone interviews. Case studies were conducted at 20 project sites, which included the collection of observational data, interviews with staff and conversations with children. Auditing and sampling of documentation in relation to the achievement of children’s learning outcomes was also conducted.

Results
A total of 897 occupational and speech and language therapy interventions were implemented across early childhood settings. Evaluation of these interventions reported an increase in staff confidence and ability in the early identification of children requiring additional support; increased competence in modifying early childhood environments and teaching approaches to provide for all learners and an understanding of each other’s (educators and therapists) roles in supporting all children.

Conclusions
The evaluation findings suggest that providing therapeutic services to children in a cohesive and a responsive manner has the potential to enhance child outcomes. Optimising outcomes for all children requires a collaborative approach and a development of a shared understanding and work practices between Health and Education personnel.
Cultural differences and determinants of Parental Reflective Functioning between the UK and South Korea

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Introduction: Parental Reflective Functioning (PRF) is one of most actively studied concepts of parental mentalization. PRF refers to a parent’s ability to reflect and hold their infants’ mental states in their own minds. Although several empirical studies reported a key role of PRF to the positive quality of parenting and children’s development, there was no study to investigate how PRF is culturally different and what would be critical determinants.

Aim of the Study: The present study aimed to explore potential determinants focusing on cultural context, and maternal variables including empathy and the quality of parenting.

Material and Methods: Mothers (nUK=63; nSK=66) participated with their infants (UK: M=6.14 months, SD=1.55, SK: M=7.49 months, SD=1.15). PRF, empathy, parenting style were measured by questionnaires and maternal intrusiveness was scored from free-play observation. The questionnaire of PRF has subscales assessing mothers’ certainty about their infants’ mental states, and interest in mental states.

Results: Korean mothers were more certain about what they think about their infants’ minds compared with British mothers (F(1,124)=21.17, p <.001). However, regarding the levels of genuine interest in their infants’ minds, there was no significant differences between the British and Korean groups. Being Korean and only Korean mothers’ high levels of self-reported cognitive empathy predicted the high levels of certainty about their infants’ mental states (β = .61, p<.001, β = .25, p<.05, respectively). Self-reported positive parenting style showed predictive links with PRF across cultures.

Conclusion: Our findings show that although mothers’ genuine interest about their infants’ minds would be universal, mothers’ focus on their parental mentalizing and determinants of PRF might be culturally dependent. Given that Korean mothers’ PRF was consistent with the Korean parenting beliefs emphasizing “oneness” between mother and child, it may shed light on the importance of the role of cultural parenting beliefs in mother-infant relationships.
Emotional prosody in infant-directed speech during Lausanne Trilogue Play: effects of age, interaction, parental alliance

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Introduction. Emotional prosody in infant-directed speech is predictive of infant’s outcomes and is functional to infant’s attention, regulation and emotion expression. Whether it is linked to the type of family interaction and alliance is still unknown.

Aim and Methods. The main aim of this study was to investigate the acoustical characteristics of parental emotional prosody in 69 families, during Lausanne Trilogue Play (LTP), dyadic or triadic interactions, when infants were 3, 9 and 18 months of age.

Results. An effect of infant’s age and a significant interaction between age and type of interaction (dyadic or triadic) were found on several acoustic and perceptual variables including energy, spectrum, amplitude, and pitch of infant-directed speech. Emotional prosody perception was then investigated, and 54 naive participants were asked to rate the degree of positive or negative emotions they perceived in the parental vocalizations. A more pronounced emotion, both positive and negative, was rated in conflicted and disordered triads, than in the cooperative ones. A subsequent analysis was performed on a subsample of 18 triads during the LTP, when infants were 3 months. The main aim of this part of the study was to assess the effects of the parental alliances on maternal and paternal emotional vocalizations (soothing vocalizations and laughs). The parental alliance – cooperative, conflicted, and disordered - significantly modulated the frequency and duration of emotional vocalizations, both in mothers and fathers. Finally, when analyzing the unfolding dynamic organization in parental vocalizations, different patterns emerged in the three types of parental alliances.

Conclusions. All of the aforementioned findings will be discussed in terms of how emotional prosody is organized and develops within the LTP’s theoretical framework.
Infant negative affectivity triggers parenting stress in mothers who have been exposed to childhood trauma

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Introduction and Aim of the study: Infant challenging temperament may contribute to parenting stress (Andreadakis et al., 2020). Currently, research hints at transactional effects between mother and infant vulnerabilities in our understanding of parenting behaviors and child development (Armour et al., 2017; Bernier et al., 2022). This study aims to evaluate the moderating role of maternal childhood trauma – an important risk factor for parenting difficulties (Savage et al., 2019) – in the association between infant negative affectivity and parenting stress in the first year postpartum.

Material and Methods: Pregnant women (N = 137, Mage = 29.47, SD = 4.42) were recruited prenatally and followed-up between 6 and 13 months postpartum (51.5% girls, Mage = 7.71 months, SD = 2.45). A third of women (n = 48) reported having been exposed to childhood trauma at study inception (Childhood Trauma Questionnaire). At the follow-up, mothers reported on child negative affectivity (Infant Behavior Questionnaire) and parenting stress (Parenting Stress Index).

Results: Maternal childhood trauma, infant negative affectivity and parenting stress were all correlated (rs = [0.17; 0.39], ps < .05). Maternal trauma moderated the association between infant negative affectivity and parenting stress, b = 6.47, 95% CI [1.12; 11.83], whereas the association between infant negative affectivity and parenting stress was significantly stronger in trauma-exposed mothers, b = 10.25, 95% CI [5.78; 14.72], than in women not reporting trauma, b = 3.79, 95% CI [0.82; 6.73]. Together, maternal childhood trauma and infant negative affectivity explained 25% of the variance in parenting stress, p < .001.

Conclusions: Findings underline that infant negative affectivity may represent a particular risk factor for mothers having been exposed to childhood trauma and provide further understanding on the interplay between maternal and infant vulnerabilities. They call for empirically driven perinatal interventions for mothers having been exposed to childhood trauma.
Implementing the Infant Mental Health Endorsement in Virginia: Reflections and Lessons Learned

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Introduction
This study was conducted to gather information to inform key stakeholders in Virginia’s Infant/Early Childhood Mental Health workforce who are involved in the Infant Mental Health Endorsement®. The Endorsement® sets universal standards to ensure that professionals have the necessary experiences and knowledge to best support children and families (Funk et al., 2017).

Aim of the Study
For this study, we investigated the impact the Infant Mental Health endorsement has had on practice and the barriers to completing the endorsement process. The following research questions guided this study: 1) who is part of the infant mental health endorsed workforce in Virginia? 2) what are the benefits and barriers to the Endorsement® process?

Material and Methods
The online survey was researcher-developed and consisted of a mixture of open-ended and multiple choice questions. Thematic analysis was used to group participant’s responses on the open-ended questions, including the purpose for pursuing endorsement, barriers to completing endorsement, impact of the endorsement process on their practice, benefits of the endorsement process on their practice, and the benefits for children and families.

Conclusions
Results indicate that candidates having support from their place of employment is a key factor as to whether they complete their endorsement. Ongoing reflective supervision and building knowledge and connections are additional important aspects of the endorsement. Barriers to the endorsement process include cost, time, lack of professional recognition and compensation state-wide, and system infrastructure. Information gathered from the survey will be used to better support the Infant Mental Health Endorsement® process, and the initiation of the Early Childhood Mental Health Endorsement.

Effectiveness of EMDR in young children with post-traumatic stress disorder

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It is now widely acknowledged that very young children suffer from trauma and can subsequently develop a Post-Traumatic Stress Disorder (PTSD) for which treatment is needed. Eye Movement Desensitization and Reprocessing (EMDR) is a brief and effective treatment for school-age children, but evidence for its effectiveness in early childhood is still lacking. Preliminary evidence for the effectiveness of EMDR in children aged 4 to 8 years old was published in 2021 by one of the authors. However, more research is needed also for children under the age of 4 years. Therefore, we investigated outcomes of trauma treatment using EMDR in very young children, aged 1.5 to 8 years old (N = 20). These children were referred to a mental health care center in Amsterdam, the Netherlands. A multiple baseline Single Case Experimental Design was used to determine the effectiveness of EMDR. Children were randomized, allocating to a specific baseline period before starting treatment. By comparing scores within different phases (i.e., baseline, treatment, and follow-up), children can function as their own controls. As such, we can get an insight into the effectiveness of the trauma treatment. To determine whether children met the PTSD criteria, a semi-structured interview (the Diagnostic Infant and Preschool Assessment) was used. From the baseline, parents reported daily about the 3 most frequent and intense PTSD symptoms, using an app on their phone. Furthermore, severeness of PTSD symptoms, behavioral problems and parenting stress was assessed by parent-reported questionnaires. These measurements took place at baseline, before the start of the treatment, two weeks after the treatment and at 3-month follow up. We will present on the effectiveness of EMDR by discussing the percentage of diagnosis loss, severeness of PTSD symptoms, child behavior problems and parenting stress.
The PROMISE of Integrated Perinatal Behavioral Health Services to Increase Equity

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INTRODUCTION

Although the integration of behavioral health services into medical homes offers the opportunity to improve the identification of perinatal mental health disorders, significant ethnic and racial disparities exist when accessing and engaging in mental health care for minoritized groups (Ehmer et al., 2021).

AIM

The current project stratifies engagement in services offered by an integrated perinatal behavioral health program (The PROMISE Clinic) by race, ethnicity, language, and insurance status to support quality improvement efforts to increase equitable access to care.

METHOD

The PROMISE Clinic is an integrated behavioral health program that serves individuals who are pregnant through 6 months postpartum and is housed in prenatal clinics at a large regional hospital. Between January 01, 2021 – December 31, 2021, 2,321 pregnant parents were seen for an initial obstetrical visit. Fifty-three percent of patients identified as white/Caucasian, 18% identified as black, and 27% identified as Hispanic; 90% of the clinic identified English as their primary language, and 45% were publicly insured. PROMISE served 1,260 of these patients, with similar demographics to the larger clinic. The PROMISE clinic had 5,212 patient contacts, 302 new therapy patient visits, 127 group visits, 495 consultations in person, 523 consultations over the phone, and 405 provider consults. Additional stratification by race, ethnicity, and language within PROMISE service type (therapy, consultation, follow up visits) will identify which groups of patients are accessing PROMISE services.

CONCLUSIONS

Initial data suggest that the PROMISE clinic is serving a similar demographic to the racially and ethnically diverse prenatal practice. PROMISE is also serving a significant portion of the clinic’s total volume, highlighting the benefits of an integrated service model. Additional data will be used to discuss takeaways and quality improvement efforts to increase equitable access to the range of PROMISE services that are offered in the clinic.
Characteristics of Young Children Served Through a Statewide Child Psychiatry Access Program

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Introduction: A gap exists between the need for and availability of pediatric mental health services, particularly within the early childhood system of care. Child Psychiatry Access Programs, like Maryland Behavioral Health Integration in Pediatric Primary Care (BHIPP), play a critical role in addressing this gap. BHIPP supports pediatric primary care providers (PCPs) in meeting their young patients’ needs through provider education and three patient-specific services: physician-to-physician telephone consultation with a child psychiatrist, resource/referral networking via telephone, and direct-to-patient mental health care through embedding social workers in primary care practices.

Aim of the Study: This study describes characteristics of patients, 0-3 years old, for whom PCPs and/or families sought BHIPP services to address young children’s developmental, behavioral, and social-emotional concerns.

Material and Methods: Data includes 606 unique patient-specific contacts from 10/2012 to 9/2022. Data was collected on patient demographics, presenting problems, BHIPP service received, and BHIPP diagnostic impressions and treatment recommendations. Descriptive statistics were performed in SPSS to address study aims.

Among patient-specific contacts, 10.5% were for physician-to-physician consultation, 20.0% were for resource/referral networking, and 69.1% were for direct-to-patient mental health care.

Demographically, patients were primarily male (57.0%) and publicly insured (58.7%). The most common presenting problems reported at the time of BHIPP service included: behavior problems at home (32.8%), aggression (17.3%), and behavior problems at school (11.0%). The most common diagnostic impressions made by BHIPP included a Trauma and Stressor-related disorder (8.9%), Disruptive Behavior Disorder (7.4%), and ADHD (6.7%); approximately 10% of cases had multiple comorbid diagnoses. The most common recommendations made by BHIPP included referral to a community mental health provider (46.7%), in-office behavioral intervention (27.1%), and providing psychoeducational handouts to the family (20.9%).

Conclusions: This study highlights the role that child psychiatry access programs can play in reducing disparities in access to early childhood mental health care.
Understanding Interdisciplinary Collaboration

Within Zero To Three Safe Babies Court Teams

Dr. Tina Ryznar

American Institutes For Research, United States

Introduction and Aim of the Study

In the United States infants and toddlers experience the highest rates of maltreatment. The ZERO TO THREE Safe Babies Court Team™ (SBCT) child welfare intervention was created to address this issue. This approach has consistently yielded improved permanency and well-being outcomes for young children and their families and has increased the voice of infant mental health clinicians within the child welfare field. However, the effectiveness of the SBCT approach requires uncommonly high levels of interdisciplinary collaboration. The aim of this study was to outline the necessary components for interdisciplinary collaboration to occur between members of SBCTs.

Materials and Methods

A qualitative, cross sectional, Grounded Theory design was used for this study. Twenty-eight semi-structured interviews were completed with SBCT members from six different SBCT sites across the United States. Interviewees represented nine different child welfare-related professions, including infant mental health clinicians.

Conclusions

The data from this study yielded a theory of interdisciplinary collaboration within the SBCT approach. Modeled after Maslow’s Hierarchy of Needs, this theory posits that the factors and actions needed for interdisciplinary collaboration to occur are hierarchical. At the foundational level are five core components specific to the SBCT approach, including Judicial Leadership, a Local Community Coordinator, Systems Commitment to Continuous Learning and Improvement, Monthly Family Team Meetings, and an Active Community Team. With these components present team members can engage in a set of critical interpersonal actions, which include improved communication, increased familiarity, greater professional competence, and improved understanding for teammates’ professional roles and responsibilities. The presence of these interpersonal actions supports the development of core values, specifically, trust and respect for team members and buy-in to the SBCT approach. These values support the development of professional relationships, thereby creating a favorable environment for the occurrence of interdisciplinary collaboration within SBCTs.
Profiles of parenting orientations that predict timing of parenthood, parenting behaviours and bonding

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INTRODUCTION: In prior research, the existence of ‘a reproductive orientation’ that marks a predilection to procreation has been proposed. We extend on this positing a ‘parenting orientation’ that motivates both reproduction and nurturant caregiving. We suggest that, at least in part, this orientation emerges from the development of individual characteristics and interpersonal ecologies that are advantageous for sensitive and supported parental caregiving. AIM: Using rare longitudinal data from preconception in early adulthood to one year postpartum, we aimed to: (1) distinguish profiles of individual and interpersonal resources in young adults that may orient them toward parenthood; and (2) investigate whether profiles predicted timing of entering parenthood, postpartum parenting behaviour, and parent-infant bonding.

METHODS: Data were from the 39-year Australian Temperament Project Generation 3 study. At 23-24 and 27-28 years, participants (n=1,429; 53% female) and their parents provided data on 20 intra- and inter-personal variables theoretically aligned to future nurturant parenting. These were examined in Latent Profile Analyses. In regressions, we investigated if profiles predicted parenthood timing (‘early’ ≤ 25 years; ‘on-time’ > 25 years; ‘not a parent’ by 37 years). In those who became parents (n=684 of 1,144 children), we investigated associations with parenting warmth, anxiety, hostility, and bonding with infants at 12 months postpartum. RESULTS-CONCLUSIONS: We identified four profiles: ‘connected’ (n=463, 32.4%; 24% male), ‘constricted empathy’ (n=461, 32.3%; 77% male), ‘insecure’ (n=343, 24%; 36% male) and ‘disconnected’ (n=162, 11.3%; 54%, male). Connected young adults had close ties to family of origin and peers, strong identity clarity and high empathy. They were more likely to be parents by 37 years than insecure and disconnected profile participants, and more likely to enter parenthood ‘on-time’ compared to ‘early’ parenthood in the constricted empathy profile. Connected participants reported the strongest bonds and warmest parenting and the least anxiety and hostility with infants.
Interviews to inform parenting support program for female prisoners with babies or infants

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[Introduction] Although the formation of attachments by children aged 0 to 3 years to others is considered important, female prisoners with babies or infants are separated from them during this important period. This study aimed to explore effective parenting support for female prisoners with babies or infants through interviews.

[Methods] Among 41 female prisoners with children younger than 18 years old, we interviewed one primipara and one multipara who consented to participating in this study. We planned to conduct interviews based on the three Rs theory: Remediation, Redefinition, and Reeducation. We conducted interviews with each participant six times, approximately once a month.

[Results/Discussion] During the first interview, we focused on building a good relationship with study participants by encouraging them to talk about what they want to discuss. During the second and third interviews, we discussed parenting role models and the relationship between the study participants and their parents. During these interviews, the participants told us that they had prepared conversation topics, suggesting that our interview method was effective in building a supporter-parent partnership. During the fourth interview, we practiced reading signals from babies using Baby Cues™ Cards. We told them that they were reading these signals correctly to increase their confidence. During the fifth interview, it seemed that they had changed their perspective on their children. They became able to reflect on their past and constructively consider what is necessary for parenting their children after being released from prison.

[Conclusion] Interviews with mothers in prison based on the 3 Rs theory can be effective if the interviewer’s attitude is supportive. Based on the findings of this study, we will review contents of interviews, aiming to establish a parenting support program.
Impact of A Home-Visitation Program on Maternal Wellbeing:

The Moderating Role of Child Emotionality

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Growing up in poverty in the first three years of life hampers human growth more deeply than any other period (Evans et al., 2013) and early parenting interventions (EPIs) can buffer the negative impact of socioeconomic deprivation on child development (Britto et al., 2017). A recent meta-analysis of 102 RCTs demonstrated that although EPIs targeting families with children aged 0 to 3 promote children’s developmental outcomes as well as positive parent-child relationship;, they, however, do not reduce maternal depression (Jeong et al., 2021) which is a key predictor of mothers’ nonresponsiveness and hostility (Murray et al., 2019). In this study, we examined the impact of the an EPI on maternal wellbeing, taking into account child temperament. The EPI that focused on (a) developmentally-facilitating parenting, (b) child nutrition and (c) maternal psychological well-being on maternal wellbeing and targeted in a group of families living in the poorest neighborhoods of Istanbul, Turkey. The program was delivered by community workers at four district municipalities through biweekly home-visits from the prenatal period till the age 2. The sample consisted of 455 (N intervention = 228; N control = 227) families, with assessments in the prenatal period, at ages 9 and 18 months. In line with the meta-analytic (Murray et al., 2019) findings, our longitudinal analysis results demonstrated no intervention effect on maternal depression. Nevertheless, we found that toddlers’ emotionality moderated the intervention effect on maternal depression at 18 months controlling for mothers’ depression scores at earlier assessments, indicating that the EPI may play a protective role for psychological wellbeing of mothers who have emotionally reactive children. The implications of the findings for social policies will be discussed in the presentation.
Home visiting for women in clinics with integrated Infant Mental Health Behavioral Health Consultants

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Introduction

Infant mental health home visiting (IMHHV) has been shown to have positive effects on early parent-child relationships by increasing parenting sensitivity and reflective functioning and improving maternal mental health. However, perinatal mothers, especially those at heightened mental health and psychosocial risk, are often hesitant to follow up on referrals to IMHHV. Therefore, strategies to increase the uptake of IMHHV will benefit families in need.

Aim of the study

This study investigated whether embedding an Infant Mental Health-trained Behavioral Health Consultant (IMHBHC) in prenatal care would increase uptake of IMHHV services compared to standard of care.

Materials and Methods

We compared rates of IMH home visiting for women who had received prenatal care with integrated IMHBHC (n=90) with women who had received standard prenatal care (n=68). 75% of families had incomes below $30,000 and 78% were minoritized race. All participants completed assessments twice during pregnancy and three times postpartum (approximately 6 weeks, 6 months, and 12 months).

We found that overall rates for mental health encounters differed between IMHBHC and comparison groups during pregnancy (88% versus 8%, respectively; chi-square = 84.03, p <.001), but not postpartum (9% versus 7.5%, respectively; chi-square = 0.00, p = .99). In contrast, perinatal rates for IMH home visiting differed significantly between the IMHBHC and comparison group (14.4% versus 4.5%; chi-square = 4.2, p <.039). Among those who received any visits, the number of visits ranged from 1 to 67. Logistic regression showed a greater likelihood of receiving home visiting services for those in the IMHBHC prenatal care group compared to women in standard prenatal care (OR = 2.95, p = .022).

Conclusions

Having an infant mental health behavioral health consultant (IMHBHC) available in pregnancy clinics increased mental health services during pregnancy as well as home visiting services across the perinatal period.
An integrated family approach in mental health care to support parents and their infants

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INTRODUCTION
Parental mental disorders have an impact on parenting and child development. An adult and child mental health care service in the Netherlands offer an integrated family approach in treatment focusing on the parental mental disorder, infant development, and family relationships especially the parent-infant relationship.

AIM of the study
To increase the knowledge about supporting parents with a mental disorder with parenting, building a secure relationship with their infant and to prevent them from experiencing adverse outcomes and the transmission of mental disorders.
To increase the knowledge about key elements and barriers of an integrated family approach in mental health care.

MATERIAL and METHODS
Our research encompasses a literature review, a multiple case-study, the outcomes of treatment on the parent-infant interaction, and a case-file study. The multiple case-study consist of group interviews with professionals (n=19) and interviews of patients about their experiences of treatment (n=18). The outcomes of treatment consist of a pre-and-post measurement design without a control group (observation of the parent-infant relation) (n=34). The case-file study consist of a description of the sample (n =85).

RESULTS
The project and findings will be presented. This will cover which are the intervention targets to prevent adverse outcomes in both parents and infants according to current knowledge of transmission of psychopathology. A model of an integrated family approach in mental health care. The outcomes of an integrated family approach in treatment on the quality of the parent-child interactions.

CONCLUSIONS
Risk factors and intervention targets are identified on different domains namely parental factors, the developing parent-child relationship, family factors, child factors and environmental factors. An Integrated Family Approach in treatments of adult and child mental health services is needed to stop detrimental cascade effects and promote cascading resilience.
A second order witness: observing infant observers in South Africa

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**Introduction**

Infant mental health is a new field in southern Africa. Some of its Euro-American premises do not mesh with the region’s complex social worlds. Presumptions about family shape and function are complicated by histories of racism, dispossession, illness, inequality, mobility and local models of personhood. These may confound assumptions about care, responsibility, relationship and well-being.

As part of their training in IMH, students conduct infant observations based on the Tavistock model and reporting back to peers and experts. Concerns have been raised about the model’s objectifying capacity. Earlier iterations of the observation also suggested that observation feedback sessions offer a potentially rich source of material for reflection.

**Aim:**

To understand how observers and participants experience the observation process, and to feed findings back into the IMH training programme.

**Material/Methods**

The anthropologist attended weekly online seminars for two years. During these, five students registered for an M.Phil in Infant Mental Health reported back on their hour-long weekly infant observation sessions to the student group and a psychologist and psychiatrist. The resultant discussions were recorded and key themes identified.

**Conclusions**

‘Second-order witnessing’ enabled careful reflection on the experience of learning to be an observer. The observer is seen from three vantages: their own self-reflections; the perspective of those in the infant-nexus (family and care-givers); and the baby’s experience of the observer.

The study demonstrates that to be an observer is to allow oneself to be affected by others without becoming part of the generative dynamic. Observation meetings generate an ‘invisible community of concern’, practicing a form of care that, while invisible to those in the infant nexus, has tremendous power in creating the conditions under which unknown others – strangers – can be held in mind. This quality of observation has reparative and perhaps redressive potential.
The Effectiveness, Implementation and Cost-Effectiveness of a prevention-focused, group-based Early Parenting Intervention

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Introduction. Area-based childhood development programmes targeting the earliest years (0-3) which are focused on the promotion of nurturing parental care are increasingly a feature of policies tackling disadvantage and inequality.

Aims of the study: This study investigated the effectiveness, cost-effectiveness and implementation of a Parent and Infant (PIN) programme – a group-based early parenting programme which combines a range of developmentally tailored supports with the Incredible Years Baby programme.

Materials and Methods. A controlled trial, accompanying process evaluation and cost-effectiveness study were conducted: Parent and child developmental outcomes were assessed in 212 parents and infants participating in the PIN intervention. Outcomes and cost-effectiveness were compared to a service-as-usual group (n=168). Assessments were conducted at baseline (before intervention) and when infants were 8, 16 and 24 months old. Interviews and focus groups with key stakeholders (n=68) were conducted to explore implementation.

Conclusions. The findings highlight significant, sustained improvements in parenting self-efficacy. Sub-group analyses showed positive outcomes in respect of infant temperament and problem solving, but only for low-risk families. The average cost of PIN was €646.64/dyad. The probability that the PIN programme was cost-effective in enhancing parenting attitudes was 87%. The process evaluation highlighted barriers to parent engagement and practitioner involvement in programme delivery. Factors that promoted programme adoption, acceptability and feasibility included innovation characteristics, parent and practitioner attitudes, as well as organisational and systems factors. The findings show that group-based early parenting support delivered in community settings may be an effective way to enhance parenting attitudes, as well as infant socioemotional and problem-solving skills - although more at-risk families may need additional support to promote positive outcomes. The study provides real world evidence on the costs and cost-effectiveness of an early parenting support programme, as well as helping to build understanding of the implementation factors integral to successful early intervention.
'Look- your baby is talking to you'

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**Introduction**

Maternal vulnerability challenges parenthood and poses an essential task to health professionals working in postnatal care. Being born by a vulnerable mother may have wide-ranging effects on child development and carry a risk of impairment in cognitive performance, behavioral disturbances, and mental problems. Healthcare professionals in the obstetric department are in a unique position to initiate early intervention to improve both outcomes for both mother and infant.

**Aim**

By working family focused and relationship based with the families the complex intervention ‘Look-your baby is talking to you’ has been carried out at Copenhagen University Hospital Hvidovre, Copenhagen and is the first of its kind to combine components from the methods Family Focused Nursing and Newborn behavioral observations (NBO), as well as a systematized transition to the primary healthcare sector. The intervention hypothesizes that when providing the mother with optimal support, strengthening confidence, observation skills, understanding of their infants’ cues and signals and empowering family resource’s chance is to lower maternal depressive symptoms 3 month post-partum.

**Methods**

The target group of the intervention is mothers with current or past depression and / or anxiety. The intervention consisted of a five-day standardized stay at the obstetric department including 3 NBO sessions and 3 family conversations. At the last family conversation, the family’s healthcare worker was invited to participate. In total 49 mothers received intervention and 51 were included in the comparison group. Baseline data were collected 24-48 hours post-partum and 3-month post-partum. Data analysis are ongoing, and results may be presentable spring 2023.

**Conclusions**

This short-term intervention will contribute with a new perspective on the potential of the postpartum stay at the obstetric department and provide knowledge about the application of both NBO and family conversations at the obstetric department which has never been done in a Danish context.
Preterm infants’ spontaneous movements and maternal emotional availability contribute to children’s motor and socio-emotional competence.

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Introduction: School-aged children born preterm are at increased risk for less favorable motor and socio-emotional functioning.

Aim: We examined the contribution of infants’ spontaneous movements and mothers’ emotional availability at school-age to motor skills, social competence, and self-esteem of school-aged children born preterm.

Materials and Method: A longitudinal study that included 106 dyads of mothers and children born preterm (Gestational age Range = 23-35 weeks; Birth weight range = 520-2434g.; 38.3% girls) was conducted. At corrected ages of 3-5 months, the Prechtl General Movement Assessment was used for assessing infants’ spontaneous movements. In school-age (Age range = 60-106 months), mother’s emotional availability was assessed during play interactions using the Emotional Availability Scales; Children’s motor skills were assessed using the Movement Assessment Battery for Children; their social competence was reported by mothers and teachers using the Health and Behavior Questionnaire, and children’s self-esteem was assessed by teachers reports using the Teacher’s Rating Scale of Child’s Actual Competence and Social Acceptance. Covariates included demographic characteristics, medical history, and developmental diagnoses (e.g., attention disorder and cerebral palsy).

Results: Both typical spontaneous movements in infancy and maternal emotional availability in school age contributed to children’s motor skills in school age. Higher maternal emotional availability mediated the link between typical spontaneous movements in infancy and higher social competence in school age. Finally, lower maternal emotional availability was associated with lower self-esteem in school age, but only among children who showed abnormal spontaneous movements in infancy.

Conclusions: Results point to the value of assessing infants’ spontaneous movements for identifying children at risk for less favorable motor and socio-emotional development in school age. These findings highlight the importance of interventions in this population to improve mother-child emotional availability and children’s motor skills.
Promoting young children’s mental health across contexts: Findings from a research-to-practice center

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(Overall abstract for BOP session)

Background
It is well documented how early childhood adversity often has long-term detrimental consequences on a range of areas, such as mental health, educational and labor market success. Early interventions may prevent or buffer some of these negative effects. While research on the effectiveness of such programs is thus an important research topic, knowledge on how evidence-based programs work in real-life settings and what facilitates or hinders implementation in practice is imperative.

Since children develop across multiple contexts, early childhood mental health promotion should include various disciplines (e.g., psychologists, health visitors, and pediatricians) and occur at different levels (e.g., universal, selective, or indicated interventions).

Description
At this BOP-session, we present results from studies focusing on early childhood mental health promotion conducted at the Center for Early Intervention and Family Studies (CIF), University of Copenhagen. We present results from studies focusing on the family and the childcare context as well as from studies with implications for different groups of professionals (primary care professionals, family therapists, childcare providers).

The first presentation presents results on the detection of infants at risk by addressing the validity of the Alarm Distress Baby Scale (ADBB) when used as a universal screening tool for social withdrawal in primary care. The second and third presentations present results on the effects of the Understanding Your Baby-intervention, a universal intervention delivered to parents by health visitors in combination with the ADBB-screening. In the fourth presentation, findings are presented regarding the effect of the Circle of Security-Parenting delivered to mothers with postpartum depression and/or mothers of socially withdrawn infants. The fifth presentation shares results on determinants of mind-mindedness in professional caregivers in center-based childcare. Finally, the last two presentations present results on the implementation and effect of the Circle of Security-Classroom in center-based childcare.
INTRODUCTION: Trait anger reflects a tendency to feel irritation, annoyance, and rage, and involves a narrowing of cognition and attention. This narrowed scope may impact the capacity to understand the mental states of oneself and others (mentalising), which for fathers of infants may compromise bonding and caregiving involvement.

AIM: Here, we investigated the extent to which mentalising mediated the relationship between father trait anger and both father-infant bonding and caregiving involvement.

MATERIAL AND METHODS: Data were from 168 fathers (age M = 30.04, SD = 1.36) of 190 infants (M = 7.58 months-of-age, SD = 5.06) in the longitudinal Men and Parenting Pathways (MAPP) Study. We assessed fathers’ preconception trait anger at Wave 1 and their mentalising two years later at Wave 3. At Waves 3, 4, and/or 5, we assessed father-infant bonding and father involvement in caregiving when men had an infant younger than 18-months-of-age. Associations were examined using path analysis.

CONCLUSIONS: Poorer mentalising fully mediated the relationship between preconception trait anger and father-infant bonding (total score), but not involvement in infant caregiving. Further, poorer mentalising fully mediated the relationships between trait anger and each component of the father-infant bond (i.e., patience and tolerance, affection and pride, and pleasure in interactions). Findings suggest that for men high on trait anger, targeted interventions that facilitate mentalising capacities may help to develop a foundation for a strong father-infant bond. Interventions may be offered on becoming a father (perinatal), or prior to becoming a father (preconception) in order to prevent future bonding problems.
Evaluating the efficacy of Circle of Security- Parenting in an at-risk community sample

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Infant attachment insecurity and disorganization increase the risk for development of psychopathology. Maternal postpartum depression (PPD) is a known risk factor for maternal insensitivity, infant social withdrawal and insecure infant-mother attachment. The Circle of Security-Parenting (COS-P) is a manualized group-based intervention to promote parental sensitivity and secure attachment. Recent RCTs have shown mixed effects of COS-P. Cassidy et al. (2017) found main effects for fewer maternal unsupportive responses to child distress and better inhibitory control in children, but no main effect on attachment. Zimmer-Gembeck et al. (2021) found small effects for reducing caregivers’ own attachment anxiety and self-reported negative parenting practices.

In this study, 297 mothers and their 2-12 months old infants with diagnosed maternal PPD and/or infant social withdrawal were randomized 2:1 into COS-P or Care as Usual (CAU), i.e., standard practices for at-risk families in Copenhagen. Hereof, 236 mothers (167 COS-P, 69 CAU) completed follow-up assessments, including the Strange Situation and a free-play interaction coded for maternal sensitivity using Coding Interactive Behavior (CIB, Feldman, 1998).

Preliminary analyses of mixed effects, controlling for baseline measurements and COS-P group, showed no main effects of COS-P regarding maternal sensitivity, maternal reflective functioning, or child attachment. Results will be expanded to include relevant control variables and moderators, e.g., educational level, symptoms of personality disorder, attachment style, and adverse childhood experiences.
Social support, maternal parental self-efficacy and postnatal depression in the transition to motherhood

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Introduction and Aim of study
Becoming a mother for the first time is a major developmental transition and previous research indicates that social support and mothers’ own beliefs in their capabilities as new mothers facilitates the transition to motherhood. The aim of this study was to examine the relationships between social support (SS), maternal parental self-efficacy (MPS-E) and Postnatal depression (PND) for first-time mothers at 6 weeks postpartum.

Methods: A correlational cross-sectional study design was used. Data were collected from first-time mothers (n=410) using a five-part survey which included a demographic questionnaire, the Perinatal Social Support Questionnaire (PICSS) and the Perceived Maternal Parental Self-Efficacy Scale and the Edinburgh Postnatal Depression Scale.

Results
Demographic data revealed two-thirds of respondents were aged between 27 and 35 years with three quarters educated to University/third level. The majority of respondents were living with their husband (64%) or partner (23%) and the average stay in hospital was 3.6 days with a greater number of vaginal deliveries (68%) than caesarean sections (33%) reported. In terms of structural social support, the vast majority of respondents reported informal social networks as their main sources of support with fewer participants indicating receiving formal support. The mean total functional social support score was 68.3 (SD 8.9) (range 47–88), indicating that respondents received high levels of different types of support. The mean score for MPS-E was 65.9 SD 8.2 (range 32–80) indicating a high level of maternal parental self-efficacy. Results revealed statistically significant relationships between informal social support and MPS-E (p < 0.001); informal structural social support and PND (p < 0.001) and between MPS-E and PND (p<0.001).

Conclusions
Nurses and midwives need to be cognisant of the importance of social support for first-time mothers in both enhancing maternal parental self-efficacy and reducing postnatal depressive symptomatology in the early postpartum period.
Patterns of Emotional Availability among mothers with Substance Use Disorder and their children

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Introduction: Maternal Substance Use Disorder (SUD) represents a well-known risk factor for child development, with an important role played by children’s exposure to dysfunctional caregiving practices beyond the teratogenic impacts of substances. Most of the research on parent-child interactions among substance-abusing mothers focused on specific parenting dimension (e.g. maternal sensitivity or intrusiveness) or on maternal and child behaviors separately, which may not be representative of the quality of the relationship as a whole.

Aims: The aim of this study was to identify patterns of dyadic Emotional Availability (EA) in mother-child dyads receiving residential intervention services for maternal substance abuse, and their association with different individual or dyadic risk factors.

Material and methods: The study involved 77 mothers with SUD (Mage=28.55yrs, SD=6.41) and their children (47% male, Mage=12.47mths, SD=15.04). Mother-child interactions were observed and rated with the Emotional Availability Scales (EAS) at the admission of the dyads into a residential Therapeutic Community. Cluster analysis was used to detect potentially different patterns of dyadic interactions. The different groups of mother-child dyads were examined in relation to contextual and clinical variables, assessed through specific checklists, and to maternal psychopathological symptoms, measured through the SCL-90-R.

Conclusions: Four EA patterns were identified: (a) “low functioning dyads” (b) “low functioning mother with inconsistent child”, (c) “inconsistent mother with low functioning child”, and (d) “functioning dyads”. These patterns presented differences with respect to clinical and psychopathological variables. These results highlight the heterogeneity in the quality of mother-child interactions and offer important clinical implications that may contribute to the development of specific therapeutic interventions for mothers with SUD aimed at improving both the quality of parenting behaviors and childhood development trajectories.
Understanding Your Baby: A controlled parallel group study of a universal home-based educational program

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Introduction
Transition to parenthood represents a challenging time, where parents need to adjust to the new roles and develop new competencies. Parental competence is a key factor in promoting healthy functioning for parents and their children. Therefore, the aim of the Understanding Your Baby (UYB) intervention is to support parental competence and infant development by aiding mothers in noticing their infants’ behavioral cues and interpreting them in terms of mental states. The UYB is a universal program delivered by municipality health visitors in the context of the existing Danish home-visiting program.

Aim of the study
The study examines whether mothers receiving Care As Usual (CAU) including the UYB intervention in comparison to mothers receiving CAU alone experience higher parental competence, increased knowledge about infant socioemotional development, and less parenting stress at infant age 11 months.

Material and Methods
First-time mothers were recruited for the CAU (n = 479) and UYB (n = 472) groups from ten municipalities during two different time periods, i.e. before and after the health visitors in the municipality were trained in and started to deliver the UYB intervention. Participants were recruited six weeks postpartum and received online questionnaires when their infants were 2, 4, 7, and 11 months. Data are analyzed according to the intention to treat principle. The comparison of the UYB and CAU groups are conducted using linear mixed models with the health visitor as the second order variable to account for the correlation induced by the same health visitor conducting the CAU and UYB intervention for multiple families. Analyses are controlled for maternal educational level, maternal depressive symptoms, and maternal age.

Conclusions
Analyses are ongoing. The results will be presented at the conference, and discussed in relation to the possibilities and challenges of universal home-based interventions in supporting parenting and infant mental health.
MATERNAL BONDING MEDIATES BETWEEN MATERNAL DEPRESSIVE AND ANXIOUS POSTPARTUM SYMPTOMS AND PERCEIVED PARENTING STRESS

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The bond between mother and infant is a central concept in postpartum research. It concerns the emerging relationship between mother and infant. This maternal bond means that the mother goes to great lengths to meet the infant’s needs.

Evidences from research studies suggested that anxiety and depression are factors which can significantly impair maternal–infant bonding as well as impact on parenting stress.

Very few studies have explored the relationship between anxiety and depressive experiences, maternal bonding to the child and parenting stress, showing an association between these factors.

Aims of the study are: (1) to investigate the relationship between these factors and (2) the possible mediating effect of bonding to the child between maternal anxiety and depression reported symptoms and parenting stress.

Maternal bonding (MPAS), depressive and anxious symptoms (EPDS; STAI) and parenting stress (PSI) were assessed in a community sample of 111 women (M [SD] = 32.70 (4.34) yrs old) at three months postpartum.

Pearson’s correlation analyses showed from moderate to high relationships between all investigated factors. The three mediation models conducted separately showed that MPAS partially mitigates the effects of EPDS (b = .729; SE = .207; 95%CI = .330 – 1.14) and STAI State (b = .396; SE = .106; 95%CI = .197 – .616) on PSI, and totally mediated the relationship between STAI Trait and PSI (b = .609; SE = .153; 95%CI = .327 – .919). Results highlighted the key role of the maternal bonding as protective factor for the negative impact of postpartum depression and anxiety reported symptoms on parenting stress.

The finding that maternal bonding partially mediates the relationship between perceived maternal anxiety/depression symptoms and parental stress is indicative for the development of interventions
MATERNAL PREMENTALIZING MODES MEDIATE BETWEEN MOTHERS’ INSECURE ATTACHMENT AND EARLY ADOLESCENTS’ EXTERNALIZING BEHAVIORS

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Compared with childhood, early adolescence demonstrates a sharp increase in externalizing behaviors. Therefore, it’s particularly important to identify their predictors. Mother’s parental reflective functioning (PRF) is considered to be an important predictor of children’s externalizing behaviors, as well as maternal attachment is considered to be a key factor in fostering the development of son’s emotional and behavioral capacities. Yet, there is a lack of research examining how maternal attachment and PRF are related to sons’ externalizing behaviors during early adolescence. Moreover, only few studies in this area have assessed PRF as a multidimensional capacity.

Aims of the study are to investigate: (1) the associations between early adolescents’ externalizing behaviors, mother’s PRF and her attachment dimensions (i.e., levels of attachment avoidance and anxiety); (2) whether maternal PRF mediates the relation between maternal attachment dimensions and early adolescents’ externalizing behaviors. We hypothesized that insecure attachment dimensions would be negatively related to indices of sons’ externalizing behaviors. Furthermore, we expected that PRF dimensions would mediate the relationships between attachment dimensions and sons’ externalizing behaviors.

Parental reflective functioning (PRFQ), maternal attachment dimensions (ASQ) and early adolescents’ externalizing behaviors (CBCL) were assessed in a community sample of 53 mothers (M [SD] = 45.79 (4.69) yrs old) and their sons (M [SD] = 13.03 (0.91) yrs old). Pearson’s correlation analyses showed from moderate to high relationships between insecure maternal attachment, mothers’ pre mentalization modes (PM) and sons’ externalizing behaviors. The mediation model showed that PM totally mediated the relationship between both anxious attachment and sons’ externalizing behaviors (b = .134; SE = .066; 95%CI = .028 -.285) and maternal avoidance and sons’ externalizing behaviors (b = .108; SE = .039; 95%CI = .035 .183). This study provides new evidence of the importance of the parent’s mentalizing stance for the development of externalizing difficulties in early adolescents.
Bio-behavioral synchrony during mother -infant face-to-face interactions at 6 and 9 months of infant age

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Introduction
Parent–child positive synchrony refers to a type of interaction that is mutually regulated, reciprocal, and harmonious, a fundamental experience for infants to promote several developmental goals. Synchrony reflects an attunement between infants and mothers that facilitates active regulation of distress; in this way, it may build a repertoire for regulating stress that facilitates the transition from mutual regulation to self-regulation. Synchrony between mothers and infants during social interactions occurs at a behavioural, physiological and neural level, all levels concurring to a process of co-regulation. While the effects of each level of synchrony separately were previously explored, no studies examined all the three levels simultaneously and their interplay.

Aim of the study:
We aim to present a way of examining dyadic bio-behavioural synchrony during spontaneous face-to-face mother-infant interactions at 6 and 9 months of infant age.

Materials and methods:
Thirty mother-infant dyads were videotaped during the Still-Face Procedure (3 minutes interaction, 2 minutes still-face, 3 minutes reunion). Behavioural synchrony was examined by coding patterns of co-regulated attention and affect. Physiological synchrony was examined by computing and correlating infant and mother Respiratory Sinus Arrythmia values. Neural synchrony was computed by correlating each partner frontal EEG activity. Patterns of synchrony were examined each 20 seconds interval to describe dynamical changes during the interaction. Mothers completed a set of questionnaires to assess maternal well-being.

Conclusion:
Dyads exhibited bidirectional neuro-physiological synchrony during the interaction and the still-face phases. Physiological synchrony changed over time during the phases, and was not associated with levels of behavioural synchrony. Quality of physiological and behavioral synchrony was influenced by maternal individual factors. Methodological and empirical implications for the study of synchrony during mother-infant interactions are discussed.
How Do Early Childhood Educators Experience Reflective Consultation?

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INTRODUCTION
There is limited research that centers the voices and experiences of early childhood (EC) educators participating in reflective consultation. Given the promise of reflective consultation in ECE settings and its impact on educator well-being and competence, it is imperative to understand the perspectives of EC educators participating in reflective consultation.

AIM OF STUDY
The purpose of this study was to describe the experiences of EC educators participating in reflective consultation by elevating the voices of EC educators experiencing reflective consultation and describe, in their words, the primary benefits of engaging in reflective consultation.

METHODS
A total of 15 EC educators (preschool teachers and directors; 40% Latina, 60% White) received monthly reflective consultation (1-1.5 hours per session) in their teaching teams, facilitated by a mental health clinician (trained through the Napa County Infant-Mental Health Fellowship). Reflective consultation was offered in English and in English-Spanish. Following participation in reflective consultation, we conducted semi-structured interviews in the preferred language of participants. Using inductive inquiry (Saldaña and Omasta, 2022), we investigated participants’ responses. Each author examined the transcripts in their entirety, identified salient quotes and through multiple discussions identified codes and patterns in the data (Braun and Clarke 2012).

RESULTS
Four primary themes emerged from the data: 1) Space to express feelings (a sense of safety to talk about their experiences as EC educators); 2) Taking a pause (space and time to take a pause to engage in intentional breathing and reflect on their work); 3) Awareness of self and others (enhanced understanding of self and capacity for perspective taking), and 4) Working as a team (deepened sense of trust in themselves and co-workers).

CONCLUSIONS
This project illuminates and builds upon our understanding of how EC educators and directors experience reflective consultation.
Introducing mind-mindedness in early childcare providers with the COS-Classroom approach: a randomized controlled trial

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Introduction.
In countries where the majority of young children are enrolled in professional childcare, the childcare setting constitutes an important part of children's caregiving environment. Research consistently shows that particularly the quality of the daily interactions and relationships between young children and their professional caregivers have long-term effects on a range of child developmental outcomes. Therefore, professional caregivers' capacity for establishing high-quality interactions with the children in their care is an essential target of intervention. An important component of the caregiver's interactive skills is assumed to be the caregiver's mentalizing ability, in particular when the caregiver or the child is distressed.

AIM of the study.
To test the effect of the efficacy of the group-based attachment theory informed Circle of Security approach adapted to the childcare setting (COS-Classroom, COS-C), a relatively resource-effective professional development program with potential for upscaling. While we also test effects on caregiver interactive skills, this presentation focuses on effects on caregiver mentalizing ability (operationalized as Mind-Mindedness) in relation to children perceived as 'challenging' by the caregivers.

Material and Methods.
A prospective, parallel, cluster-randomized wait-list controlled trial design is used. Participants are professional caregivers of children aged 0–2.9 years from Danish childcare centers. Thirty-one childcare centers, corresponding to 113 caregivers and their managers participated in the study. The Mind-Mindedness coding scheme for interviews is used to assess caregivers' Mind-Mindedness. Data on structural factors (e.g., caregiver-child ratio and level of pre-service education), and caregiver attachment style, together with data on the acceptability and feasibility of the COS-C was additionally collected to investigate moderating and confounding effects.

Results
Mind-Mindedness interviews are currently being coded and findings will be presented.

Conclusion
Examining the effects of COS-C on caregiver Mind-Mindedness contributes to our knowledge on how to improve the quality of care in center-based childcare settings.
Negative coparenting and infant self-regulation: the susceptibility role of lower fetal heart rate variability

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Introduction: Infants can be more susceptible to the impact of environment due to higher neurobiological plasticity. Lower fetal heart rate variability (FHRV) may be a prenatal endophenotypic susceptibility marker and increase the impact of both positive and negative coparenting on infant self-regulation.

Aim of the study: This study analyzed the moderator role of FHRV in the impact of positive and negative coparenting on infant self-regulation at three months.

Material and Methods: The sample comprised 86 first-born infants and their mothers and fathers. FHRV was recorded during routine cardiotocography examination at the third trimester of gestation. Mothers and fathers reported on coparenting and infant self-regulation at two weeks and three months postpartum.

Conclusions: Results indicated that FHRV moderated the impact of mother and father’s negative coparenting at two weeks postpartum on infant self-regulation at three months. Infants with low FHRV presented higher self-regulation when mothers or fathers reported less negative coparenting, while lower self-regulation when mothers or fathers reported more negative coparenting, than infants with high FHRV. Findings suggested lower FHRV as a prenatal endophenotypic susceptibility marker that increases the impact of negative coparenting on infant self-regulation. Infants with low FHRV can be those who better develop self-regulatory mechanisms in the presence of less negative coparenting, while at high risk of self-regulation problems in the presence of more negative coparenting.
The New Families project – a universal home visiting program - content and research

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Introduction: The Child Health Services (CHS) in Norway are part of the Primary Health Care (PHC) service for children 0-5 years and their families. The service is used by 98% of the eligible population and is legally regulated as part of the PHC at a municipal level. The New Families program (NF) is an early universal intervention which includes home visits provided by Public Health Nurses (PHNs) during pregnancy and until the child is two years old. The same home visitors follow the families in the CHC clinics. NF was developed and piloted by the City of Oslo and supplements the regular CHS program. NF is based on a salutogenic perspective, focusing on resource mobilization and parental support.

Aim: To present a universal home visiting program and the research design on this program.

Material and Methods: A prospective non-randomized controlled study with parallel group design was conducted to evaluate the impact of NF. First-time parents in three city districts received NF in addition to usual care, and first-time parents in two city districts received usual care. Participants (parents) were recruited before pregnancy week 28 and were followed until 12 months postpartum. Data collection started October 2018 and continued until June 2021. Quantitative data were collected via self-reported questionnaires five times during the period. Qualitative data comprise in depth interviews with parents, and participant observation to explore parental experience of the NF. PHNs’ reflection notes were analysed to investigate their reflections on implementing the NF.

Conclusions: A total of 425 parents, 228 mothers and 197 fathers participated in the study. All the qualitative data from the PHNs’ reflection notes, the interviews with parents and the observational data from NF home visits have been collected and analyzed. Results from the research project are described in the proceeding symposium abstracts.
The New Families program from the perspective of public health nurses and parents: preliminary results

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Introduction: Norway has longstanding provision of extensive and freely available universal preventive health care at child health centers for under school aged children. Nearly all parents with small children use this service for regular consultations with public health nurses 14 times until school age. A supplement to these consultations, the New Families program was implemented in 2019 in the City of Oslo. This program, based on home visits from a public health nurse, primarily targets first-time parents and is based on proportionate universalism.

Aim of the study: To investigate the implementation of the New Families program from the perspective of public health nurses and parents.

Material and Methods: An interpretive description approach based on, first, 206 anonymized reflection notes by public health nurses becoming familiar with the New Families program collected in 2017-2020. Further, an observational and interview study was conducted in three districts of the City of Oslo. This study comprised eight participant observations of the public health nurses’ home visits in the program and six qualitative interviews with parents about their experiences of the program.

Conclusions: In home visits to prospective parents that addressed previous life and childhood experiences and parental role expectations, public health nurses experienced differences from what they were used to. Preliminary results indicate that parents experienced scant advance information regarding the reason and content of the first home visit in the New Families program. However, the prospective parents seemed receptive and open-minded during home visits before the child was born, sharing narratives on personal concerns. They experienced it as positive to have met their public health nurse before the birth. For public health nurses, the program’s new focus required some training and guidance.
Community approaches to infant mental health - Application of a holistic systems thinking approach.

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Our relationships shape who we are, framing our identities and impacting our life from conception, a baby’s ability to connect and to be connected to others directly influences their outcomes. However, whilst relationships with individuals are hugely important, the systems around babies, families and other social support networks play a critical role in securing those foundations, providing a mirror for good practice and maximizing the infant’s potential. The Centre for Early Child Development (CECD), the research and development hub of Blackpool Better Start, are presenting these Brief Overview Presentations (BOPs) which reflect on seven examples of interwoven programmes within the Better Start initiative.

This is a 10-year national lottery community fund (TNLCF) initiative designed to improve the life chances of those aged 0 – 4 years in areas of high socio-economic deprivation. The Better Start initiative is an investment in systems transformation, using the latest science and evidence, combined with lived experience, to interrupt intergenerational cycles of poor outcomes. In taking a whole systems approach, the examples highlight the challenges and opportunities of supporting parent-infant relationships. These BOPs provide a narrative of the journey from exploring caregiver priorities and how infant needs are framed by our communities, to the strategies used to forge peer to peer connections to foster relationships to services. The presentations offer an opportunity to hear how the Blackpool Better Start partnership is supporting infant mental health across a continuum that includes community priorities, workforce development, universal provision, early identification of need, integrated referral pathways, along with targeted and specialist perinatal mental health and parent-infant relationship services.
How we co-produced a programme theory to support the development of Wee Minds Matter.

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‘Wee Minds Matter’ (WMM) is a multidisciplinary Infant Mental Health (IMH) service that aims to support families and professionals to meet infants’ needs and understand the infant experience, and thus transform culture around IMH in Greater Glasgow and Clyde. The evaluation design of this complex intervention draws on national guidance and regional needs assessments (i, ii, iii). The development of the underpinning programme theory was aided by a ‘Programme theory workshop’ (PTW) facilitated by the evaluation team to capture how the WMM team see this intervention ‘working’. The WMM team contributed to a stakeholder analysis, review of wider context and system influences, and identification of interventions, and underlying mechanisms of change.

AIM OF THE WORKSHOP
The aim of the workshop is to share the development, implementation and synthesis of findings from the PTW.

METHODS
A demonstration of the interactive online whiteboard used to capture data, and methods such as ‘history of the future’, ‘PESTLE’ and final reflections will be delivered. Participants will take part in an interactive example of one of the methods.

CONCLUSIONS
The workshop will explore the PTW approach, discuss methods used, and consider how this methodology could be extended to enrich and refine other programme theories. The workshop will conclude with an open discussion on strengths, limitations and potential improvements.

Parental self-efficacy and professional support - first-time parents’ experiences with an extensive Child Health Service

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Background: Becoming a parent for the first time is a major transition and parental self-efficacy is considered an important predictor of parenting functioning. Parental self-efficacy is defined as the parents’ belief in their ability to perform the parental role successfully. According to self-efficacy theory, there are four information sources of impact: enactive mastery experiences, vicarious experiences, verbal persuasion, and physiological and affective states. Most expectant and new parents seek social support and information from various sources to facilitate their mastery in this transition, and appraisal and informational support are found to be significantly related to self-efficacy in infant care practices. One of the main objectives of the Child Health Services in Norway is to ensure that parents experience mastery in their parental role.

Aim: The aim of this study was to gain knowledge of how the New Families home visiting program, integrated in the Child Health Services, support first-time parents’ self-efficacy and mastery capacity during the first year postpartum.

Method: Qualitative data were collected from parents through in-depth interviews. We interviewed 13 parents, six fathers and seven mothers, and explored their transition to parenthood and their experiences with the support.

Conclusions: The four main themes “Unknown territory”, “Mastery experiences and strategies”, “Guidance and reassurance” and “Family focus” describe a dynamic development of parental identity and are discussed in the light of self-efficacy theory, Antonovsky’s salutogenic theory and proportionate universalism. Both home visits during pregnancy and postpartum are experienced as positive if needed. However, to tailor parental support from the Child Health Services and be able to define parental needs, more proactive information about the Child Health Services seems to be needed. Health checks of the baby, patient and friendly public health nurses having enough time, peers and family seems to facilitate the parental self-efficacy.
How do visually impaired infants (and their mothers) respond to the Face-to-Face Still-Face?

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Introduction: Socio-emotional stress regulation (SESR) is key to infants' development and mental health. Previous research used the Face-to-Face Still-Face (FFSF) procedure to assess SESR and highlighted how maternal voice and touch support infants' capacity to respond to stress. Less is known on SESR in visually impaired (VI) infants. VI infants can present partially unclear emotional cues; thus their mothers may be challenged in responding contingently compared to mothers of typically developing (TD) infants.

Aim of the study: (1) comparing TD and VI infants' SESR in response to the FFSF and (2) exploring the role of mothers' voice and touch on infants' SESR in both groups (3) compare observational patterns of VI and TD infants' mothers during a task of child's emotion recognition.

Material and Methods: 9-to-12-month VI and TD infants and their mothers participated in a videotaped FFSF session. Subsequently, mothers were shown videos of their infant expressing positive or negative emotions on a Tobii TX300 eye-tracker. Infants' negative emotionality and avoiding gaze orientation, mothers' verbal and touching behaviours were micro-analytically coded.

Preliminary data showed higher negative emotionality and avoiding gaze during still-face phase in both groups. Mothers of TD infants increased mind-oriented verbal comments and decreased the use of playful touch after the still-face phase, whereas mothers of VI infants did not. Looking times proportions to the child's body-vs-face and eyes-vs-mouth resulted to be similar between groups.

Conclusions: The study suggests that VI and TD infants are similarly sensitive to maternal unresponsiveness. Mothers of VI infants seem to use similar observational patterns to read their infant's emotional needs. Mothers of VI infants tend to use less mind-oriented caregiving when regulating their infants SESR. These data offer potential targets for early interventions aimed at supporting infants' socio-emotional development and mental health thought early dyadic interaction.
Mental health focus among pregnant women and fathers.

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Background. The transition to parenthood is characterized as meaningful but also challenging for parents. The parent’s mental health may be affected, and support is important. Evidence suggests that prepartum depression among mothers is a health problem as prevalent as postpartum depression. We know that depression symptoms lie a heavy burden on the family. The New Families program (NF) intends to improve the quality of existing Child Health Services (CHS) by offering tailored services and providing early intervention to families.

Aim. To estimate the prevalence and assess the strength of associations between antenatal depressive symptoms and selected possible predictive factors among women attending antenatal care for the first time at the CHS. To understand fathers’ experiences of the NF intervention.

Method. Data is from (1) a cross-sectional study included a sample of 228 women participating in the NF research program answering questionnaire at week 28 of pregnancy. The EPDS was used as the outcome measure. (2) Qualitative data were collected from fathers through in-depth interviews.

Conclusions. The prevalence of depressive symptoms in this sample was 17.9%. Not sleeping enough resulted in significantly higher odds of having depressive symptoms. High satisfaction in the relationship acted as a buffer. Fathers experienced the program as an important contribution towards a more available and tailored service for men. The prevalence of depressive symptoms in this sample indicates that health personnel needs to be aware of depressive symptoms already in pregnancy. Identifying predictive factors may help health personnel support parents. Our results raise the question of whether pregnancy could be a feasible time to screen for depressive symptoms in the general population of pregnant women. The results underscore the importance of involving partners in antenatal care. Home visits during pregnancy can contribute to the parents’ trust in CHS and prepare them for the postnatal period.
Evaluating the implementation and impact of Wee Minds Matter - NHSGGC Infant Mental Health Service

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**Introduction**

The Scottish Government has made a major investment in infant mental health services. Prior to this, there was little specialist support for infants in Scotland (Rare Jewels report; Hogg, 2020). Each new Scottish service represents a novel and pioneering model, with shared challenges including matching service offer to health board profile, forming an identity amidst existing services, and using limited resource creatively to address considerable need.

**Aim of the Study**

In 2021 Specialist Children’s Services in NHS Greater Glasgow & Clyde, the largest health board in Scotland, established and recruited to a multidisciplinary infant mental health service, ‘Wee Minds Matter’. The service aims to use relationship-based practice to ensure that infant experience and need are well understood by families and professionals, and that care is matched to need at all tiers of service provision from universal to specialist.

**Materials and Methods**

Drawing on a Public Health Scotland (2021) evaluability assessment and recommendations for perinatal and infant mental health service evaluation, we developed a theory of change logic model, and refined key evaluation questions to guide scrutiny and analysis of the impact of the service in its early years. This offers opportunities: to weave gold standard principles such as participation and co-production into service design, to innovate, and to consider and engage in systemic service evaluation and improvement from the outset.

**Conclusions**

In this brief oral presentation, we will provide an overview of the evaluation plan for Wee Minds Matter, including describing the development of a logic model; outlining structure and key questions; presenting findings from phase one of the service evaluation, including service user feedback, and giving examples of how this will feed into iterative developments. We anticipate that this will be of particular interest to others involved in infant mental health service innovation, design, strategy and evaluation.
Measuring maltreatment, foster carer commitment and placement duration: Understanding the journeys of infants in care.

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The BeST? Services Trial is a Randomised Controlled Trial measuring the effectiveness and cost effectiveness of an IMH approach, compared with social work (services as usual) on the outcomes of infant mental health and time to permanent placement. 488 children under the age of five who were removed from parental care in two sites in the UK were recruited.

The focus of this symposium is on 4 strands of work from trial data characterising aspects of the child’s journey through care:

Presentation 1: Crawford et al compared two methods of measuring child maltreatment prospectively in a sample of 101 infants entering foster care, the ACE Questionnaire and modified Maltreatment Classification System. This suggests that each instrument highlights particular types of maltreatment and concludes that the use of both instruments may provide better data for understanding how certain types of maltreatment may predict outcomes.

Presentation 2: Turner et al qualitatively explored the fit between the UK short-term system of foster care with infant mental health needs and Mary Dozier’s construct of foster carer commitment using interview and focus group data from foster carers and infant mental health professionals. Drivers and barriers to committed foster care are identified.

Presentation 3: Turner et al measured foster carer commitment against the outcomes of infant mental health and symptoms of attachment disorders from 144 children. Whilst some attachment disorder symptoms improved after 1 year, mental health problems unexpectedly increased after 2.5 years. We discuss possible causal mechanisms for these trends.

Presentation 4: Kainth et al measured the time taken for 198 children within the BeST? cohort, initially placed in foster and kinship care, to reach a permanent placement (either permanent reunification with family, or adoption). Age at entry to care was the only factor to be significantly associated with the probability of permanent placement.
Nosotros Jugamos: a cultural and language sensitive Caregiver-Led Parent-Child Group

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Nosotros Jugamos is a facilitated play, support, and psychoeducation evidence-based program with mental health components for caregivers with young children between the ages of 6 - 36 months, priorly called WePlay Español. It is similar to the WePlayDenver (WePlay) except the groups are exclusively held in Spanish and targeted the needs of Spanish-speaking caregivers. Nosotros Jugamos is a cultural sensitivity model pertinent to addressing the needs present within the LatinX population of Colorado, which represents 12% of Colorado’s population (Colorado Health Institute, 2015) and 1.1 million Coloradoans identify as Latinx (Latino Leadership Institute, 2017). In Colorado, and more specifically in Denver, only very few mental health professionals are able to offer services in Spanish. Nosotros Jugamos aims to fill the gap by improving communication between Hispanic individuals and their health care providers (American Psychiatric Association, 2017). Nosotros Jugamos facilitators and supervisors are culturally, and linguistically sensitive clinicians trained in offering evidence-based psychotherapy in Spanish.

In this presentation, we will address some of the different culture-specific core values (e.g.: simpatia and respecto) and stressors (e.g.: social mobility, adaptation problems to a new language, behavioral norms, and values of the new environment) (Rogler et al.,1991, cited in Welsh, 2013) this model is accounting for. In Nosotros Jugamos, the Flexibility of WePlay Denver is applied to the specificities of the LatinX community, reducing acculturative stress from assimilation issues (Crockett et al., 2007), thus promoting mental well-being (American Psychiatric Association, 2017) while supporting participants around childcare practices and normative developmental behaviors. Nosotros Jugamos helps to fill a gap for participants who may feel hesitant or unwilling to ask questions of their care providers for fear of appearing disrespectful.
Development of a psychomotor stimulation protocol for malnourished infants and young children

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Introduction: Severe acute malnutrition causes great psychological suffering and has negative consequences on the development of infant and young children (cognitive, emotional, motor, etc.). Numerous studies show that children who survive severe acute malnutrition are not only at increased risk for illness and early mortality (but also impaired cognitive and emotional development. However, there is evidence that early psychosocial stimulation with disadvantaged infants and young children can result in short- and long-term benefits for cognitive and social development. These interventions are designed to teach parents to interact and respond appropriately to encourage their child's play and development. For these reasons, it is important to provide complementary psychosocial support, with a focus on psychomotricity, for this vulnerable population directly served in health centers.

Objective: The objective of the study is to adapt and measure the effectiveness of a psychosocial psychomotor intervention focused on severe acute malnutrition in infant and young children in two countries of Central African Region. The care device is proposed by health workers, in order to measure the impact of psychosocial therapeutic approaches adapted to the management of severe acute malnutrition.

Methods: Quantitative data are collected at two points in time: at admission and at the end of treatment. Data will be collected through a standardized questionnaire that will include demographic data of children and adults, observation grids and psychometric scales.

Conclusion: The expected results of this project aim to demonstrate that psychomotricity care for malnourished children is possible, feasible by non-specialists and that it allows a large coverage since it is part of a public health approach. At the global level, the results of this research serve to increase the recognition of the psychosocial aspects of severe acute malnutrition and his impact on the development of children and the need to implement effective care.
The role of child’s emotional reactivity, parental distress, and screen-related practices in early screen use

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A recent meta-analysis revealed that just 35.6 per cent of children aged two to five years met the pediatric guideline of spending no more than an hour a day in front of a device (McArthur et al, 2022). Child characteristics (e.g. gender, age and temperamental traits) as well as parental characteristics (e.g. educational level and parental distress) may be important to understand parental media-related decisions for screen use in early childhood, especially in stress-induced situations like COVID-19 pandemic. In the current study, we examined the associations between 2-5 year olds’ total screen time, child’s emotional reactivity, parental stress and screen-related parental practices.

Parents of children aged 2-5 y.o. (N = 295, 48.8 % girls, mean age = 3,63 years, SD = 1,12), completed an online survey reporting on child’s educational and leisure screen time in a weekday and weekend, parental distress and parental screen-related practices (e.g. how often parents use screens to calm down a child or to reward a child) in 2021 spring. The emotional reactivity was assessed by Child Behavior Checklist (CBCL/1.5-5, Achenbach & Rescorla, 2000). The results showed that only 31.9 % of children spent less than an hour a day in front of screen. Controlling for the child age, the overall leisure screen time was significantly related to higher child’s emotional negativity and more frequent screen-related parental practices. Parental distress was positively related to child’s negative reactivity and screen-related parental practices. The regression analysis revealed that the higher leisure screen time was predicted by elder child’s age, lower parental education, higher emotional reactivity, and more frequent screen-related practices. According to SEM analysis, parental distress added to screen time indirectly through screen-related parental practices. The findings of the study are important to understand the media-related parenting and ways to support healthy media use habits in early childhood.
How does foster carer commitment relate to short-term foster care following abuse and neglect?

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Introduction: Foster carer commitment to the child has been shown to be of paramount importance in young children’s recovery and development following abuse and neglect. In Dozier’s definition of commitment in the US, there is a focus on both emotional investment in the child and committing to an enduring relationship with the child. How this relates to the routine practice of short-term, temporary, foster care in the UK had not been studied until now.

Aims: This is the first qualitative study to explore the drivers of, and barriers to, commitment in short-term foster care within the broader aim of examining whether short-term care is meeting the needs of maltreated young children.

Methods: Fourteen foster carers took part in research interviews and five focus groups were conducted with infant mental health professionals. Interviews and focus group data were subject to qualitative thematic analysis in order to identify patterns of commonality in relation to our research questions.

Conclusions: The emotional investment facet of commitment is more alive in the ‘psyche’ of short-term foster care than commitment to an enduring relationship. We suggest that a long-term outlook for the child may be an undefined facet of commitment that is more akin with short-term placements.

Three broad themes pertain to commitment and the meeting of young children’s needs in short-term foster care: Influence, Timescales and Choice in the fostering role. These themes were found to house both drivers of, and barriers to, commitment in short-term care, which are influenced by systemic normalisations of fostering practices.
The development of a postdischarge responsive parenting intervention for moderate preterm infants in The Netherlands

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Introduction
In The Netherlands, all very preterm infants (<32 weeks of gestational age and/or birth weight <1500 grams) and their parents are eligible for an evidence-based, postdischarge, responsive parenting intervention (TOP program). This program aims to improve parent-child interaction and infant development. A TOP pediatric physiotherapist visits the family 12 times in the first year after hospital discharge. Although moderate preterm infants also have an increased risk of developmental problems, the TOP program is not available for these infants.

Aims
Study aims are (1) to develop an intervention based on the TOP program for parents with a moderate preterm infant; (2) to test the feasibility of this intervention in 40 families; and (3) to assess the potential effectiveness of the intervention.

Material and methods
Parents and TOP-therapists participated in co-creations sessions to develop the intervention. Feasibility of the intervention is assessed through questionnaires and semi-structured interviews with parents and therapists. To assess the potential effectiveness of the intervention (1) parents complete questionnaires on infant socio-emotional development, parental self-efficacy, parental reflective functioning, and parental distress at baseline and 6 months after intervention; (2) TOP-therapists score infants’ motor development; and (3) parent-child interaction is recorded on video and coded afterwards.

Results
A 6-month intervention program for parents of moderate preterm infants was developed. The program consists of 6 home-based intervention sessions by a TOP-therapist, 5 parent reports with photos and strength-based recommendations, and a mobile information app. A toolbox for therapists was also developed. The feasibility study starts in November 2022. The first preliminary results will be presented at the conference.

Conclusions
If the intervention proves to be feasible, we will examine the (cost)effectiveness of the intervention in an RCT. The intervention is designed in such a way that it can be implemented nationally if it proves to be effective and efficient.
Therapeutic Change and mentalization in depressed mother in an online mentalization-informed intervention using video-feedback

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Specific treatment to address PPD are focused on mother-infant relationship aiming to improve mother’s subjective change and her abilities to relate with her baby. In particular, research on the effectiveness of mother-infant treatments demonstrates improvements in mother-infant relationships as well as lowering depressive symptoms. Psychotherapy process research has been increasing during the last decades, although, child and dyadic psychotherapy have been scarcely investigated from this perspective. Thus, content and mechanisms related to therapeutic change have been overlooked by research, as well as mentalizing manifestations during the psychotherapy process.

The applicability of the Generic Change Indicators (GCI) model to identify moments of change in the parent during dyadic interventions (Sieverson et al., 2022), as well as the observation of mentalizing during psychotherapy (OMP) has been tested (Morán et al., 2022). This study aims to explore, describe and illustrate the therapeutic process through a brief mentalization-informed intervention with depressive mothers and their babies (N=24), using video-feedback as its main strategy, which has ample evidence about its effectiveness.

We will conduct a qualitative study using the GCIs and OMP models. Mothers’ ongoing change will be determined by identifying Episodes of Change (EC) and Moments of Change (MC). Each MC was then labeled with one of the 19 GCIs. Mentalization was identified and coded by an observational system with 6 dimensions of mentalizing ability and labeled in 5-point scale.

We expect to observe GCIs in every intervention process as well as an increment over each intervention, in association with the mentalization manifestations in both the therapist and the mother, especially during the video-feedback.
Early Detection of Infant Social Withdrawal Using the Alarm Distress Baby Scale in Primary Care

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INTRODUCTION: Early identification of infants at-risk is imperative for proper referral to intervention programs. The Alarm Distress Baby Scale (ADBB) is a screening tool detecting social withdrawal in infants. To date, no studies have examined the validity and cut-off score of ADBB after implementation as a universal screening tool in primary care.

AIM of the study: The aim of the study is to 1) use Item Response Theory (IRT) to examine the construct validity of the ADBB and 2) to validate the cut-off score on the ADBB in comparison with the public health visitors’ clinical assessment of social development.

MATERIAL AND METHODS: For the IRT analyses, the sample consisted of 24,752 infants aged 2-3, 4-7 (only primiparous), and 8-12 months from the municipality of Copenhagen. For the cut-off validation, the sample was 7,481 infants aged 2-3 months. We used the public health visitors’ ADBB screening scores.

RESULTS: IRT analyses showed that items showed similar patterns across the three waves and fulfilled most of the assumptions. Items 7 and 8 were locally dependent and had nearly identical ICC, suggesting that they discriminate equally well at the same level of social withdrawal. Item 4 and 6 discriminated best at very high levels of social withdrawal. ROC analyses indicated that a cut-off of 2 would be the optimal balance of sensitivity (78.4%) and specificity (86.7%). When comparing our prevalence-rates to other countries’ findings, a cut-off of 3 would be more suitable (8.4%).

CONCLUSION: The ADBB shows several psychometric strengths when used by public health visitors in primary care. Yet, the results also suggest that the validity of the scale might be improved with the removal of items 4, 6, and 8, as well as lowering the cut-off score from 5 to 3.
Quality of life in parents during pregnancy and the postpartum period

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Introduction: The transition to parenthood is characterized by physical, psychological, and social changes. Evaluating Quality of Life (QoL) of new parents during pregnancy and postpartum period can provide insights into health-related challenges and, thus, their need for professional support. The New Families (NF) home visiting program intends to improve the quality of the existing Child Health Service (including prenatal care and primary health care for children 0-5 years and their families) by offering a more tailored service.

Aim of the study: to assess new parents’ QoL during pregnancy and investigate selective predictive factors associated with QoL during pregnancy. Furthermore, to describe first-time mothers QoL at three months postpartum and the impact of NF home visiting program on it.

Material and Methods: A prospective non-randomized controlled study with parallel group design that included 228 mothers and 197 fathers. Data collection was performed in pregnancy week 28, and at 6 weeks and 3 months postpartum. QoL was measured with the instrument WHOQOL-BREF, and selective predictive factors with the instrument EPDS (depressive symptoms) and two single items on the perception of sleep and complications during pregnancy. Preliminary analyses were conducted using descriptive statistics and linear regression.

Conclusions: Our data revealed that the pregnant women reported diminished QoL in pregnancy, and significantly lower QoL scores than the male partners. In the pregnant women, higher QoL scores was associated with the perception of enough sleep and lower QoL with pregnancy complications and depressive symptoms. In the male partners during pregnancy, the perception of enough sleep was a significant predictor of higher QoL scores. Results regarding QoL in postpartum first-time mothers and the impact of NF home visiting program on QoL are currently being analyzed and the results will be presented at the conference.
The Emotional Vaccine: Sensitive caregiving in infancy shapes future preschooler stress response to Covid-19

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Introduction: The COVID-19 pandemic is a large-scale stressor imposing detrimental impact on children’s mental health. Studies reveal variation in severity of children’s stress-response to COVID19. Variation in children’s vulnerability largely depends on environmental factors. Elevated caregiver-stress assessed during the pandemic, has been found to mediate detrimental pandemic impacts on children’s mental health. In addition to caregiving influences exerted in real-time, the ‘stress sensitization model’ posits that early caregiving experiences influence children’s future vulnerability to stressful events. Developmental neuroscience establishes infancy as a sensitive time window during which caregiving can foster neural circuitry supportive of stress-regulation, thus shaping long-lasting stress-vulnerability and resilience.

Aim of the study: The present study examined whether infant early care increased/attenuated children’s future vulnerability to Covid19. This is the first study to simultaneously assess both concurrent and early caregiving to examine unique contributions of each in shaping children’s stress response to Covid-19.

Material and Methods: Preschool-aged children previously assessed in infancy, were re-assessed several years later during nationwide lockdown (N=200). Maternal behavior was observed at 4-months. At four years, during lockdown, preschoolers’ dose of exposure to Covid-related psychosocial stressors (DOE) was reported along with child internalizing symptoms, and maternal stress and behavior.

Conclusions: Structural Equational Modeling revealed links between preschoolers’ DOE and symptoms (β =.19, p < .01). Concurrent maternal-stress underlies significant indirect links between the two. Maternal sensitive care experienced in infancy significantly moderated future associations between DOE and preschoolers’ internalizing symptoms (β =.16, p =.04), controlling for concurrent caregiving. Children who experienced low levels of maternal sensitivity during infancy, revealed significant links between DOE and symptoms during lockdown (β =.37, p <.001). At high levels of infant maternal-sensitivity, no such Covid-related effects emerged. Findings demonstrate that infant caregiving shapes children’s future response to large-scale stressors underscoring the need for policy which promotes optimal infant care.
Coordination - about the role of the child’s response inhibition in the mother-infant interaction

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For many years the infant’s role in the mother-child interaction was undervalued. The infant was perceived as the passive subject. After important works revealing the social competencies of infants (e.g. Brazelton et al., 1974; Stern, 1985; Trevarthen, 1979) the child’s active role became broadly accepted. It is reflected in the current definition of the interaction - the coordinated behaviors exchange shown by two active partners (Shugar, 1982).

However, in the research, there is still a tendency to emphasize the role of parents’ characteristics and practices in the quality of interaction. The aim of the presented study was to understand the importance of the infant’s response inhibition (Diamond, 2013) in this dyadic process. This is a psychological function that enables the child to override the impulsive reaction and instead take intentional actions.

The total of 48 dyads of mothers and infants between the age of 9-12 months (50.0% girls) participated in the laboratory study. The A-not-B task (Diamond et al., 1997) was carried out to set the level of the infant’s response inhibition. The quality of the interaction was assessed during the free-play observation. The video was coded in Noldus Observer XT software.

The correlational analysis was used to evaluate the results. It showed the connections between the level of infant’s response inhibition and aspects of mother-infant interaction which were its time structure and the regulation of mutual behaviors.

The current findings give a new perspective on analyzing the factors crucial for the quality of the mother-infant interaction. It underlines the importance of infants’ characteristics. There is also evidence that the response inhibition has the meaning in coordinating the behaviors exchanged.
Prioritising infant mental health: barriers and enablers to infant mental health service development

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**Intro**

Despite the known importance of the first years of life, and clear evidence that under-fives suffer a similar prevalence of psychiatric illness as their older peers, there is an international lack of mental health support for this age group and limited research into service development in this field. Children are particularly vulnerable at this age, yet are also most malleable to intervention.

**Aim**

The Scottish Government recently released funding for the first Infant Mental Health (IMH) service in Scotland. With limited literature to guide this initiative, there was concern about how it will be developed. Hence, this research aimed to identify stakeholders’ insights into potential barriers to service development, and enablers to combat these.

**Material and Methods**

Interviews were conducted with a range of health, social care and third sector professionals (n=13). Participants were purposively recruited from a pre-existing list of local stakeholders in order to sample a wide range of professionals. Open questions were used to explore their vision of an Infant Mental Health service in Scotland, and what they believed may hinder, or facilitate it. Transcripts were thematically analysed.

**Conclusions**

Twelve ‘Barriers to Change’ were identified. The most commonly identified was the current stigma, perceived as a consequence of a societal lack of understanding about IMH. Related to this, was a professional fear of over-pathologising. Six ‘Enabling Factors’ were identified. There was a consistent indication of optimism at the recent progress that Scotland has made. Participants emphasised the importance of increasing both professional and societal understanding through various approaches.

A culture change in order to remove the current stigma was perceived as vital.

Though this research is specific to its location, it is likely that the barriers and enablers identified are not, and hence it is important that service developers worldwide recognise these.
Using Technology to Provide Infant and Early Childhood Mental Health Education and Consultation

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Introduction: There is a critical shortage of specialists to address infant and early childhood mental health (IECMH) and developmental concerns. Technology is one of the strategies to expand the reach of IECMH consultation and education, increasing access to quality services and training, and creating learning communities.

Aim: Speakers will present data from two tele-education programs in the United States which provide innovative training and consultation in infant mental health and early childhood mental health, emotional, developmental and behavioral (MEDB) problems.

Method: This symposium will look at how technology is being used at two programs in the United States to expand the workforce and positively impact the mental health care of infants, young children, and their families through Project ECHO (Extension for Community Healthcare Outcomes). Dr. Harrison will present data from the Kennedy Krieger Institute Network for Early Childhood Tele-Education which brings together medical providers and early childhood professionals through education and case consultation on MEDB needs of young children in their care. Participants showed statistically significant improvement in confidence, knowledge and skills in management of very young children with MEDBs. Drs. Chesher and Huffer will present lessons learned from Oklahoma State University’s Infant Mental Health ECHO which focuses on the needs of infant mental health (IMH) clinicians, including IMH modalities, IMH therapeutic assessments, and IMH diagnoses. They will discuss data on the growth of the program including the large increase during the COVID-19 pandemic. In addition, qualitative data regarding the experience of the participants will be discussed.

Conclusions: Technology, specifically Project ECHO, is a solution to the barriers to providing high quality IECMH and developmental care by increasing access to IECMH experts. Through training and case-based consultation in regular meetings, it creates local experts and a supportive infant and early childhood mental health community.
The Role of Parents and Children Attachment quality on Children’s Obesity: preliminary data

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1
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Introduction
Temperament, attachment relationships, and family routines uniquely and jointly contribute to the self-organizational processes across early childhood (Tereno et al. 2017). This knowledge has been adopted in the quest to understand and prevent pediatric obesity.

Aim of the study
The goal of our study is to test associations between individual child (temperament), parent-child (attachment security), and family mealtime (interaction, feeding, eating) factors and patterns of children’s eating behaviors.

Material and Methods
For this, we included sixty families with children aged between 3 to 5 years old, with identified overweight by their pediatrician. In this presentation we’ll present preliminary data on parent’s attachment quality (assessed by the Relationship Scale Questionary) and children’s attachment quality (assessed by the Attachment Behavior Perception Questionary) and self-regulation quality (assessed by the Child Behavior Questionnaire), according to their levels of obesity (BMI).

Conclusion
Data collection and analysis are still in progress. Findings will be discussed to underline child obesity risk factors that should be considered on preventive clinical work of children obesity. This will allow informed intervention activities that are both child-focused as well as family-focused.

References
Addressing Practitioners’ Secondary Traumatic Stress

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Research on the prevalence of secondary traumatic stress disorder (STS) indicates that workers engaged in direct practice with children and families are highly likely to be secondarily exposed to traumatic events through their work with traumatized populations. STS is a natural but disruptive by-product of working with traumatized clients. It is a set of observable reactions to working with people who have been traumatized and mirrors the symptoms of post-traumatic stress disorder (PTSD; Osofsky, Putnam & Lederman, 2008). Many social workers are likely to experience at least some symptoms of STS, and a significant minority may meet the diagnostic criteria for PTS (Bride, 2007).

The current study reports from a pilot project at a non-profit organization in the Intermountain West region of the United States. Previous surveys indicated that employees were experiencing STS symptoms prompting the development of a weekly STS workshop led by in-house therapists. Participation is voluntary and available virtually and in-person. At the end of each workshop session, employees are invited to complete the Secondary Traumatic Stress Scale which, in addition to a total score, has three subscales: Intrusion, Arousal, and Avoidance (Bride, Robinson, Yegidis, & Figley, 2004).

Across repeated administrations, 20% of total scores (n = 94) were in the “High” or “Severe” range. Of first time attendees only (N = 27), 41% experienced “Severe” Arousal. Comparison of individuals’ first to most recent scores reveal significant decreases in Intrusion(t=4.84(16), p<.001), Avoidance(t=4.95(16), p<.001), and Total scores(t=4.74(16), p<.001). Correlation reveals a statistically significant relation between number of sessions attended and Intrusion(r=-.56, p=.021) suggesting that employees who attend more sessions may have lower Intrusion scores.

Conclusions presented will outline workshop approaches as a means to strengthen practitioner relationships with infants and families. Data collection is ongoing. We anticipate a larger sample will be available for further investigation.
The Impact of Teacher Mental Health on the Behavior Problems of Young Children

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Maternal depression has been shown to be a risk factor for the development of problem behaviors in young children. More children worldwide are spending time in childcare. There are gaps in the research regarding how the mental health of caregivers in childcare settings impact young children’s behavior problems.

Study Aim: Explore associations among childcare provider depression and 3-yr-old problem behaviors after controlling for maternal depression.

Material and Methods
The Family and Child Experiences (FACES:2009) survey is a longitudinal nationally representative extant dataset of the Head Start program. Head Start programs in the United States provide early care and education for children ages 3-5 who are from economically disadvantaged homes or have a disability. A total of 1,445 cases with data at both the beginning and end of the school year were available for regression analyses.

Parent and Teacher depression were measured using the CES-D (Radloff, 1977). Child problem behavior as reported by parents was collected using an abbreviated adaptation of the Personal Maturity Scale (Entwisle et al. 1987) and from the Behavior Problems Index (BPI; Peterson and Zill 1986). Scores range from 0-24.

Regression analyses controlled for child age in months and gender (0=female).

Conclusions
Analyses revealed that child gender (β=.585, t(1,444)=3.231, p=.001) and parent (β=.099, t(1,444)=6.554, p<.001) and teacher (β=.047, t(1,444)=2.432, p=.015) depression at the beginning of the year were statistically significant predictor of child problem behaviors reported at the end of the year. Results indicated that in addition to male children having higher problem behavior scores, higher parent and teacher depression scores were also associated with higher problem behavior scores. Parent depression had notably bigger impacts, but the noted impact of teacher depression on child outcomes provides additional support for efforts to support healthy mental health and wellbeing for all caregiver types.

Implications for practice will be discussed.
"Breaking The Cycle": A Qualitative Study Exploring General Practitioners’ Views of Infant Mental Health

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Introduction
Infants living in areas of socio-economic deprivation are more likely to have adverse childhood experiences which can negatively affect infant mental health (IMH) and continue to impact physical and mental health throughout the life course. As part of the development of IMH services in NHS Greater Glasgow and Clyde, studies are being conducted to explore different stakeholders’ views, including those of Deep End (DE) general practitioners (GPs) who work in the most deprived communities in Scotland.

Aim
To understand the views and experiences of DE GPs in relation to IMH.

Method
This is a qualitative study with GPs from Scottish DE practices. Semi-structured interviews were conducted with 12 GPs working across 11 different practices, mostly based in Greater Glasgow, recruited from the DE Steering Group. Reflexive thematic analysis was carried out on transcribed interviews, following the Braun and Clarke Framework and using NVIVO12 software.

Results
Three overarching themes were derived; 1) GPs’ inherent understanding of IMH due to their placement in DE communities and the under-recognised role of primary care in current IMH provision; 2) GP perspectives of community understanding of IMH, particularly how families in areas of socioeconomic deprivation might perceive and engage with IMH support; and 3) GP views on current and future IMH services, including how to improve on current shortcomings of connectivity and accessibility of services, to develop a successful new IMH service.

Conclusion
This study indicates that GPs in areas of socio-economic deprivation have a deep understanding of, and commitment to, infant mental health. A new community-based IMH service is much-needed to support the infant and wider family holistically, particularly in areas of socio-economic deprivation. However, the valuable pre-existing role of primary care in IMH must be recognised, supported and integrated into the new service, with specific training to increase awareness amongst healthcare professionals.
Supporting new families: Contextual challenges and successes

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Introduction:
Numerous studies demonstrate the value of support for new parents, especially those who are vulnerable because of social, health, or mental health concerns. However, when providing services to new families, it is important that challenges faced by parents, particularly those that impact infant caregiving, are addressed within the contexts of service provision, including the community’s health care resources, specific needs of the client population served, and program goals and implementation approaches. By virtue of their roles in health care and home visiting, nurses are a primary resource for new parents.

Aims of the session:
In this session of brief oral presentations, nurse-led research examines the experiences of new parents and families representing a variety of contextual settings. The specific aims of the session include:
1) Describe the impact of social support and parenting self-efficacy in the transition to parenthood.
2) Discuss approaches to addressing parental mental health, including depression and anxiety symptoms, in universal and targeted home visiting.
3) Examine the perspectives of clients as well as nurse home visitors as they navigate the challenges faced by new parents and their infants.

Materials/methods
Studies from Ireland, Norway, and the US examine the needs of new families, perspectives of nurse home visitors and parents, and approaches and interventions aimed at reducing depression and anxiety symptoms in vulnerable families.

Results and Conclusions
Across Euro-western service settings, many new families face difficulties with social support, developing parenting self-efficacy, and the effects of mental health symptoms. Research examining the impact of nursing interventions considers the contextual advantages and limitations of program development and implementation.

Conclusions
Nursing research contributes important perspectives relevant to addressing the psychosocial, mental health, and social needs of new parents across a variety of settings. Challenges in conducting research in complex service environments such as home visiting are discussed.
Preparing Nurse Home Visitors to Address Symptoms of Depression and Anxiety

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Introduction:
Nurse home visitors (NHV’s) often work with mothers whose symptoms of depression and anxiety detrimentally affect their program participation and their ability to provide safe, responsive infant care. Many home visitors are not prepared to address these symptoms. Because they work with complex families in a comprehensive manner, educational efforts must provide sufficient knowledge, skills and resources, and also must fit within the scope of the home visitor’s professional role and scope of the home visiting program.

Aim of the study:
To develop educational approaches and resources for a multicomponent Mental Health Intervention (MHI) to be integrated into a well-established nurse home visiting program, the Nurse Family Partnership (NFP).

Material and methods:
Selected evidence-based approaches that used the full scope of nursing practice were aimed at reducing maternal depression and anxiety symptoms. Four implementation strategies were created to educate, support, complement, and reinforce the work of NHV’s and included online education modules, clinical resources, team meeting modules, and virtual consultation. Qualitative and quantitative data at NHV, supervisor, and agency levels were collected from 264 NFP agencies across the US.

Conclusion:
A strong academic-program collaboration led to development of a multicomponent model congruent with NFP approaches. Comprehensive, relevant, and flexible educational approaches were valued by the NHV’s; content that received the highest uptake included nurses’ legal liability and crisis prevention and management. NHV’s with knowledge, skills, and resources to address anxiety and depression reported more confidence in addressing these symptoms, yet integration into practice was complicated by the complex nature of serving families with multiple needs, competing program demands, and the limitations of team and community resources.
Building hope: Evidence base positive narratives about futures of young children in difficult circumstances

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\textsuperscript{1}Fielding Graduate University, Santa Barbara, USA

Responsive caregiving has a deep and long term impact on early child development. Cross-disciplinary contributors from child psychiatry, psychology, occupational therapy, speech-language pathology, and chiropractic fields will report on research and clinical projects aiming to improve parent-child relationships in the midst of biological or situational challenges. Clinical projects include use of developmental relationship based approaches to overcome trauma by developing self-regulation; understanding parents' perceptions of their child's developmental and emotional needs, emotions and functioning during morning routines; and early experiences with chiropractic care and long-term health. Research projects include educating direct service professionals regarding how diverse and stimulating activities build complex brains for children born with complex diagnosis; use of online meetings and videos to support parents during episodes of isolation; scaling up responsive caregiving and staff reflective practice at child care centers for families affected by conflict; building empathy to increase social-emotional success; and using an easily implemented app to measure parent-child connectedness during daily interactions. These presentations will serve as guides to other programs around the world about ways to support healthy development with families and young children.
The impact of trauma on socio-emotional, cognitive, and language development

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Responsive caregivers who model self-regulation and co-regulate with their babies, help them manage their emotions so they can play, engage in joyful interactions to build relationships, learn, develop communication skills, and move past trauma. Greenspan's DIR and Functional Emotional Developmental Levels guide addressing the holistic needs of babies from trauma backgrounds and to educate public health service providers for facilitating healthy development in communities (Greenspan, et. al., 2010). Factors impacting integrated development of motor, language, visual, auditory, and sensory processing at each level are discussed. Consistent, secure attachments and co-regulation promote physical and emotional understanding of experiences and interactions. When these needs are satisfied, babies heal and develop executive functioning skills. Developing language enables babies to form healthy attachments within the context of joyful relationships so they learn to self-regulate. With a solid foundation they can effectively navigate experiences in life. For service providers who enter the relationships within the context of trauma, intervention strategies are presented to facilitate monitoring internal bodily states, mindfulness, emotional vocabulary, and interpreting non-verbal facial expressions. Co-regulation and self-regulation are fueled by relationships and lead to healthy social-emotional, cognitive, and language skills. Within loving and secure attachments, babies develop understanding of cause/effect relationships, begin problem solving and make inferences. Self-regulated babies stay calm, manage frustration, plan and organize to get things done so they can overcome trauma and thrive.

key words: trauma, early childhood

Pilot to controlled trial to scaling up: supporting resilience in young children impacted by conflict.

Dr Joshua Feder

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Introduction: Young children growing up in conflict zones are at high risk for trauma, mood disorders, and other poor outcomes.

Purpose of the programme: This presentation will outline the process and progress to date for the Early Years Media Initiative for Children Revised Toddler Module, a program the supports the development of resilience in young children and families impacted by conflict through a program delivered through early childhood care centers and founded on principles of responsive caregiving and reflective practice.

Description of project: The presentation will share how this program has developed and unfolded to date as an example of a scalable evidence informed and measurement-based program that can be a model for other programs.

Conclusions: Streamlined staff training coupled with reflective practice can improve responsive caregiving in staff and parents in a scalable programme with indicators of better developmental trajectories and resilience in toddlers impacted by armed conflict.

References:
4. Swain, K. Supporting the sovereignty of families and cultures. The Lancet VOLUME 6, ISSUE 10, P677-678, OCT 01, 2022
The lived experience of the parent during the morning routine

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Parents and children experience the morning routine that is varied and ranges from calm to stressful. It is an important example of the way parents manage parenting. Parents experience strain from life stressors such as work, marriage, finances as well as from parenting tasks and this is often revealed in the way that the morning routine occurs.

The purpose of this study is to understand parents’ perceptions when they need to complete their own and their child’s activities of daily living while also attending to and remaining attuned to their child’s developmental and emotional needs. Specifically, the morning routine was chosen as an important routine because it establishes the beginning of the day for parents and children and because of its relevance in determining the child’s and caregiver’s emotional state during the transition from home to school/work.

This qualitative phenomenological study utilized semi-structured interviews of ten employed parents with preschool children who attended morning preschool programs. Participants were interviewed about their experiences of how they make sense of the morning routine. The study emerged from a lack of discussion in the literature concerning parents’ morning routine experiences and the prevalence of difficulty with caregiving during this routine. An ecological cultural theoretical approach informed this study which contributed to a deeper understanding of the processes involved in reciprocal interactions between the parent and the child. The results of the data included the primary themes of routine, parents’ perception of the child’s development, interaction, individual differences, stress, time, appraisal, and coping strategies. This study will inform and benefit families, and other professionals regarding the underlying components involved in the morning routine and the way in which it is experienced. Ultimately, the parent-child relationship has great influence on the emotions and functioning of the parent and the child during the morning routine.
Changes in Child Screen Time, Physical Activity, and Mental Health During the Pandemic: Meta-Analytic Findings

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Introduction: To limit the spread of the COVID-19 virus, numerous restrictions were imposed on the daily lives of children globally, including repeated school closures, cancellation of extracurricular activities, social and physical distancing from peers and other sources of interpersonal support (e.g., teachers, coaches), and mandated home quarantining due to COVID-19 exposure. Parents, in parallel, also experienced substantial challenges, including financial instability, job insecurity, loss of childcare, and increased home-schooling responsibilities, which individually and collectively resulted in increased family stress and mental distress. Hundreds of studies have examined changes from pre-COVID-19-pandemic to during the pandemic; however, considerable variability in the direction and magnitude of change exists across these studies. Thus, there is a need to explain variability across studies in COVID-related changes in children’s screen time, physical activity, and mental health, and determine when and for whom increases were observed.

Materials and Methods: In each talk, meta-analyses of global data comparing pre-pandemic to pandemic changes will be described, followed by considerations for future research and clinical applications.

Results: The first meta-analysis of 146 samples (29,017 children) will address the extent to which the COVID-19 pandemic has impacted the duration, content, and context of daily screen time among children globally. The second meta-analysis of 46 samples (14,216 children) will address the extent that the COVID-19 pandemic has impacted the physical activity levels of children. The third meta-analysis with 31 representing >5·25 million hospital visits provides a comparison of the number of paediatric emergency department visits for self-harm and suicidality prior to during the COVID-19 pandemic. The fourth meta-analysis of 40 cohort studies worldwide compares changes in children’s anxiety and depression scores pre-pandemic to during the pandemic.

Conclusion: Together, these studies can inform practitioners, programs, and policies seeking to put children’s physical and mental health at the forefront of global pandemic recovery efforts.
The shared neurobiology of irritability and sleep problems in children aged 0-5 years: scoping review

**Miss Keerthi Kotttampally**¹, Associate Professor Jenny Downs¹,², Dr Donna Bayliss², Dr Gabrielle Rigney³, Dr Lauren Wakschlag⁴, Dr Nicholas Badcock², Professor Andrew Whitehouse¹,², Dr Amy Finlay-Jones¹,²

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Introduction: Emerging research suggests that early regulatory problems are risk and maintenance factors for a range of mental health disorders in later life. Specifically, sleep difficulties and dysregulated irritability during infancy have each been associated with a greater risk of child internalising and externalising disorders. Currently, the neural correlates of sleep problems and irritability have been studied separately and the extent to which these different regulatory behaviours have shared neurobiological underpinnings is not well understood. Understanding the distinct and shared neurobiological correlates of these problems is important to characterise unique and shared pathways of risk, to identify vulnerable subgroups, and inform interventions.

Aim: The aim of this scoping review was to understand the extent and type of evidence in relation to the shared neurobiological correlates of sleep problems and dysregulated irritability in infants and young children aged 0-5 years.

Material and Methods: A comprehensive search of four electronic databases (PsycINFO, EMBASE, Medline and Web of Science) for academic and gray literature was conducted using keywords relating to irritability, sleep problems, neurobiology and young children.

Results: Twenty-six of the 7661 identified studies met our inclusion criteria. These studies varied with respect to population characteristics, measures and symptoms of sleep problems/irritability and neurobiological measures. Synthesis of the evidence revealed that both sleep and irritability problems are associated with abnormal activity of the hypothalamic-pituitary-adrenal axis and parietal lobe.

Conclusions: The review identified important future directions including further research on genotypes and brain structure, considering the neurobiological consequences of interventions, and examining sleep and irritability in a single cohort. Future research in this area would benefit from careful selection of measures and more standardised reporting, and including social determinants of health in analyses.
Global Changes in Child Physical Activity During the COVID-19 Pandemic: A Systematic Review and Meta-Analysis

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Introduction: Numerous physical distancing measures were implemented to mitigate the spread of the COVID-19 virus, which could have negatively impacted child physical activity levels.

Aim: To conduct a systematic review and meta-analysis of the literature that used validated measures to document changes in child physical activity during the COVID-19 pandemic, and to estimate whether changes in physical activity differed between participant-level, contextual, and methodological moderators.

Methods: PubMed, PsychInfo, SportDiscus, Web of Science, Scopus, CINAHL, and MedLine were searched (from January 1, 2020, to January 1, 2022). A total of 1085 nonduplicate records were retrieved. Studies were included if they (1) reported changes in the duration of physical activity at any intensity for children comparing before and during the COVID-19 pandemic using validated physical activity measurement tools, and were (2) from general population samples, (3) peer-reviewed, and (4) published in English. 126 articles underwent full-text review. Data were analyzed in January 2022.

Results: Twenty-two studies including 46 independent samples and 79 effect sizes from 14216 participants were included in a random effect meta-analysis. The percentage change in the duration of engagement in total daily physical activity from before to during COVID-19 was -20% (90%CI, -34 to -4%). Moderation analyses revealed that this change was larger for higher intensity activities (-32%, 90%CI -44 to -16%), corresponding to a 17-minute reduction in children’s daily moderate-to-vigorous physical activity levels.

Conclusion: Children have experienced measurable reductions in physical activity on account of the COVID-19 pandemic. Findings underscore the need to provide bolstered access to support and resources related to physical activity to ensure good health and social functioning among children during pandemic recovery efforts.
To touch and be touched: The Touch through photography

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- Introduction:

The body "speaks", but this language is not necessarily read with the eyes - it is also full of smells, tastes, sounds and touches. Although perceived primarily with vision, we can mentally translate information received through other senses.

- Aim of the study:

Assessment of the effects of skin-to-skin contact between parents and babies: “What it was like to touch and be touched” through photographs.

- Material and Methods:

Analysis of the effects of skin-to-skin contact, through photographs and statements of parents telling of their perception of skin-to-skin contact with their newborn children. Ten newborns were evaluated together with their parents at birth, in the neonatal unit and at the return on the fifth day of life during the year 2020 and 2021. The parents were later asked to make an audio and send it reporting what this meant. moment of skin-to-skin contact for them, based on the guiding question as the basic axis: “What was it like to touch and be touched?”. The material obtained from the audios was submitted to content analysis and subsequently to thematic analysis of the data.

- Conclusions:

The testimonies show how much skin-to-skin contact brings parents to this role of caring, as it ignites the bond, it envelops. The speeches bring common points such as the feeling of feeling called to take responsibility for the care of the baby at that moment. It seemed common among the speeches that this sensation came from the impression that the baby felt safe in skin-to-skin contact. This makes it clear that not only the environment provides resources to the baby, but also that the baby communicates with the parents, awakening affection in them.
Can an intensive infant mental health informed early education intervention impact vulnerable parent-child relationships?

**Ms Nichola Coombs**

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Introduction: An intensive, infant-mental health informed, early childhood education and care program specifically designed for socially vulnerable children at risk of abuse or neglect, was trialled via RCT in Melbourne, Australia over the past decade. Highly significant impacts of the intervention have been found in child participants’ cognitive, language and social-emotional development, when compared to infants and toddlers who remained in usual care (Tseng et al. 2019). This study aimed to address a secondary hypothesis that children’s participation in this early childhood education intervention would have a positive impact on child-parent relationships.

Methods: This study used a randomised controlled design (n=52) to compare the quality of parent-child relationship for children receiving the early childhood education and care intervention with children in usual care, at one-year post-enrolment, using the Emotional Availability Scales (Biringen 2008).

Results: This study detected no overall group effect of the intervention on child-parent relationships as measured by the EAS at one year. However, when the trial population was disaggregated by gender, a highly significant interaction effect of “group” and “gender” was revealed for five out of the six EAS dimensions. Mother-boy dyads in the intervention group, showed significant positive differences after one year participation compared to mother-boy dyads in the control group, who showed significant decreases in EAS dimensions of sensitivity, structuring, non-intrusiveness, child involvement and child responsiveness.

Conclusions: The results indicate this intensive early education intervention program may have a protective effect for socially vulnerable boys within their primary care relationships after one year of a three-year intervention. This finding suggests the protective nature of the intervention in preventing deterioration in the quality of already highly stressed and vulnerable mother-boy relationships.


Patterns of infant irritability and sleep problems predict preschool behavioural outcomes: a latent class analysis

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Introduction: Up to 20\% of infants experience dysregulated levels of irritability, while 10-35\% of parents report problems with their infant’s sleep. Infant sleep and irritability problems have both been individually linked to significant mental health concerns during childhood and adolescence. Despite some evidence for their overlap, few studies have considered co-occurring irritability and sleep problems in the context of longitudinal outcomes.

Aims: Using longitudinal data, this study aimed to identify classes of infants with different patterns of sleep disturbances and/or dysregulated irritability during infancy and relationships with behavioural outcomes at 4-5 years. A secondary aim was to examine the differences in sociodemographic and parent characteristics between classes.

Material and Methods: This study used data for 3036 children participating in the Longitudinal Study of Australian Children (LSAC) Baby Cohort. Parent report of sleep and irritability problems was collected between 6 to 12 months of age (Wave 1). Internalising and externalising symptoms at 4 to 5 years of age (Wave 3) was collected via parent report on the Strengths and Difficulties Questionnaire. Multiple dimensions of disadvantage were assessed at a family, neighbourhood and education level.

Results: Latent class analysis identified 3 unique classes: high sleep/high irritability (Class 1, 8.3\%), high sleep/moderate irritability (Class 2, 18\%), and low sleep/low irritability (Class 3, 73.8\%). Infants in Class 1 were more likely to have internalising and externalising behavioural problems at 4-5 years compared to infants in Class 3. Infants in Class 2 showed elevated levels of externalising problems only. Parents of children in Class 1 and 2 were more likely to have poorer mental health than those in Class 3.

Conclusions: This study demonstrates that co-occurring infant irritability and sleep problems can predict later behavioural outcomes. Findings may inform future strategies to screen infants at risk of later mental health problems.
Attachment as a moderator in associations between parent and child wellbeing during COVID-19 lockdown restrictions

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Introduction: Family pressure during COVID-19-related lockdowns brought about significant mental health challenges for parents of young dependent children. An emerging evidence base attests to elevated levels of parental stress during the COVID-19 pandemic. The well-established role of parental stress in child wellbeing outcomes, warrants further investigation into factors that may potentiate or buffer this risk association in the context of family pressure during the pandemic. Child attachment is one such factor, in light of prior evidence about the buffering role of secure attachment in child stress and wellbeing outcomes.

Aims of the study: We aim to examine the extent to which i) secure attachment classifications during infancy and preschool buffered the subsequent risk associations between parent stress and child emotional distress in the context of COVID-19 lockdown restrictions; ii) insecure attachment classifications during infancy and preschool intensified these risk associations; and iii) protective and risk effects changed from the beginning of the lockdown period to the end.

Methods: We draw on a subsample of parent-child dyads (n=314) from a longitudinal cohort study in Victoria, Australia. Using i) observational measures of offspring attachment behaviour during infancy and preschool periods and ii) parent-reported measures of parent and child wellbeing during COVID-19 lockdown restrictions, a series of moderation analyses will be conducted to address the study aims.

Conclusions: Analyses will examine associations between offspring attachment security (during both infancy and preschool) and subsequent parent and child emotional wellbeing. We will discuss the extent to which patterns of attachment, developed prior to the pandemic, moderate associations between parental and child wellbeing outcomes in the context of COVID-19-related pressure. Findings will be discussed with reference to the potential utility of identifying attachment-related risk or protective factors in support and intervention efforts offered to families during times of pressure.
Parents reports of their experience of a health care intervention for their young, unsettled infants.

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Introduction
Parents seek help when their children have difficulty with breastfeeding, settling, excessive crying, and sleeping issues. Early experiences impact attachment and have significant impacts on long-term health and well-being.

Aim of the study
This presentation will give voice to parents’ experience of a healthcare service, its impact on their child’s health, and the parents’ early care-giving experiences.

Material and Methods
This presentation reports on a mixed methods study analyzing data from an Australian government survey of 22,043 parents’ responses to their experiences of chiropractic care for their children.

Conclusions
This presentation provides rich information on parents’ experience of their infant’s and children’s health and development, and the parent’s own experience of bonding and attachment improvements after chiropractic care. It has important implications for children’s health, development, and well-being.
The effects of foster carer commitment on attachment disorders and mental health problems over time

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Introduction: Whilst we know that foster care is better than institutional care for abused and neglected children, we know less about the specific qualities of foster care that are important for their development and recovery from maltreatment effects.

Aims: This is the first study to investigate the effects of foster carer commitment on symptoms of Attachment Disorders (AD) and mental health problems in young children post-maltreatment.

Methods: 144 children from BeST? were assessed using the Disturbances of Attachment Interview and the Strengths and Difficulties Questionnaire, then followed up 15 months and 2.5 years thereafter. Commitment of the foster carer was measured by ‘This Is My Baby’ interview. Multiple regression was used to analyse the data.

Conclusions: This study highlights the complex and non-linear development of children in committed foster care, underscoring the need to examine multiple time-points and to consider symptoms of Attachment Disorders separately from those of other mental health problems: Higher initial foster carer commitment, measured shortly after entry to care, was associated with a reduction in Reactive Attachment Disorder symptoms 15 months after placement, with a modest (non-significant) association persisting 2.5 years later. Initial commitment was not associated with symptoms of Disinhibited Social Engagement Disorder at any follow-up time point, nor with symptoms of mental health problems at 15 months. However, higher initial commitment was unexpectedly associated with higher mental health symptom scores at 2.5 years post-accommodation. We discuss potential explanations for these trends and present hypotheses to be tested in future studies.
Face-to-face vs. online delivery of a group-based creative music intervention for mothers: the Lullaby Project

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Introduction: Mother-baby singing has multiple benefits for mother and baby, including improved wellbeing and self-esteem, reduced symptoms of postnatal depression and a closer mother-infant bond. The Lullaby Project is a non-manualised, universal creative music intervention for mothers of infants under 3. Sessions involve group music activities and reflective journaling, and mothers work with professional musicians to create a personalised lullaby for their baby. In addition to in-person delivery across the Scottish Highlands, Lullaby Project groups were adapted for videoconference delivery during COVID-19 social distancing restrictions.

Aim of study: The is a small-scale process evaluation which aimed to elucidate the mechanisms of change for the intervention and explore and compare engagement, participation, and group processes across in-person and online delivery.

Materials and Methods: Semi-structured interviews were conducted with mothers and musicians who experienced one of three delivery methods: 1) face-to-face; 2) face-to-face and online combination; 3) online. Interviews were analysed inductively using thematic analysis.

Conclusions: Mothers felt they benefitted from participating in the Lullaby Project and formed meaningful relationships through in-person and online delivery. Key benefits included connecting with their identity, feeling a sense of accomplishment and having time and headspace for themselves. Group processes and change mechanisms differed between in-person and online delivery, demarcating them as separate interventions. Findings provide insight into the viability of online delivery, particularly within rural areas or where there may be barriers to accessing in-person groups. Further research is needed to fully elucidate the causal mechanisms associated with videoconference delivery, to explore a diversity of experiences and to evaluate the efficacy of online interventions.
Coparenting among parents of preschoolers with Autism Spectrum Disorder: contribution to mother-father-child interactions

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Introduction: Children with Autism Spectrum Disorder (ASD) display difficulties in communication which challenge the synchrony of their interactions with their parents. Nonetheless, studies show that parental behavior can affect the quality of the interactions between these children and their parents. Heretofore these studies have focused on dyadic, mother-child interactions, even though triadic, mother-father-child interactions are also very important.

Aim of the study: The study examined triadic interactions in families with young children with ASD and sought to examine the impact of Co-parenting, known to be important in triadic interactions with Typically Developing children, on these interactions. The hypothesis was that more cooperative Co-parenting will be associated with higher observed Parental Coordinated Support and Child Involvement while taking into consideration children's cognitive impairment and the severity of their diagnosis.

Material and Methods: Eighty preschooler boys with ASD were observed interacting with their parents in the Lausanne Trilogue Play (LTP) procedure. Coparenting was assessed using both a self-report questionnaire (Coparenting Relationship Scale) and a discussion task between the parents about their child developed for this study. Children's cognitive level was assessed using standardized tests and the severity of their diagnosis was assessed using the Autism Diagnostic Observation Schedule (ADOS).

Results: Results showed that Co-parenting was associated with parental Coordinated Support and children's Involvement, even after controlling for children’s cognitive functioning and the severity of their autistic symptoms. Additionally, parental Coordinated Support mediated the link between Co-parenting and children’s Involvement. Finally, children’s cognitive functioning did not moderate these associations.

Conclusions: The study broadens our understanding of the factors that influence triadic interactions of families of children with ASD, and encourage the development of triadic interventions with such families, particularly those focusing on Co-parenting.
CoAction against Adversity: A community-based approach for screening and treating children’s mental health problems

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Covid-19 pandemic posed an unprecedented challenge to society. Besides the health-related effects, it has dramatically changed life conditions of the world population, constituting a large-scale adverse experience, with implications for individuals’ mental health. It has already been demonstrated that the loss, fear and stress associated with Covid-19 pandemic exacerbated existing mental health problems and contributed to a higher incidence of stress and trauma related disorders, particularly in vulnerable groups as children. Indeed, Covid-19 pandemic and public health related measures, including confinement, social distancing and school closure, were stress-inducing factors with potential impact on parents’ and children’s mental health and well-being. Therefore, interventions aiming to promote mental health and to treat psychological problems should address pandemic as an adverse experience that affect, in the long term, children but also the entire community. Hence, using a multilevel approach and the articulation of community resources, the CoAction Against Adversity, being implemented since February 2021, aims to (1) conduct a community online screening and psychological assessment to identify the prevalence of and risk factors for psychological problems in children from 3-10 years of age from the city of Guimarães, Portugal, and (2) deliver a psychological intervention for those presenting mental health problems, assessing its feasibility and efficacy. Between February and July 2021, 1094 children were screened using the Strengths and Difficulties Questionnaire (Goodman, 2005; Fleitlich, Loureiro, Fonseca, & Gaspar, 2005). From these children, 20% (n=219) showed signs of mental health problems, with significantly higher levels of externalizing problems (M=11.56; SD=2.39) – hyperactivity and conduct issues – than internalizing problems (M=7.78; SD=2.71) – emotional and peer issues. From these 219 children, 36% (n=79) were targeted for psychological treatment, which demonstrated high rates of adherence and clinical efficacy. The design of public health policies and interventions should include community actions based on empirical evidence.
Is mother-child Emotional Availability malleable through short-term focal psychoanalytic therapy for children with depressive disorders?

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Introduction: Parent-child interactions of low quality represent a risk factor for child psychopathology and unfavourable socio-emotional adjustment. Emotional Availability (EA) is a construct describing the affective quality of parent-child interactions and has shown to be sensitive to attachment-based interventions or programmes focusing specifically at improving parent-child-interactions. However, there is a paucity of data regarding the sensitivity to change of EA in child psychotherapies, such as Short-term Psychoanalytic Child Therapy (PaCT).

Aims of the study: This prospective study aimed to evaluate whether dimensions of mother-child EA are malleable through PaCT.

Methods: This study included a sample of N=30 children aged 4;0 to 8;11 years;months with their mothers. Videotaped mother-child interactions in a free-play context were coded with the Emotional Availability Scales, 4th edition at two assessment points: before (t1) and after (t2) PaCT. All children had been diagnosed with a depressive disorder within a period of maximum 3 months prior to t1 using the Preschool Age Psychiatric Assessment (PAPA), which is a structured, psychiatric interview to assess psychiatric symptoms, diagnoses and impairments in 2- to 8-year-old children.

Results: By applying repeated measures multiple analysis of covariance (MANCOVA) using time as independent variable, the EA dimensions as dependent variables and child age and sex as covariates, we will present detailed data on whether changes regarding the EA dimensions occurred between t1 and t2.
Group processes and interpersonal change mechanisms within a group-based intervention for mothers and their infants

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Introduction: Group processes may be an important mechanism of change within group-based interventions supporting maternal and infant mental health. Key mechanisms may include social support and provision of space for mothers to process their experiences, seek advice and normalise challenges. Conversely, group processes can diminish the effectiveness of an intervention if mothers feel stigmatised or ‘othered’ by the group, potentially reducing engagement, undermining mental health and decreasing the likelihood of future help-seeking. Contextual factors impacting group processes may include group size, level of group homogeneity and facilitator characteristics.

Aim of study: This process evaluation explores the contextual factors which affect group processes, and in turn, how group processes impact on interpersonal change mechanisms within Mellow Babies, a manualised, attachment-based intervention, targeted at mothers with existing psychosocial difficulties and their infants.

Materials and Methods: Semi-structured interviews were conducted with mothers and facilitators at various stages of the intervention through telephone fidelity checks and in-person interviews. Data will be analysed using structured thematic analysis.

Conclusions: Analysis is ongoing but we will elucidate the mechanisms of change for Mellow Babies and identify the key group contextual factors which influence outcomes. Understanding the context and conditions where delivery is most effective will help optimise the efficacy of the intervention, optimising future delivery. We will discuss the application of findings to the delivery and implementation of other group-based interventions for mothers.
Fathers’ views and experiences of their own mental health and well-being during the perinatal period

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Introduction: Over the past 3 decades, addressing mental health needs has been identified as a priority by the World Health Organization and in European health and social agenda. Historically, research on perinatal mental health has focused on mothers; however, there is now an awareness that fathers face many of the same changes and stresses that mothers do, with potential negative consequences for their mental health and wellbeing.

Aim: To examine the views and experiences of fathers in relation to their own mental health and wellbeing during the perinatal period.

Material and methods: Thematic analysis of comments written by fathers who completed a study assessing stress, anxiety, and depression was undertaken. A total of 103 fathers were included in the analysis. Data were collected at a large maternity hospital in Southern Ireland.

Results: Four themes emerged which were 1) An emotional time: positive, negative and mixed emotions; 2) Supporting and the need to be supported; 3) The father’s role: a balancing act; 4) Paternal Mental Health: sources of adverse mental health and mechanisms for coping.

The majority of fathers in the study documented positive feelings towards fatherhood; however, some fathers expressed negative emotions that were generally connected to their partner and infant’s health status. Fathers placed great emphasis on the need to support their partner. When it came to accessing support for their own mental health and wellbeing, fathers reported that there was a paucity of services available. Stress related to challenges balancing their work responsibilities with being a father was documented as the main area that impacted on their mental health.

Conclusion: Historically, fathers, as a population group, have tended to be overlooked at a global and national health policy level. Governments need to develop policies that support fathers to achieve optimum mental health and wellbeing during the perinatal period.
Infant Multimodal Coordination of Gaze and Smile with Familiar and Unfamiliar Partners in Real Time

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Infant social communication is organized in time. However, little is known about its development in the first year of life, and the role of the infant’s interaction partner in this coordination. We go beyond previous event-based conceptualization of early infant communication to ask how infant action in one behavioral modality influences infant action in another modality in real-time.

We examined the development of infant gaze and smile coordination longitudinally at 4 and 8 months in a sample of 58 families. Infants were observed during 2-minute home-based face-to-face interactions with mothers, fathers, and strangers. Behaviors were coded every second to characterize infants’ gaze direction (at or away from the partner’s face) and infant smiles (present/absent).

Multilevel Poisson survival regressions indicated that the probability of a transition from no smile to smile —smile initiation— was higher when gazing at the partner’s face while the probability of a transition from smile to no smile —smile termination— were higher when looking away from the partner’s face. This effect varied as a function of infant age. The dependence of smile initiation on gaze state declined from 4 to 8 months. Specifically, the probability of smile initiation in the absence of gazing at the parent’s face were higher at 8 than 4 months.

The probability of a transition to gazing at the partner’s face was higher than the probability of gazing away at 4 but not at 8 months. The dependence of gaze on smile presence was stronger at 4 than 8 months. Specifically, the probability of gaze away from parent while smiling increased at 8 months.

Differences were most accentuated when infants interacted with mothers, and less accentuated when interacting with father and stranger.

Findings provide new insights into infants’ organization of social behavior across behavioral modalities, and suggest the importance of the interactive partner.
How are the constructs of infant mental health prioritised by families? A longitudinal community consultation.

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Background
The most successful interventions are those which are seen as acceptable to the local community. To develop and implement interventions to address early child development in Blackpool, it was important to understand the communities’ needs, priorities, and readiness for change. The Centre for Early Child Development (CECD), the research and development hub of the Blackpool Better Start partnership, used a Community-Engaged Research approach to develop a research and engagement tool – the Community Consultation Photo Grid to identify the early years priorities of families in Blackpool.

Method
The Community Consultation has taken place every three years: 2016, 2019 and latterly in March 2022. The consultation involves research staff attending early years settings or community venues that include early years activities in locations across the Blackpool Better Start wards (e.g. libraries, faith buildings, play groups etc.,) for a two-week period in February/March to explore individual’s responses to the question of ‘What is important to you for your child’s development?’ Respondents are asked to answer this question by rank sorting 35 cards, each depicting an image, with text on the reverse, of the factors which influence early child development and place them in order of priority on a Photo Grid.

Learning
The 2022 Consultation was undertaken after the end of a two-year period of intermittent restrictions on social interactions due to the Covid-19 pandemic (March 2020 – January 2022). This BOP considers the attitudinal changes of caregivers to early years development, specifically drawing upon pandemic experiences and how this has shaped relationships within and around the family.
Strategies to supporting positive relationships through a community approach: Applying Reach, Engagement, Change (REC)

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Background
Community engagement is central to Blackpool Better Start’s approach to building awareness of perinatal mental health and wellbeing. The individuals within communities are the drivers for change, through their ability to identify local needs and the assets to address these. It is suggested, per social contagion theory, that demonstration of behaviours may lead to mirroring in the behaviour of others in their social networks.

Method
The Better Start role of Community Connector, adopts a peer-to-peer approach by prioritising recruitment from the local community, appointing those residents and training them in early years development messages, apply a community engagement framework of Reach, Engagement, Change (REC) thus fostering positive relationships within families’ communities. The approach seeks to Reach a wide audience, maximizing interactions with target families by identifying and providing opportunities for raising awareness e.g. of universal early years activities (park rangers), resources (engagement packs), messages (infant feeding) and services (health visiting).

A study of the interactions between a connector and parent (caregiver) over a 1-year period (1st April 2018 – 31st March 2019) including interviews with 22 parents suggested that the process of the ‘everyday’ conversation with the Connectors supported positive mental health.

Learning
The work highlighted that the strategies and perceived impact of the Connectors for our target population may contribute to wider service seeking behaviours. These connections serve to underpin meaningful Engagement as the connector employs strategies that serve to mediate the boundaries between the practitioner and the individual, whilst also brokering outward connections to others within their communities. It is thought that through these strategies including positive reinforcement contributed to self-efficacy. The approaches seek to increase awareness of and access to perinatal mental health support across our communities, normalising this need for many during the parenting journey and breaking down barriers to accessing more acute intervention.
Longitudinal Relations Between Parenting Stress and Child Internalizing and Externalizing Behaviors

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Introduction
Parenthood can be experienced as a pleasant but challenging period for parents, possibly accompanied by parenting stress. Early parenthood in particular is a vulnerable period as many parents experience biological and psychosocial changes related to new parenthood. Previous studies have shown that parenting stress is related to child behavior problems, but few studies have investigated the transactional relations across time between parenting stress and child outcomes separately, examining within-person changes.

Aim of the study
The first aim of this study was to examine the transactional within-person associations of parenting stress and child internalizing and externalizing behavior problems across childhood from age 9 months to 9 years. Secondly, we examined parenting as a possible underlying mechanism by testing whether parental warmth and hostility mediate within-person associations of parenting stress and child behavior across time.

Materials and Methods
Data were analyzed from the Growing Up in Ireland longitudinal child cohort study including 7,208 caregiver-child dyads at wave 1 (child’s age nine months), who were followed at child’s age three (wave 2), five (wave 3) and nine years (wave 5). Data were analyzed using a random intercept cross-lagged panel model in R-lavaan.

Conclusions
Bidirectional relations between parenting stress and child behavior were found for both internalizing and externalizing behavior from age 5 to 9, but not for earlier time points. Our results did not indicate mediating effects of parental warmth or parental hostility in the associations between parenting stress and child behavior problems. Therefore, we conclude that parenting stress and child internalizing as well as parenting stress and child externalizing behaviors have transactional associations from child’s age 5 to 9 years. Future research examining transactional associations of parenting stress and child behaviors should investigate possible other mediations taking a within-person approach by utilizing the RI-CLPM.
Developing the workforce around the family: The enhanced health visitor service and Infant Mental Health.

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Background
Health Visitors are registered nurses or midwives who have additional training in community public health nursing. Given their remit and contact with every family from pregnancy and the early years, health visitors are uniquely well placed to support perinatal mental health, to promote positive parent-infant interaction and to offer additional support or refer families to targeted or specialist services. In Blackpool, health visitors are at the heart of the Better Start approach, providing an enhanced model including eight universal contacts and the training and support to provide a diverse range of evidence-based tools, assessments and interventions.

Method
The transformation of the health visiting service began in 2019 including a yearlong commission which engaged parents and professionals to identify how the service should be designed and implemented. The co-design work resulted in multiple changes including training in Newborn Behavioural Observations and Assessments enabling health visitors to identify needs as early as possible; the Baby Steps antenatal education programme, with health visitors delivering this programme about the transition to parenthood alongside family engagement workers and midwives; health visitors routinely asking about trauma at the antenatal contact and the delivery of behavioural activation, supporting women experiencing low mood and supporting recovery. Increased supervision and support is also provided to health visitors to ensure that they are well supported to deliver the new model.

Learning
The new health visitor model in Blackpool ensures that comprehensive early help and support is provided to all families. This paves the way to additional support, where required, often delivered by the health visitor themselves. Upskilling the workforce in this way, ensures that babies and families are not falling through the cracks of separate services and are able to engage in timely interventions with a trusted practitioner with whom they already have a relationship.
Advocating positive relationships through trauma-informed workforce: Challenges and opportunities from delivery of trauma-informed training.

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Introduction
The perinatal period offers opportunities for identification of needs, communication of messages and engagement in interventions. Increased contact with families can lead to positive outcomes that empower pregnant women and their partners. The Centre for Early Child Development (CECD) was commissioned by the NHS Maternity and Newborn Alliance to develop a trauma-informed maternity and perinatal mental health services training (TIMPS) offer for perinatal and maternity staff.

Aim
TIMPS built on learning from the NHS England Good Practice Guide to support the implementation of trauma-informed care (TIC) in the perinatal period which was co-created with Health Care Practitioners (HCPs) and caregivers through a range of national workshops and a nation-wide survey for HCPs. The guide focused on four principles: compassion and recognition; communication and collaboration; consistency and continuity and recognising diversity and facilitating recovery upon which the training was framed. The purpose of this work was to review the capacity and capability, including the training and support mechanisms in place for staff.

Method
Core for the TIMPS offer were pre and post organisational readiness workshops and surveys. It is essential that staff understand the impact of trauma both for themselves and their clients and how they can deliver TIC within practice, ensuring they respond to care decisions, resist re-traumatisation, and consider future engagement of parents.

Conclusion
The learning highlighted tensions in the workforce, with an apparent awareness of the importance of TIC for families contrasting with staff experiences of trauma and its impact. It is pertinent to note that this work began at the start of a return to ‘normality’ post pandemic, nevertheless the impact for staff appears to continue. Staff cited feeling overburdened and reported physical signs of stress which impacted mental health. This work reinforces the need for ongoing training and support so that they may support families.
When birth diagnosis interacts with the sandbox: How can professionals offer hopeful narratives?

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Introduction: There are birth diagnoses for which expected developmental outcomes have been pessimistic (Carroll et al., 2018; Treptow, 2017a; 2017b; 2019). Gaps in what we knew about brain plasticity interacted with social bias and the status quo (de Toma et al., 2016). All babies with certain symptom clusters were expected to do poorly—resulting in less rigorous social, intellectual, physical, communicative, and spiritual challenges.

Study Aim: This study probes historical limits on what babies with early challenges can be expected to do.

Method: This medical and psychological literature review highlights how milieus rich in parent-infant engagement build neural pathways via body-brain connections. The data reveal room for professionals to embrace growth mindsets that foster opportunity.

Conclusions: Scientific findings support overturning limited paradigms and shifting our lens. If activity in the world builds complex brains, how can we help all babies play in the most fun sandbox?

References:
Client and practitioner relationships: A pilot of Behavioural Activation for women experiencing postnatal low mood.

Mrs Melanie Farman¹, Dr Claire Mills¹, Mrs Clare Law¹
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Introduction
There are a range of potential barriers dissuading women from accessing depression treatments in the postnatal period. These include practical barriers such as the accessibility of services, disruption to existing parent and child routine or home and work structures, length of waiting time for the service, concerns of stigmatisation or social service intrusion on their family.

Aim
The pilot study to explore the acceptability and feasibility of an intervention to support women experiencing postnatal low mood, Behavioural Activation (BA), was delivered by trained Health Visitors.

The approach to delivery of BA draws upon the positive pre-existing relationship between client and professional, and to continue delivery within the home environment so as to minimise disruption to the parent and infant routines. It was envisaged this approach would support programme attrition and should increase the likelihood of successful outcomes for both mother and infant upon full programme implementation.

Method
This presentation reflects on the early findings from the first phase of the pilot study, a series of single case studies, which aim to examine the appropriateness of the programme and suitability of the approach within the Health Visitor pathway and delivery of the approach in practice through qualitative data collected from practitioners and participants.

Conclusions
The learning reinforced the positive contribution of a trusting relationship between the Health Visitor and mother for delivering mental health strategies. It was suggested the relationship helped to identify and tailor delivery to individual needs, for the client this included reducing anxiety associated with discussing mental health, promoting a sense of togetherness and acceptability of the mother's experiences. Additionally, as BA facilitates the mothers to engage in positive behaviours and works on problem solving strategies it may increase positive parent-infant interactions which in turn may support bonding.
What is measured counts – but for whom? Exploring outcome measures for Parent-Infant Relationship Services.

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Introduction
A secure, nurturing infant-caregiver relationship is essential to support mental health from the very start. Providing specialist expertise to support and strengthen this relationship has been shown to improve mental health for parents and infants. Blackpool Better Start Partnership has commissioned a Specialised Parent Infant Relationship Service, one of only 39 in the UK, to provide direct therapeutic support for families, along with consultancy and training for the workforce.

Aim
Although there is considerable research into the impact of parent-infant relationships on infant mental health, during the development work at CECD, we found that researchers and practitioners described a lack of outcome measures which could be used for service evaluation in practice.

A review of the current use of outcome measures was undertaken to both inform the service development and contribute to wider knowledge.

Method
Consultation with practitioners (n=44), parents (n = 69) parents and the wider infant mental health community were intrinsic to the service development. A study on the use of outcome measures in parent-infant relationship services and infant mental health was carried out through a literature review and data collection with practitioners (41n) has provided learning from the national context to inform the implementation and evaluation of the service.

Conclusions
The work highlighted the challenges in measuring the impact of PIR services, influenced by the array of constructs within the PIR work, differing stakeholder requirements and drivers. This study seeks to address this evidence gap, bringing together guidance on measures by professional bodies, a review of measures used to evaluate interventions which address PIR and the voices of practitioners in the field of parent-infant relationships. In writing this report we aim to amplify the voices of practitioners to help guide good practice in evaluation of parent-infant relationships and to provide practical solutions for future use.
Right Help, Right Time, Right Place, Right People: Scaling-up Evidenced-based Approaches supporting infant mental health.

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Introduction
The emotional wellbeing of babies is dependent upon the quality of the relationship between the infant and their carers. Blackpool Better Start are supporting the Early Help and Support Service to strengthen their Early Years offer and provide training and development in relation to evidence based interventions and practice through a sustainable model with focus on access, connection and relationships – right help, right time, right place, right people.

Aim
The purpose is to embed a proven suite of interventions (SafeCare, Survivor Mums Companion and Video Interaction Guidance [VIG]) within the Early Help and Support Service that promote positive parental mental health and good quality parent-infant relationships. These evidence-based interventions have been shown to be suitable for Early Help levels of need to provide support for families with babies and young children, enabling greater reach as well as upskilling the workforce.

Method
Blackpool Better Start have been training the early years workforce in a suite of programmes so that they provide a metaphorical toolbox by which families can be supported. One such programme VIG is a strengths-based, brief intervention that promotes attunement, sensitivity and mentalisation in relationships for seven years. Practitioners trained to date include specialist health visitor, social workers, children services practitioner and early help practitioners.

Conclusions
The learning suggests that programmes, including VIG, are feasible and acceptable for families. VIG is suggested to be an effective intervention for enhancing positive parent-child relationships. Results show that VIG is successful at increasing parental sensitivity and improving the parent-child relationship. Most parents achieved positive changes to their levels of parenting stress and confidence over the course of the intervention.

The scale-up of evidenced-based interventions that support infant mental health is ongoing, whilst their feasibility and acceptability is positive, testing is ongoing for their delivery within local public services.
Minding the Baby: quasi-RCT of a home-visiting intervention for families at increased risk for adversity

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Introduction: Health inequities early in life can profoundly affect a child’s health and opportunities later in life. Minding the Baby® (MTB) is an attachment-based, interdisciplinary home visiting intervention aimed at improving developmental, health, and relationship outcomes in families experiencing adversity and trauma. A team of highly skilled practitioners with health and social work experience delivers the manualized MTB intervention to families from pregnancy until the child is two years old. An RCT conducted in the USA found positive effects on a range of outcomes, but similar findings were not found in a study in the UK.

Aim: The study examines the effects of MTB in a Danish community sample of families at increased risk of adversity. This presentation focuses on findings when the infant is three months old.

Material and methods: The study is a pragmatic, prospective, quasi-cluster-randomized controlled trial in which seven Danish municipalities were randomized to receive MTB training in either 2018 or 2019. We recruited 255 pregnant women at increased risk of adversity from 2018-2022. Control families received care as usual. All participants were assessed at baseline and when the infants were 3, 12, and 24 months old. The primary outcome is maternal sensitivity measured by the Coding Interactive Behavior scale applied to video recordings of mother-infant interactions when the child is 12 and 24 months old. We estimate the treatment effect as a fixed effect using a binary indicator of MTB treatment and cluster-robust standard errors based on wild bootstrap.

Conclusions: In this presentation, we will present the preliminary results of the analyses of maternal well-being, postnatal depression, maternal satisfaction, child motor development, child socio-emotional development, child health, and the number of out-of-home placements when the child was three months old.
TBEARS Program: Promoting Maternal Mental Health around Early Regulatory Concerns

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INTRODUCTION
While infant crying is part of typical development, excessive crying is linked to risk for child abuse, parental depression, parent/child relationship problems, and later development. Parental perception of the cries is correlated with depression, anxiety and parental self-efficacy for fathers and mothers. Infant sleep and feeding disturbances impact maternal mental health. Families facing these concerns living in a health disparate, disaster-prone community are potentially at greater risk. TBEARS is an IEMCH service modeled after the Erikson Institute Fussy Baby Network and uses the FAN approach to family engagement. Previous research showed that the FAN model was effective in reducing infant crying and increasing parental self-efficacy. This study examined if the model would transfer to a different region and what would its impact be on maternal mental health.

AIM
To present the results of a mixed-methods study examining the impact TBEARS on maternal mental health in families facing infant crying, sleep or feeding concerns and living in a health disparate, disaster-prone community.

METHODS
Forty-nine (49) mothers were recruited into a mixed-methods study to examine parental outcomes and explore how parents experienced the program. Parents completed 7 measures and reported significant increases in bonding, parental confidence and self-efficacy and significant decreases in parental stress, anxiety, and depression. However, they remained in the clinical range for depression and anxiety. Mothers highlighted the FAN processes of Empathic Inquiry (emotional support) and Capacity Building (implementing strategies to address concerns) as central to their experience. The maternal mental health outcomes exceeded those of the original Fussy Baby program. The program name was changed to TBEARS as Fussy Baby held a negative connotation in the community.

CONCLUSION
Participation in TBEARS produced positive outcomes for mothers and demonstrated that the FAN model for engagement is applicable in a health desperate, disaster-prone community.
INTRODUCTION
Family engagement and attuned interactions between practitioners and parents/caregivers is linked to positive outcomes for young children and their families. Facilitating Attuned Interactions (FAN) is a conceptual model and a communication tool that has been shown to help practitioners develop strong, respectful, relationships with families through attunement and reflective practice. FAN is a promising practice of the Association of Maternal and Child Health Programs. However, qualitative findings have never been analyzed which can deepen the understanding of how and why the tool has been successful across service sectors (early childhood education, home visiting, early Intervention, child welfare, medical settings).

AIM
To conduct a qualitative meta-analysis of FAN research in order to enhance understanding of how and why FAN is associated with positive outcomes for supervisors, practitioners, and parents/caregivers in multiple service settings for young children and their families.

METHOD
Researchers will complete a qualitative meta-analysis of FAN using grounded theory’s four steps (open coding, development of concepts, grouping into categories, theory formation) and conducting coding and analysis using Atlas.ti. We will analyze fifteen qualitative studies with outcomes at the practitioner, supervisor, and parent/caregiver level.

RESULTS
Preliminary analyses suggest that FAN is beneficial for both families and those who work with them. FAN-trained practitioners experience less burnout and have increased capacity for reflection, empathic listening, attunement, attentiveness to parents’ cues and priorities, self-knowledge, family engagement and collaboration, and self-regulation. Additional analyses will identify facilitators and barriers to implementing FAN and identify potential differences by sector and professional role.

CONCLUSIONS
FAN is a promising tool for engaging and strengthening relationships between practitioners and families, in turn promoting progress toward program and family goals. We will engage the audience in discussion about the potential underlying mechanisms of FAN from a qualitative perspective and additional research needed to further elucidate FAN’s effectiveness.
Couple Therapy With Parents: Impact on Individual, Couple and Child Well-Being

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INTRODUCTION
The impact of couple therapy on family-related outcomes, such as coparenting satisfaction and child well-being has rarely been assessed.

AIM OF THE STUDY
This study aimed to compare the effectiveness of the Integrative Brief Systemic Intervention (IBSI) combining therapeutic work on marital and coparenting relationships with brief systemic therapy as usual (BST-as-usual) for parent couples.

MATERIAL and METHODS
A sample of 101 parents were randomly allocated to IBSI (N = 51) or BST-as-usual (N = 50). The participants completed questionnaires about their individual well-being, quality of the marital and coparenting relationships and child adjustment at four time points: before and after therapy and at six-month and one-year follow-ups. A videotaped discussion task was conducted to assess couples’ interactions when addressing romantic and coparenting-related topics.

Children were 4-5 years-old on average with 46.5% of them being 0 to 3 years-old. First, we used mixed effects modeling to examine stability in the outcomes over time. We then examined whether there were differences between couples in their stability trajectories using Multiple Factor Analysis and Hierarchical Clustering on Principal Components. Based on the ward method, we created five groups of couples based on parents’ scores on all outcome variables. We then examined how the five groups differed in the outcome variables from which they were constructed. Finally, we tested whether couples’ communication prior to therapy was used to predict group assignment using logistic regression.

CONCLUSIONS
The results showed that gains made in therapy on different levels of functioning remained stable after therapy ended, and that child well-being was perceived as more positive over time. This suggests that improvement in child adjustment can be observed even after the completion of treatment. In addition, the quality of communication before therapy appeared to be an important component of subsequent improvement.
What adversities do infants experience before they enter care and how best to measure these?

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Introduction:
Approaches to classifying and measuring early childhood adversity vary, and there are difficulties in using different approaches. It is important to be able to measure exposure to different types of childhood maltreatment in order to fully understand their associations with health and mental health outcomes. This will help policymakers and practitioners to develop and target support.

Aims:
This study collected maltreatment data using two instruments which measure abuse and neglect entering an episode of care using in a sample of children in foster care aged 0-5 years old living in Glasgow. It aimed to comparatively assess the data collected by each to consider future approaches to collecting contemporaneous maltreatment data.

Materials and Methods:
Detailed Standardised Social Work Reports were used to obtain each child’s maltreatment history. These reports contain free text descriptions of the child’s experiences under set headings. The Adverse Childhood Experiences Questionnaire (ACE-Q) and the modified Maltreatment Classification System (MCS) were then used to record trauma/neglect exposure, prevalence, and in the case of MCS, severity, from these documents for 101 children.

Conclusions:
There was a high degree of overlap between instruments which both demonstrated comparable prevalence of physical neglect in the cohort. However, there are certain factors only measured by one of the instruments. For example, only the ACE-Q measured exposure to domestic abuse. The MCS measured severity whilst the ACE-Q only measured prevalence which led to differing responses due to the differing criteria for each scale. The MCS picked up more adversities due to it being a more sensitive scale than the ACE-Q. The main trial continues to use both to ensure capturing the fullest picture of maltreatment in its sample. This will enable future analysis on understanding how patterns of adversity predict outcomes.
Developmental trajectories of young children’s depression and anxiety during the COVID-19 pandemic in the Netherlands

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Introduction: Mental health problems, such as depressive and anxiety symptoms (DAS), in toddlers and preschool aged children increase chances of developing psychopathology later in life. The COVID-19 pandemic has led to an increase of DAS in children, but research in the youngest age group (<5 years) is limited.

Aim: The current study will therefore investigate which different developmental trajectories of DAS in young children during the pandemic can be distinguished. Additionally, risk and protective factors for different trajectories of DAS will be investigated.

Materials and Methods: Within the framework and protocol of ‘the COVID unmasked study’, parents of children aged 1-5 years were recruited online in the Netherlands to complete an e-survey at four timepoints between November 2020 and June 2022 (t1, n=2762; t2, n=965; t3, n=529; t4, n=508). Children’s mental health, parent’s mental health, parent’s perceived impact of the pandemic on their lives (positive/negative), COVID-19 infection or loss within the families, parental feelings of rejection towards the child, and parent-child communication regarding the pandemic (active/passive) were measured.

Parallel-Processes Latent Class Growth Models will be used to analyze which developmental trajectories can be distinguished for children’s DAS. Furthermore, it will be investigated which factors predict these different trajectories, with children’s age and gender as covariates.

First results: Trajectory analyses have not been done yet. First analyses on t1 showed that children’s DAS were significantly related to parental mental health problems, parents’ negatively perceived impact of the pandemic, parental rejection, and both passive and active communication towards the child. Results of the current study will give more insight into which trajectories of DAS exist and how these factors relate to the different trajectories.
Understanding Families’ Perceptions of Need and Accessibility of Crisis/Respite Nursery Services During the COVID-19 Pandemic.

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INTRODUCTION The COVID-19 pandemic resulted in families world-wide experiencing major disruptions to their day-to-day lives providing opportunities to investigate how families react to, cope with, and understand resource availability during times of crisis.

AIM The project used a mixed-methods approach to better understand how families perceived their own need for community services, how they used resources to cope, and their understandings of the availability of resources, particularly in terms of crisis/respite nursery service use around the COVID-19 pandemic.

METHODS Seventy-seven families who used crisis/respite nursery services in a rural US community within 6-12 months of the beginning of the COVID-19 pandemic completed surveys, questions included the Coronavirus Impact Scale and questions developed by the research team surrounding clients’ concerns about accessing services. Researchers also conducted qualitative interviews with 13 families to understand perceptions of crisis/respite nurseries, particularly during the COVID-19 pandemic.

CONCLUSIONS On average, families reported COVID-related change in 5 out of the 8 areas. Categories most closely related to family functioning had the most change, whereas external “access” categories were less prevalent. General stress and lockdown restrictions were cited most often as the cause for an increase in need for crisis/respite nursery services. A surprising 41% of survey respondents were misinformed about service availability. Pearson correlations between sum of concerns and whether the family had contacted crisis/respite nurseries since the start of the COVID-19 pandemic indicated that as concern increased, the likelihood of contacting the nursery decreased (r=-.44, p<.001). Four overarching themes identified from the qualitative interviews were benefits related to experiencing lockdown, building and maintaining relationships with family, assurance that community resources remained accessible, and family’s adjustments to routines. Connections between quantitative results and qualitative themes, as well as implications for community services, can inform meaningful pathways to support families in times of crisis.
Supporting resilience in young children and families impacted by conflict: Using media technology during pandemic

Dr Jerri Lynn Hogg

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This presentation will provide the technology tools and structure used to connect with families and young children during the pandemic through the Early Years Media Initiative for Children Revised Toddler Module. The program supports the development of resilience in young children and families impacted by conflict through a program delivered through early childhood care centers and founded on principles of responsive caregiving and reflective practice. During the pandemic, additional forms of connections were needed. New approaches using media and technology were developed. The program used short-form videos to reach out to support young children and families during a difficult time of isolation. Virtual meeting technology was employed for caregiver reflective practice and video support for responsive caregiving. Best practices as developed as a result of this process will be shared.
An Exploration of Maternal Sensitivity, Culture and Context in a South African Township

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Introduction:
Western-developed theories of child development predominate, despite the fact that less than 10% of the world’s children are born in the Western world.

Aims of the Study:
In an attempt to address the paucity of African studies into parenting and child development, this study aimed to research the applicability of the construct of maternal sensitivity to the context of Alexandra Township, in Johannesburg, South Africa.

Materials and Methods:
Using a combined psychoanalytic and social constructionist theoretical framework, this study used a mixed method, concurrent triangulation approach to better understand local maternal behaviour and ideas about good mothering. The study drew on data from eight qualitative interviews and fifty mother-infant interactional videos from the context.

Conclusions:
The study found overall congruence between local ideas about good mothering, and Ainsworth’s original conceptualisation of maternal sensitivity. Some convergences with subsequent adaptations of the concept of maternal sensitivity were identified, including an unanticipated assertion that local mothers should play with their babies and should not leave their babies with family members. Divergences with more recent Western-developed operationalisations of the construct were found in the areas of warmth, verbal responsiveness, and facilitation of learning. Poverty, threats to safety, and experiences of loss were identified as contextual factors that influence parenting goals, ideals, and behaviours in the setting. Maternal control, interference and non-responsiveness to infant wants and during divided attention were found to be common maternal behaviours in the setting. Such maternal behaviours are put forward as both adaptive and maladaptive, using developmental and evolutionary arguments. Maternal sensitivity is concluded to be an appropriate construct for application in the setting, and the need for infant mental health interventions which can drive social change are highlighted.
Introduction: Since the 1970s, social-emotional intelligence has been a research topic with infants through adulthood. The literature cites empathy as a key SES for success in relationships, academic achievement, and successful employment.

Purpose: Research studies involving the social-emotional response in infants and young children have typically involved a method that causes anxiety or fear. This research study incorporated a kind method to document empathic responses with children 4-5 years old using the “The Pink Pencil Test.” The aim was to evaluate empathic responses and outcomes using a kind test method.

Description: The test consisted of a structured activity with a small group that required empathizing and sharing with a child in need. The subjects included 129 boys and girls at seven preschools. Children were randomly divided into groups of six children. The researcher conducted a drawing activity, including a step in which one child would lack the necessary “pink pencil.” The researcher did not intervene when this child requested help. The children’s responses during the activity were documented as empathic or non-empathic, verbal, or action. The lead preschool teacher completed the empathy EmQue Test scores. The score on each question for each child was comparatively analyzed using a chi-square method with fascinating and unexpected results.

Conclusions: This research supports the idea of incorporating kindness and the action of empathy with peers in preschool as an important component of the curricula. According to the literature review, developing empathic and other social-emotional skills at a young age can decrease bullying and violence, and increase the potential for strong interpersonal relationships, higher academic achievement, and vocational success throughout the spectrum into adulthood.
Infant and early childhood mental health consultation in pediatric primary care

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Objective: To present the rationale of early childhood-focused child psychiatry access programs and practice-specific consultation to pediatric primary care and demonstrate the potential of collaborative primary care mental health collaboration to increase access to children’s mental health, using the CHECC model as an example.

Methods: We provide an overview of the child psychiatry access models and the CHECC model of consultation as an example of practice-specific consultation.

Results: In the U.S., population-focused child psychiatry access programs and perinatal consultation programs provide phone support and education to primary care providers serving pregnant patients and children. While the child psychiatry programs focus on all ages, at least 5 now focus specifically on young children.

Over two and a half years, the CHECC program has provided over 350 consults to pediatric primary care providers. The mean age of children about whom consults have been requested is 4 years 4 months. More than half of consults are focused on the needs of children of color, a rate significantly higher than the population served. Nearly 90% are covered by public insurance and the majority focus on boys. The pediatricians endorsed 4 or greater on a 5 point likert scale that the program improves mental health access, helps them care for patients, and that patients appreciate the consults. From year 1 to year 2, rates of formal screening for early childhood mental health concerns increased significantly. Rates of medication use before consult did not change in the first two years.

Conclusions: This presentation will offer the rationale and specific examples of the value of early childhood mental health consultation in primary care.
New fathers’ experiences of an individual conversation with the child health nurse

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Introduction and Aims. Swedish Child Health Services provides regular health surveillance of children 0-5 years and support to parents. The intention is to contribute to equitable child healthcare and to promote physical, emotional, and social health for children. While individual conversations with the child health nurse, including screening for postnatal depression, are implemented for mothers, routines for a visit specifically for the non-birthing parent vary and are not well studied. As part of a project, child health nurses conducted individual conversations with fathers, aiming to support their parenthood and well-being related to having a new-born child. This study aimed to explore how non-birthing parents experienced the individual conversations with their child health nurse, three months after the birth.

Materials and Methods. Semi-structured interviews were conducted with 16 fathers who had participated in individual conversations with a nurse at their child health centre. Interviews were audio-recorded and transcribed, and data analysed with qualitative content analysis.

Results. The preliminary findings are presented in three categories: The first, “Being invited into a supportive context” about how father appreciated being invited as well as the framework for the conversation. The second, “Talking about what was significant”, about how fathers had talked about experiences and relationships. The third category, “Taking it home” described how fathers felt validated and relieved, and that the conversations with the child health nurse had led to reflection and finding new ways as a father.

Conclusions. Individual conversations, without the mother present, can make fathers feel important and allow for a different type of content, tailored to their own needs. Furthermore, individual conversations can lead to changes in daily routines with the infant.
Maternal Employment and Children’s Internalizing and Externalizing Behavior Problems:
The Mediating Role of Paternal Involvement

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Despite the rich knowledge that the existing maternal employment studies offer, our understanding of the mechanisms through which maternal employment affects child development is still limited. Studies on this topic have largely focused on mother-child dyad. We extend the current literature by considering family dynamics, thus explore the mediating role of paternal involvement in the association between maternal work and child outcome.

We use sample (N=711) from the Birth cohort of the Project on Human Development in Chicago Neighborhoods (PHDCN). Our outcome measures include children’s internalizing and externalizing behavior problems at age 5, respectively. Two dimensions of paternal involvement include: (1) amounts of time spent with a father and (2) frequency of activities with a father. Our analysis uses two weighting adjustment methods: Inverse-Probability-of-Treatment Weighting (IPTW) and Ratio-of-Mediator-Probability Weighting (RMPW).

Our results show that as fathers were more involved in child-related activities, it decreased children’s internalizing problems ($\gamma^2 = -1.50$, se = .52, Wald $\chi^2 = 8.37$, p < .01) and externalizing problems ($\gamma^2 = -1.20$, se = .56, Wald $\chi^2 = 12.70$, p < .001). However, the amount of time fathers spent was not associated with children’s internalizing problems ($\gamma^2 = -.24$, se = .55, Wald $\chi^2 = .192$, p > .05). In some cases, fathers’ increased time exacerbated children’s externalizing problems ($\gamma^2 = 1.19$, se = .60, Wald $\chi^2 = 3.89$, p < .05).

Our study provides substantial evidence that fathers’ increased involvement with child-related activities, as mothers go to work, benefit child development. On the contrary, increased amount of time father and child spend does not necessarily benefit child outcome. This suggests that what fathers do with children is more important than fathers’ unstructured time with children. Our findings have important implications for designing more effective policies and promising programs that help strengthen fathers and working families.
Observing Patterns of Maternal Proximity and Maternal-Infant Engagement in a Neonatal Intensive Care Unit

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INTRODUCTION: Relationship development between mothers and their preterm infants are influenced by the frequency, duration, and quality of dyadic social encounters. AIM: This study examined patterns of maternal proximity and maternal-infant engagement in the NICU, as well as categorized alternate activities and disruptions to focused engagement. METHODS: Trained observers conducted 52 hours of field observations in a NICU and recorded maternal proximity, non-engagement, unfocused versus focused engagement, and their respective social contexts. In addition, observers documented what mothers were doing when they were not engaged with their infant as well as what mothers were doing when engaged but not focusing on their infant due to attention towards an alternate activity. Analyses included both quantitative and qualitative strategies. Results include data coded for 88 mother-infant dyads with 83% of the dyads observed during periods of maternal proximity without engagement, 97% observed during periods of focused engagement, and 65% observed during periods of unfocused engagement. Unfocused engagement occurrences were most frequently observed during nurturing contexts (M=6.50 minutes; N=48). Mothers who were in proximity to their infant but not engaged were most frequently observed using a personal mobile device followed by talking to a member of the healthcare staff. Similarly, when mothers were observed in unfocused engagement, they were most frequently observed using a personal mobile device followed by talking to healthcare staff. Interestingly, occurrences of unfocused engagement due to using a personal mobile device occurred only during nurturing contexts (N=27). Of those mothers, 44% immersed their attention for ten minutes or longer to their mobile devices versus to their infant. CONCLUSION: While it is expected that occasional interruptions to mother-infant interaction in the NICU will occur, more research studies are needed to determine if brief or prolonged disruptions during dyadic interactions impact maternal sensitivity or interaction quality in the NICU.
Internet mentalization informed Video Intervention Strength Based (VI-SD) to improve maternal sensitivity in mother-infant dyads

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Background: Depressive symptoms in the postpartum period are a highly prevalent mental health problem, which can negatively influence mother’s sensitivity and mentalization, key competencies for attachment formation and child development. Its prevalence increases in mothers of low socioeconomic status and even more in contexts of high psychosocial stress, which reduces treatment options and face-to-face approach. The use of Video-feedback has been particularly effective in attachment-based interventions. Despite this, the trainings are expensive, usually in English and require cultural adaptations to be used in Latin American countries. This study aims to evaluate the feasibility and acceptability of a resource-focused video intervention (VI-SD) developed in Chile, informed by mentalization and aimed at mother-baby dyads with depressive symptoms, attended in Public Health Centers.

Methods/design: A pilot randomized clinical trial with two groups of mother-baby dyads with children between 4 and 12 months of age was planned. Participants were randomly assigned to the control (CG) and experimental (GE) groups in a 1:1 ratio. The participants of both groups received the usual treatment of the Centers and psychoeducational primers, the EG received the VI-SD. The study developed started with 79 dyads, 38 from CG and 41 from EG (T1) and finalized with 49 dyads (T3), 23 from CG and 26 from EG.

Results: The results showed that it is feasible to implement an online intervention with video-feedback in mother-infant dyads with depressive symptoms. Significant differences were observed between the groups with an increase in maternal sensitive response and reflective functioning in the EG, as well as a reduction in hostile and intrusive behavior in this group.

Discussion: These results contribute with evidence for the use of a mental health intervention based on attachment theory, at a distance, for low-income mother-infant dyads, low cost and suitable for scaling to local and community Primary Health Care.
Follow-up of neuropsychomotor development of preterm infants: a university extension experience

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Introduction: In emerging countries such as Brazil, prematurity is a public health issue partially aggravated by the pandemic scenario. Therefore, the accompaniment and the quality of the service of these babies, after the hospital discharge, are of utmost importance to prevent and intervene in possible delays in global development. Aim: This study aims to present a university extension project that follows, evaluates, and early detects risk factors in the neuropsychomotor development of premature babies after hospital discharge. Method: Participating in the project are 26 premature babies and their families who are followed by an interdisciplinary team, composed of students and professionals from psychology, medicine, and physiotherapy, linked to the Regional University of the Northwest of the State of Rio Grande do Sul, Brazil. The premature babies are evaluated in the developmental milestones (3, 6, 9, 12, 15, 18, and 24 months), considering the corrected age, at which time the companion (usually the mother) is also listened to. Results: The results have shown a misknowledge on the part of families about the specificities of a premature baby (e.g. corrected age). For that matter, the actions of the project have enabled health education, as well as the early detection of risk to the development of the baby and the referral to early intervention. Furthermore, listening to the anguish of parents, especially mothers, has contributed to the recognition of the real baby and the support of parenthood experience. Conclusion: There is a welfare gap in the Brazilian public policies regarding the outpatient follow-up of premature babies. Therefore, it is understood that the actions of this extension project can contribute to the investment in early childhood, through the follow-up of premature babies and their families and the early detection of risk to neuropsychomotor development.
Finding Goldilocks: Balancing Parental Reflective Functioning, parental trauma, and attachment perception in Neonatal Intensive Care

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Introduction
Parents of infants admitted to quaternary neonatal intensive care units (NICU) need to establish relationships with their very sick infant while navigating complex medical situations and coping with their own emotional distress. A parent’s capacity to display Parental Reflective functioning, that is to think about the physical and emotional experience of their sick infant, may be impacted by the diverse and stressful factors common in NICU.

Aim
This prospective study, “Reflecting on Babies in NICU” (ROBIN), aimed to determine whether measuring PRF in NICU identified families at risk of attachment difficulties, and parents at risk of Acute Stress Disorder (ASD) or later Post-Traumatic Stress Disorder (PTSD).

Description
The ROBIN study collected data for 69 infants who were admitted to a quaternary NICU without ever being home, together with 67 mothers and 38 fathers. Follow-up data collected at 10 months allowed paired results at baseline and follow up for 57 parents. PRF was evaluated using the Parental Reflective Functioning Questionnaire (PRFQ).

Parental trauma symptoms were classified using the Acute Stress Disorder Scale (ASDS) and Posttraumatic Stress Disorder Checklist (PCL-5). Higher baseline PRFQ Interest and Curiosity about Mental States (IC) score predicted concurrent ASD, and PTSD at follow-up. The relationship between baseline PRF and parent self-reported feelings of attachment was measured with the Maternal, and Paternal, Postnatal Attachment Scales (MPAS/PPAS), showed higher PRFQ Pre-Mentalizing Mode (PM) scores in NICU predicted dyads with subsequent “at risk” attachment at follow up.

Conclusions
These findings present a dilemma. Lower capacity for PRF in NICU may jeopardise the developing parent-infant relationship, but higher PRF may create emotional trauma for parents. Infant Mental Health clinical resources and a “nested mentalization” approach to care is vital for infants and their parents in NICU, so they can be held in mind in supported ways.
Evaluating a new Perinatal and Infant Mental Health workstream in the North of Scotland

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INTRODUCTION: In 2019 the Scottish Government and national health service (NHS Scotland) announced significant investment in perinatal and infant mental health (PNIMH) services for Scotland in line with recommendations from the NHS PNIMH Managed Clinical Network. Three key areas for the delivery plan were identified as ‘More Capacity, More Staff, and More Voices’, and a specific goal of enhancing specialist community provision for the North of Scotland was highlighted. In 2021/22 NHS Highland implemented a range of new posts to facilitate the enhancement of perinatal mental health services and the creation of an infant mental health service. The University of Aberdeen Centre for Rural Health was commissioned to plan and conduct an evaluation of this service development early in 2022.

AIM of the study: To describe the development of the PNIMH service, explore barriers and facilitators to implementation from the perspective of key stakeholders, and to describe the experience of families in relation to the new care pathways.

MATERIAL and METHODS: We shall use a combination of document review, data collation, semi-structured interview, and interactive dissemination. There will be a focus on reflecting how best to implement and manage PNIMH services in remote and rural areas, drawing on learning from the present evaluation and the international research literature. The impact of ‘PAMPR’ (Perinatal Advice Meeting Professional Reflection) sessions will be highlighted as a case study.

CONCLUSIONS: We shall present findings in relation to lived experience through care pathways, service user and stakeholder reflections, and recommendations for ongoing evaluation.
Mobile-Based Intervention for Parents of Infants with Crying/Sleeping/Feeding Problems: Results of a Randomized Controlled Trial.

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INTRODUCTION: Excessive crying/sleeping/feeding problems in infancy are significant stressors for families that can result in parents’ feelings of social isolation and low self-efficacy. Affected infants are at increased risk for being maltreated and for developing mental health problems. Thus, the development of an innovative, interactive psychoeducational app for parents of children with crying/sleeping/feeding problems may provide a low-threshold access to scientifically based information and alleviate negative outcomes for families.

AIM: We investigated whether parents of children with crying/sleeping/feeding problems following the use of the app experience less parenting stress (1), gain more knowledge about crying/sleeping/feeding problems (2) and more self-efficacy (3), perceive themselves as better socially supported (4) and whether their child’s symptoms decrease more (5) than parents who did not use the app.

METHODS: N=136 parents of children (age 0–24 months) were recruited in a German cry baby outpatient clinic. In a randomized controlled design, families in the intervention group (IG; n=73) used the app during the usual waiting time until their consultation (average 3 weeks), while families in the waitlist control group (WCG, n=63) did not. Parenting stress, knowledge about crying/sleeping/feeding problems, perceived self-efficacy, perceived social support as well as child symptoms were assessed using validated questionnaires at baseline (t1) and post-test (t2) and compared between both groups at post-test.

RESULTS: The IG reported significantly lower levels of parenting stress (p=.03, d=−.23) and a higher level of knowledge about crying/sleeping/feeding (p<.001, d=0.38) after app use compared to the WCG. No differences in change were found between groups in terms of parental efficacy (p=.34, d=0.05), perceived social support (p=.66, d=0.04), and child symptoms (p=.35, d =0.10).

CONCLUSIONS: This study provides initial evidence for efficacy of a psychoeducational app for parents with infant crying/sleeping/feeding problems as a secondary-preventive service. Additional large-scale studies are needed to investigate long-term benefits.
MC3 Perinatal: Using Technology to Improve Perinatal Mental Health Outcomes

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INTRODUCTION
Perinatal mood disorders (PMDs), mainly depression and anxiety, are the number one complications of pregnancy and postpartum; 50% of affected patients go undiagnosed and of those the majority untreated. However, untreated PMDs may have detrimental impact on parenting and child outcomes. Perinatal psychiatry access programs aim to increase PMD identification and treatments in obstetric care. MC3 Perinatal is a perinatal psychiatry access program in Michigan.

AIM OF THE STUDY
To demonstrate 1) feasibility to enroll providers and patients into the program and conduct psychiatric consultations to obstetric providers and direct service to perinatal women; 2) acceptability of the program to the participants; and 3) preliminary effectiveness of the telemental health counseling for patients’ outcomes.

MATERIAL and METHODS
Since program inception (2021) we enrolled a total of n=800 obstetric providers and conducted a total of n=678 psychiatric consultations; in addition, we provided telemental health counseling to n=208 pregnant and postpartum women. To evaluate acceptability, providers and patients rated their satisfaction. Women enrolled in counseling provided intake and monthly ratings on depression (PHQ-9), anxiety (GAD-7), substance use (4Ps, NIDA Quick screen) and risk for interpersonal violence and bonding impairment. Preliminary analyses show high ratings of provider and patient program satisfaction (>90%), and positive changes in mental health from intake to 5 months postpartum for women receiving telemental health counseling (clinical level anxiety dropped from 49% to 18% and clinical level depression from 41% to 10%, respectively).

CONCLUSIONS
MC3 Perinatal for Moms has shown feasibility to increase access for PMD treatment in primary obstetric care. The program is highly acceptable to both providers and patients and shows initial effectiveness in reducing depression and anxiety across the peripartum period. Current findings suggest this may be an efficacious model to reach and support perinatal women and their infants who otherwise may go untreated.
Placement Duration and the Impact of the Law

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Intro:
Permanent, committed care is considered crucial for optimal child development. The preferred outcome for children in temporary foster care is permanent reunification with birth family. Where this is not possible, permanent alternative care is recognised as being the optimal caregiving environment. The length of time spent in temporary care is considered a risk factor for poor mental health outcomes.

For many children in temporary state care, a legal order underpins the governance and careplanning for the placement. Thus, changes in the legislation or in the interpretation of the legislation may have consequences for the for children’s outcomes.

Aims:
1. To investigate how long children remain in temporary care and assess the impact of gender, number of placements and age of entry to care on the likelihood of being placed in a permanent placement.
2. To assess the impact of change in the law.

Methods:
We analysed the placement data from a sample of 198 children from the BeST? Services Trial to ascertain the likelihood of being placed in a permanent placement. We then conducted a multivariate Cox Proportional Hazard analysis to interrogate the association between three variables (age at entry to care, gender and number of placements) and the likelihood of being placed in a permanent placement.

Survival curves before and after the legal change were then compared using a Mantel-Cox Log Rank test.

Conclusion:
The probability of being placed in a permanent placement peaked at around 60% after 7.6 years. Age at entry to care was the only variable in the model to return a statistically significant difference. There was no difference in the time taken to reach permanent placement before and after the legal change.

We discuss our findings with reference to the current practice context and outline the implications for young children in care.
Feasibility and Acceptability of a New Train-the-Trainer Model for “Mothering from the Inside Out”

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Introduction: Mothering from the Inside Out (MIO) is an attachment-based parenting intervention designed for families affected by substance use disorders (SUDs). Scalability of MIO was limited by an expert training model.

Aim: In this presentation, we will report the feasibility and acceptability of a new Train-the-Trainer curriculum using data from a pilot trial.

Materials and Methods: Train-the-Trainer involved virtual classroom preparation for new trainers and co-delivery of the MIO training with expert trainers. MIO training for new clinicians includes virtual didactic learning then delivery of 12 sessions to a parent with SUDs with weekly clinical consultation. Seven trainers completed the classroom preparation and 4 participated in training new clinicians. Of the 16 new clinicians, 10 completed the full MIO training. Seven clinicians and 6 parents participated in research assessments. Acceptability was assessed through semi-structured interviews (trainers, clinicians, parents) and field notes of the training process (research staff). Thematic analysis focused on strengths, challenges, and areas of improvement. Trainers reported the creation of a safe space to slow down, reflect, and grow into their trainer roles as the major strength. Some requested more time for preparation and reflection with the expert trainers, while recognizing scheduling limitations. New clinicians similarly identified slowing down to reflect as the primary strength of the process and recommended more interactive activities during the didactic training. Multiple participants suggested explicitly discussing systemic racism and cultural differences within future trainings. Through analysis of field notes, we observed misunderstandings of training expectations and a delay in beginning MIO delivery. Mothers articulated becoming more comfortable in their parenting roles after participating in MIO. Two mothers reported a decrease in substance use cravings.

Conclusion: The Trainer-the-Trainer curriculum created parallel processes from expert to trainer, trainer to clinician, and clinician to parent. Addressing challenges and areas of improvement may inform future trainings.
Co-designing a ‘First 1000 days’ series of workshops for parents of newborns in New Zealand

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Ohomairangi Trust is a Kaupapa Māori charitable trust providing early support programmes to families and whānau within Tāmaki Makaurau, Auckland in Aotearoa, New Zealand. With services, communities and resources – both human and material, being stretched as we recover post pandemic, the demand for support for families has increased.

Ohomairangi Trust's approach assumes that individuals, families, whānau, hapū and communities have the competence to build their resilience, and that with appropriate encouragement, they can access individual and collective strengths that will allow them to engage with new information and support networks to enable effective agency. Competence can be further nurtured by fostering social cohesion, hereby building some positive social networks and strengthening long term resilience.

We co-designed a “First 1000 days’ series of workshops for parents of newborns from multicultural backgrounds in South Auckland, Aotearoa, New Zealand. We worked with parents who had completed our antenatal group with our early intervention service, once their babies were born. Empathy interviews between these parents resulted in a group designed, 10 week programme of topics they felt they needed to support them develop secure relationships with their babies or skills that would help them parent as they and their baby journeyed together.

The group suggested speakers, ideas were shared, planning processes were designed and parents with skills offered to share them. Free play and ‘learning through play’ sessions with their babies were set up as relationships between parents and their babies, and relationships between the parents in the group were strengthened. They became keen to provide peer support for other parents in groups that followed.

We report the positive outcomes for these groups who attended, co designed and participated in these services and programmes aimed at building upon parent’s resilience.
Structural and personal determinants of early childcare providers’ mind-mindedness in relation to ‘challenging children’

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INTRODUCTION
Early childcare research has demonstrated that children’s wellbeing and long-term socioemotional and cognitive development is linked with the quality of interaction with their early childcare providers. While all children benefit from high-quality interactions with childcare providers, (positive and negative) effects are strongest for children from at-risk backgrounds. Caregiver mind-mindedness, i.e. proclivity to treat the child as a psychological agent, is considered an essential component of interaction and relationship quality. The ability to keep a mind-minded stance is particularly important when providing care for children who are distressed or exhibit “challenging” behaviors. However, research on mind-mindedness in a professional group-based childcare context is limited. Therefore, it is relevant to examine what factors are important for caregivers’ mind-mindedness, in particular in relation to ‘challenging children’.

AIM of the study
The aim of this study is to investigate personal and structural determinants of mind-mindedness in caregivers of children in early center-based childcare (0-3 years old). We will investigate caregivers’ own attachment, education, years of experience, caregiver-child ratio, group size, as well as job stress and satisfaction in relation to their mind-mindedness with children they experience as ‘challenging’.

MATERIALS AND METHODS
The sample consists of early childcare providers from 30 childcare centers in a Danish municipality with a relatively high proportion of at-risk families. Adult attachment is assessed with the Experiences in Close Relationships (ECR) questionnaire. Structural characteristics are also assessed with questionnaires, including a modified version of the Child Care Worker Job Stress Inventory. Mind-mindedness is assessed using a brief interview.

RESULTS
Findings will be presented.

CONCLUSION
This study will introduce findings on an important aspect of early childcare providers’ caregiving skills, i.e. mind-mindedness. Results will inform early childcare research and practice in terms of guiding targeted interventions that aim to enhance childcare process quality, which is particularly important for at-risk children.
Congruence and Incongruence of Infants’ Early Interactive Behavior Predict Attachment in Infants Born Very Preterm

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INTRODUCTION: Infants typically exhibit flexibly organized configurations of emotion and behavior during en-face mother-infant interactions that convey convergent messages about their internal states and desires. Interactive configurations that are congruent regarding the organization of facial, vocal, affective, postural, and kinesthetic behaviors (e.g., simultaneously looking at, smiling, and reaching for the caregiver) are easy for caregivers to read and respond to appropriately, and are linked to positive, reciprocal caregiver-infant interactions. Maternal risk factors such as postpartum depression affect infant congruency (Beebe, 2020), but less is known about the role of infant vulnerabilities such as very preterm (VPT) birth.

AIM: In this longitudinal study, we evaluated whether VPT or full-term (FT) birth was associated with infants’ interactive congruence and incongruence during mother-infant en face social interaction at 3 months corrected age. We also assessed whether interactive congruence or incongruence (regardless of birth history) would predict attachment security at 12 months.

MATERIAL AND METHODS: Participants were 70 infants born VPT and 85 infants born FT and their mothers from urban working-to-middle class backgrounds in Portugal. Infants’ congruent and incongruent responses were scored microanalytically second-by-second from videotapes of infant-mother interaction during the first episode of the Face-to-Face-Still-Face paradigm at 3 months by trained, reliable coders. An independent team of trained, reliable coders evaluated Infants’ attachment security in the Strange Situation at 12 months.

CONCLUSIONS: Compared to infants born FT, infants born VPT were more likely to exhibit incongruent responses during mother-infant en-face interactions at 3 months and to be classified with an insecure attachment at 12 months. Notably, infant interactive congruence was a stronger predictor of later attachment than infants’ gestational age at delivery, birthweight, or demographic factors. We hope that this study contributes to unveiling the organization of attachment processes in infants born VPT.

Keywords: Infant congruent and incongruent interactive behavior; very preterm birth; Face-to-Face Still-Face paradigm; attachment; Strange Situation.
Lessons Learned about Infant and Early Childhood Mental Health Consultation Delivered Virtually During the Pandemic

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Introduction: During the COVID-19 pandemic, many Infant and Early Childhood Mental Health Consultation (IECMHC) programs serving early care and education (ECE) settings adapted to a virtual delivery model, offering an opportunity to explore the feasibility and efficacy of virtual services.

Aim of Study: The purpose of this study was to explore the perception of mental health consultants (MHCs) of the feasibility and effectiveness of consultation services provided virtually, including various types of consultation services (e.g. programmatic, child-focused consultation) and specific consultation activities (e.g. meetings, observations) provided under various circumstances (e.g. to existing consultees vs new partners). We also explored the degree to which technology related issues posed a barrier to virtual IECMHC.

Materials and Methods: A panel of experts in IECMHC developed an electronic survey and distributed it to MCHs through a network of IECMHC program leaders nationally. The survey focused on provision of virtual services to ECE settings during July through December of 2020. The survey received 119 responses, of whom 94 MHCs met the eligibility criteria. Respondents were from 15 states and the majority were female (93.6%), white (55.5%) and were licensed or licensed eligible mental health professionals (89.4%)

Conclusions: The proportion of MHCs who reported consultation was as, or more, feasible virtually compared to in-person varied widely based on the type of consultation, ranging from 69.1% for programmatic consultation to 31.2% for child-focused consultation. There was also wide variation in the extent to which MHCs reported that specific activities were feasible and effective when delivered virtually. Child or classroom observation, child screening and coaching/modeling were activities rated by less than 25% of MHCs as being as or more feasible/effective virtually compared to in-person. These findings, as well as reported technology barriers, provide insights to guide expansion of IECMHC to distant locations through virtual means.
The impact of low-birthweight in infant emotional regulation, mother-infant quality of interaction, and attachment

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INTRODUCTION: It remains unclear whether infants born preterm, particularly the ones born very or extremely preterm, are more likely to develop an insecure attachment with their mothers. Instead of using gestational age criteria, we observed attachment in infants born with very low birthweight (VLBW; less than 1500g). Although the collinearity between gestational age and birthweight is high, infants born VLBW tend to stay more days in NICU and to have more comorbidities than other infants with the same gestational age.

AIM: Study the impact of low gestational birth (per se) in infants’ regulatory behavior, the quality of mother-infant interactions, and attachment security.

PARTICIPANTS AND METHODS: The participants are 71 infants’ weight lower than 1599g of gestational weight (varying between 23 and 34 weeks of gestational) and their mothers. Dyads were observed in free play and during Face to Face Still-Face paradigm with infants at 3 months of corrected age. At 12 months of corrected age, mother-infant attachment was observed during Strange Situation.

RESULTS: Results indicate that infants born with VLBW have high levels of insecure attachment (70%) and non-positive patterns of regulatory behavior (64%). Maternal and infant interactive behavior is highly associated with infant attachment. In turn, maternal interactive behavior is associated with gestational age, birthweight, and number of days in NICU. Interestingly, we also found that 76% of the ambivalent-attached infants took antibiotics in the first year of their lives (against 47% of secure and avoidant attached infants). Such contrasting proportions agree with past research performed with full-term (90% of infants classified ambivalent against 35% of secure and avoidant).

CONCLUSION: In VLBW, the quality of interaction is determined by the difficulties of each participant to regulate emotional states, express clear communicative messages, and respond to their partner affective communication, leading progressively to patterns of attachment.
INTRODUCTION: Mental health consultants to early care and education providers are frequently called upon to help address children’s behavior that the adults find frustrating, worrisome or difficult to manage. An infant mental health approach dictates an understanding of children within the multiple contexts in which they are developing, including the teacher-child relationship. An understanding of that relationship involves a consideration of how the teacher and child interact as well as the subjective experience that each has of the other. The Working Model of the Child Interview (Zeana et al., 1994) is an efficient means of obtaining an overview of teacher/caregiver perceptions of individual children.

PURPOSE: This presentation will describe the theoretical basis and a practical approach for mental health consultants to appraise a caregiver’s internal representation or working model of a specific child and their relationship with that child.

DESCRIPTION: Mental health consultants in a large statewide IECMHC program administered an adaptation of the Working Model of the Child Interview (WMCI) to teachers and childcare providers reporting concerns about individual children’s challenging behavior in their setting. Two questions from the full WMCI were extracted for analysis: adjectives to describe the focus child of consultation and adjectives to describe the teacher’s relationship with that child. A coding scheme for the valence of the adjectives was developed. Mean scores on a Negativity Scale decreased from baseline to repeated assessments after 6 months of consultation and 12 months, indicating a shift in teacher negative working models about children with whom they were struggling.

CONCLUSIONS: The WMCI is a useful tool for mental health consultants to appraise how caregivers understand young children, particularly those with whom they have a challenging relationship. The clinical utility is significant, and there is evidence indicating a positive impact of consultation on teacher and childcare provider working models.
Attachment and self-regulation: Implications of bi-directional effects for children with a disability or developmental delay

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Introduction

Children with disability or developmental delay have significantly elevated rates of clinically diagnosable emotional and behavioural disorders. Quality of parent-child attachment is significantly associated with self-regulation of emotion and behaviour, executive function, non-organic feeding problems, obesity, sleeping, and other developmental concerns found to be elevated for children with disability or developmental delay. As a malleable variable, attachment security presents an opportunity for early intervention professionals to influence a range of child development outcomes.

Aims of the study

This multi-faceted interconnection between attachment and self-regulation was explored in a study which investigated how early childhood intervention professionals could improve the attachment security of children with a disability or developmental delay.

Materials and Methods

This mixed methods study included a) a survey of early childhood intervention professionals, b) a systematic review of the attachment patterns of children with disability or developmental delay and attachment interventions used with this population, and c) in-depth interviews with parents and professionals.

Conclusions

Children with disability or developmental delay are significantly less likely to form a secure parent-child attachment relationship and almost twice as likely to form a disorganised attachment than the general population. Bi-directional effects between self-regulation and attachment security are integral to the trajectory of child developmental outcomes and family wellbeing. Association is not causation and the relationship between disability, attachment, and self-regulation, is complex. Strategies can be implemented by early childhood intervention professionals to improve attachment security, self-regulation, and child and family outcomes.
Researcher and educator interpretations of micro-analytic observations of infant sociality

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INTRODUCTION
In the field of infant mental health, methods for studying infant behaviour and interactions include: microanalytic observations where minute behavioural actions and sequences are explored using video; and psychoanalytic exploration by the observer of their thoughts and feelings about infant behaviour. Often these two approaches are used independently of one another. Yet when used in conjunction, they can generate new understandings about infants’ interactions and underlying motivations.

AIM
This presentation will describe how microanalytic and psychoanalytic methods of infant observation were used to generate researcher and educator insights into infant sociality and social development in education and care (EC) settings.

MATERIAL and METHODS
This study was conducted in two EC settings with educators and infants under 2 years of age. A micro-analytic approach was used to examine infants’ interactions in triads (defined as a third infant and an interacting infant-peer dyad) from video recordings of 20 infants collected across a 19-month period (age range = 3 to 21 months). A data set of 564 coded observations was generated and analysed using frequency analyses, correlations and group comparisons. A psychoanalytic approach was used to generate interview data with four educators while viewing video extracts of infant interactions in triads. In total, 18 interviews were conducted and analysed using structural and thematic approaches.

RESULTS
Analyses confirmed that third infants were watching, coming in to, and communicating with the dyad. Insights from the psychoanalytic method identified third infants’ motivations as: being curious and interested in their peers, working out the interactions between the dyad, and seeking belonging and togetherness.

CONCLUSION
Micro-analytic and psychoanalytic methods of observation generated data that identified and described infant-triad interactions, and provided meanings that underlie these interactions. Combined, these two methods gave a more comprehensive understanding of how and why infant groups behave the way they do.
Changes in Child Mental Health During the COVID-19 Pandemic: Meta-Analytic Findings

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Introduction: Recent research has suggested that the levels of child depression and anxiety symptoms have increased globally throughout the COVID-19 pandemic. However, there is considerable variability in the reported changes in prevalence rates from pre to during the pandemic throughout the literature.

Aim of the study: We will present a systematic review and meta-analysis with two central aims. Firstly, we will pool studies to provide estimates of the magnitude of change in child depression and anxiety symptoms in longitudinal studies with participant data pre to during the pandemic. Secondly, we will examine whether various factors predict more or less change in child mental health, including age, sex, race/ethnicity, and geographic location.

Material and Methods: Databases were searched (e.g., PsycInfo, Embase, MEDLINE) for studies reporting both pre and during COVID-19 child/adolescent depression symptoms. Four themes informed this search: (1) depression, (2) anxiety, (3) COVID-19, (4) children. Included studies had quantitative data and reported pre and during COVID-19 levels of depression and anxiety symptoms in children/adolescents in English.

Conclusions: 6822 nonduplicate abstracts were retrieved, 351 full-text articles were reviewed, and results from 44 studies (36,945 children, 11 different countries) were represented. Our meta-analyses of changes suggested a slight to small increase in depression (standardized mean change [SMC], 0·19; 95% CI, 0·11 to 0·27) and anxiety symptoms (SMC, 0·25; 95%CI, 0·08 to 0·42) in children pre to during the pandemic. Moderator analyses suggested greater increases in depression amongst girls versus boys, younger versus older children, and in samples from Europe and North American versus Asia. For anxiety, moderator analyses suggested larger increases for girls versus boys, and younger versus older children. Significant increases in child depression and anxiety levels coincided the COVID-19 pandemic, and increased utilization of child and adolescent mental health care can be expected.
Digital Stories in Early Education: a pilot study for supporting emotional development of young children

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Introduction: The ability to recognize and verbalize emotions are important for skills in emotion regulation, typically developed in everyday interactions between young children and caregivers. The ability of Early Education and Care personnel to support children’s emotional development is beneficial for all children, and particularly for children with special needs.

Material and Methods: Digital Stories in Early Education was a pilot study of how early educators could support socioemotional development of five-year-old children with digital content. Six stories were made using photos and videoclips, without any spoken language. In each story the puppy dog Hymy had an adventure with an emotional content. Three daycare centers and 61 children in the city of Tampere participated in the study. Participating children in one day care centre watched Digital Stories (DS-group), in one day care centre a children’s tv-program (Neponen-group), and in one day care centre nature programs (comparison group) twice a week for six weeks. After watching the program early educators engaged children in discussion of what had happened in the programs, and what kind of emotions it elicited.

Results: In the DS-group children talked more during watching the stories, and significantly more about emotions than in the comparison group. In parental reports, children’s social skills also improved in the DS group compared to the comparison group. In a thematic interview early educators reported that children liked watching the digital content, and it was easy for children to recognize and verbalize emotional content of the Digital Stories. Watching the Stories together in a group also gave children a stronger sense of belonging to the group. For early educators Digital Stories gave a new way of interacting with the children.

Conclusions: DS were beneficial for children. Early educators’ interest and abilities to use digital methods as a part of their work increased.
Cross-cultural factors associated postpartum depression in a sample of American Muslim women

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Introduction: Postpartum depression (PPD) is a heterogeneous syndrome that is one of the most common complications of childbirth (Stewart & Vigod, 2019). Previous literature suggests that five to twenty percent of U.S. women experience perinatal mood symptoms, making PPD treatment vital for the well-being of mothers and their infants (Ti & Curtis, 2019). There is a paucity of literature focusing on the perinatal experiences of Muslim women, suggesting the need for further research to better understand PPD in this population as well as the implications on their infants.

Aim of Study: The current study describes the characteristics of a convenience sample of U.S. Muslim women’s postpartum depressive symptoms and identifies associated risk and protective factors in this sample.

Materials and Methods: Muslim women living in the United States (N = 261) participated in an online survey, which inquired about demographics, perinatal medical factors, risk factors of postpartum depression, mental health (depression), tolerance of ambiguity, and religious practice. Data were analyzed utilizing quantitative methods.

Conclusions: Results showed that 28% of the sample endorsed clinical levels of depression. Multiple linear regression analyses showed Islamic religiosity, tolerance of ambiguity, and religious practices during pregnancy predicted lower postpartum depressive symptoms. Those who engaged in religious practices associated with their infants showed higher life satisfaction. The current study provides a foundation for future research, which should focus on developing prevention programs, screening tools, and interventions that address the unique mental health needs of perinatal Muslim women to protect the wellbeing of their infants.

References

Community-based efficacy trial of "Mothering from the Inside Out": Outcomes when delivered by addiction counselors

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Mothering from the Inside Out (MIO) is a mentalization-based individual parenting psychotherapy designed for mothers who are in substance use treatment and caring for young children. Two prior trials have demonstrated that, when delivered by research clinicians, MIO is efficacious at improving mothers’ reflective functioning, caregiving behavior, depression, and substance use, in addition to children’s attachment security. Critically, to avoid the well-documented science-to-service gap where there is a precipitous drop in efficacy when interventions are brought from the research setting into ‘real-world’ settings, we sought to answer the question: does MIO’s efficacy hold when delivered by community-based clinicians?

This study thus represents a third randomized controlled trial that tested the community-based efficacy of MIO when delivered by counselors in a community-based addiction treatment setting. Ninety-four mothers caring for a child 11-59 months of age were randomly assigned to participate in 12 sessions of either MIO or a psychoeducational intervention. Outcomes of interest were assessed at baseline, posttreatment, and 3-month follow-up.

Compared to mothers who participated in psychoeducation, mothers who participated in MIO showed decreased certainty about their child’s mental states and decreased depressive symptoms; their children demonstrated increased clarity of cues during dyadic interactions. Participation in psychoeducation was associated with increased substance use, as well as decreased child compliance, clarity of cues, and responsiveness; MIO was not associated with these declines.

Overall, participation in MIO was not associated with the same degree of improvement in maternal reflective functioning and caregiving behavior that was observed in two prior trials. However, when delivered by community-based counselors, it appears that MIO may be protective against a deterioration in caregiving over time often seen in mothers with addictions. Future implementation trials should examine factors influencing MIO effectiveness in real-world settings to close the science-to-service gap commonly seen in the dissemination of empirically validated interventions.
Ghost from the Past: Consciously Buffering Trauma Across Generations in Black American and Latine Families

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Conscious buffering of intergenerational trauma describes parents intentionally stopping ‘ghosts from the past’ from repeating in their children’s generation by not repeating what they experienced or witnessed, modeling and teaching children to make different decisions and working to remove children from harm’s way. This workshop will present and discuss conscious buffering as a body of knowledge that demonstrate parents’ deep strengths and capacities ensuring that their children are protected from racism experienced in schools (Duane, 2022), colorism experienced in families (Lewis, 2021) and other traumatic experiences (Thomas, 2019). Using virtual, semi-structured interviews and narrative thematic analysis (Riessman, 2008), Duane investigated mother’s coping with their children’s school-based trauma. Duane (2022) identified that mothers drew on their brilliance to cope and support their children’s coping in various ways (e.g., presence, spirituality, conscious buffering, moving). Lewis examined the psychological impact of discrimination based on skin tone and hair type on young children. Lewis reports development and psychometric properties of a new, theoretically grounded scale, the Recognition of the Impact of Colorism on Children Scale (RICS; Lewis, 2009). Employing mixed methods design, Thomas’ (2019) exploratory investigation found African American and Latine parents’ intentional methods of buffering intergenerational trauma. Using both qualitative and quantitative methods, these papers suggest intergenerational traumatic experiences, or ghosts, are buffered through resilience, brilliance and protective capacities of families.


Lewis, M. L., Editor, D. Weatherston, Co-Ed. (December 2021) Therapeutic cultural routines to build family relationships. Talk, touch, and listen while combing hair. Springer Publishers.


Primiparous Mothers’ Prenatal Expectations about Coparenting and Their Postnatal Experiences

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INTRODUCTION
Coparenting refers the ways that parental figures relate to one another in the role of parent. Task division, which refers to the allocation of child-related tasks between parental figures, is a component of it (Feinberg, 2003).

AIM of the STUDY
This study aimed to investigate primiparous mothers’ perceptions of childcare task division with their husbands, and how their prenatal expectations, postnatal experiences, and expectation violations regarding postnatal childcare task division are related to family SES, child characteristics, perceived social support, and couple satisfaction in Turkey.

MATERIAL and METHODS
This longitudinal study had two time-point assessments of the same of mothers. In the prenatal stage (1st time-point), 113 women were recruited to participated to the study. In the 4-months postpartum period, 97 of these mothers were assessed. Couple Satisfaction Index, Who Does What-Prenatal Form, and Multidimensional Scale of Perceived Social Support were used to collect data at the 1st time-point while Couple Satisfaction Index, Who Does What-Postnatal Form, and Infant Behavior Questionnaire-Revised Short Form were used in the 2nd time-points.

CONCLUSIONS
Mothers’ expectations about childcare task division with their husbands have been towards egalitarian sharing, but their expectations were violated as they reported doing more childcare tasks then they expected. While expectations were not explained with the predictor variables, postnatal couple satisfaction has been the unique predictor of postnatal task division. Moreover, expectation violations were predicted by family income and couple satisfaction. As a result, how important the couple satisfaction is for coparenting in Turkey has been revealed, and suggestions were given for intervention programs in the transition to parenthood stage for mental health professionals.

References
The cradle of subjectivities. A comparative anthropology of babies in two Mediterranean countries (France, Tunisia)

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Although early childhood has recently become a major theme of social anthropology, few studies have focused on the development and construction of subjectivity in different cultural contexts. This presentation aims at making the case for such a research direction by presenting an ongoing comparative study on babies in France and Tunisia.

The purpose of this study is to describe and analyse babies’ socialisation and subjectivation in two Mediterranean countries. Its originality relies in the fact that it combines two perspectives which are usually separated, for we focus both 1) on how babies are welcome and taken care of through rituals, nursing and parenting practices and how they become integrated into society from an anthropological perspective; 2) and, from a psychological perspective, on the structuration of individual psyche which enables babies to become social subjects, in particular as they learn rules and standards of conduct and as they acquire body disciplines and symbolic abilities.

To this end, we rely on longitudinal field study with young children (1-4 years old) in childcare institutions (creches, mother and infant protection, childminders) and families. Our methodology, converging with that of ethnopsychiatry and especially the “Ecole de Dakar”, combines participant observation, documentary research and a more clinical-oriented approach, based on psychopathology, which aims at identifying the difficulties and troubles babies may experience throughout their subjectivation process. This emphasis on individual cases, which also entails interviews with parents, allows us to go beyond the project of the “Culture and personality” school which tended to neglect variation inside a population as a result of a merely behaviourist conception of human mind.

In doing so, we draw a spectrum of subjectivation patterns which is common to France and Tunisia and enables us to highlight their intrinsic differences and common features, but also their recent transformations.
The Role of Adult Attachment Style and Subjective Birth Experience in Psychological Trauma Following Birth

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Introduction
Childbirth is typically a joyous occasion, but it can also place overwhelming demands on women. While the majority cope well, Psychological Trauma Following Birth (PTFB) can occur. Many vulnerability and risk factors have been identified; however, not enough is known about the interaction between these factors.

Aims
This study sought to examine if adult attachment style interacted with women’s subjective birth experience, including peritraumatic factors, to predict levels of psychological trauma following birth. The association between antenatal anxiety and depression was also explored.

Materials and Method
Using a longitudinal research design, this study (n=147) used data collected at T1 (during pregnancy) and T4 (24 months postpartum). Correlational and hierarchical multiple regression analysis were used to explore the relationships between adult attachment style, the subjective birth experience including peri-traumatic factors, in predicting levels of PTFB.

Results
7% of the sample had clinically significant symptoms of PTFB. Predictive models indicated that the subjective birth experience of feeling supported, levels of distress during the birth, and an insecure attachment style all predicted levels of PTFB, over and above the effects of mode of delivery. The model accounted for 61% of the variance in PTFB symptoms (F (8,138) = 25.5, p < .001). Attachment style moderated the links between all aspects of the subjective birth experience and PTFB. It did not interact with peri-traumatic distress. Antenatal anxiety and antenatal depression were also associated with higher levels of PTFB.

Conclusions
PTFB is a significant issue for women giving birth in Ireland. There is potential to lower the risk of PTFB by identifying the vulnerability and risk factors antenatally or immediately after birth. The findings also underscore the importance of the interpersonal environment during labour and delivery. For those who develop PTFB early identification and perinatal follow up should be arranged without delay.
0-2 month infants brain network function, mother–infant bonding and care model: a fNIRS study

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Introduction: Mother-infant bonding, an innate physical, psychological and emotional bond between mothers and infants, reflects maternal feelings toward their infant. The infant’s brain development is characterized by synapse overproduction and subsequent pruning. During this period, the infant’s early experiences play a significant role and are mostly derived from caregivers, especially from the mother. Mother-infant bonding development is an important process for postpartum mothers. If affected, it will disturb the infant’s emotional and cognitive development and subsequently impact brain development. However, whether impaired bonding or different care models can affect the infant’s brain network function and its neurological mechanisms remain unknown.

Aim of the study: To investigate the brain-environment-care model relationship during the infant’s brain function development, we employ functional near-infrared spectroscopy (fNIRS) to examine development characteristics of functional brain networks in 0-2 infants, and the relationship between brain network connection nodes, mother-infant bonding and care models.

Material and Methods: 129 mother-infant pairs (healthy, full-term infants aged 0-2 months) were included. The mother-infant bonding (using the Postpartum Bonding Questionnaire, PBQ), maternal anxiety (using the Self-Assessment Scale for Anxiety, SAS) and depression (using the Edinburgh Postnatal Depression Scale, EPDS) of all mothers were assessed. The functional connectivity of 73 infants in resting state was measured by fNIRS. Data were analyzed based on six functional networks: Default Mode Network (DMN), Frontoparietal Network (FPN), Ventral Attention Network (VAN), Dorsal Attention Network (DAN), Somatomotor Network (SEN), and Visual Network (VIS).

Conclusions: Different care models affected the mother-infant relationship and connectivity strength within networks. Mother-infant bonding was related to the time mothers spent holding their infant, the time infants were exposed to sunlight, maternal anxiety and depression. Maternal age and education primarily influenced frontoparietal network connectivity. Furthermore, we observed better mother-infant bonding was associated with increased functional connectivity, especially in Infant-focused anxiety affected frontoparietal network connectivity.
Prenatal methamphetamine exposure and executive function in children prior to school entry.

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Introduction: Higher order cognitive processes collectively referred to as executive function (EF) develop rapidly during the preschool years and are considered a precursor to life-long academic, social and behavioural outcomes. Yet little is known about the effects of prenatal exposure to methamphetamine and alcohol on EF processes prior to school entry.

Aims: 1) To investigate whether prenatal exposure to methamphetamine and alcohol are associated with poorer executive functions prior to formal school entry (age 4 1/2).
2) To determine whether neonatal, caregiver and environmental characteristics since birth explain these associations.

Methods: Infant clinical outcomes at birth and prenatal substance exposure were obtained from 221 mothers enrolled in the New Zealand Infant Development, Environment and Lifestyle Study. Primary caregivers were interviewed at 1, 12, 24, 30, 36 and 54 months to obtain infant, maternal and family characteristics (Maternal Lifestyle Interview). The Brief Symptom Inventory, Substance Use Inventory, and the Home Observation for the Measurement of the Environment measured maternal mental illness, continued substance use and the home environment, respectively. EF outcomes were obtained from the Parent Report of the Behavior Rating Inventory of Executive Function-Preschool Version (BRIEF-P) including 5 clinical scales (Inhibition, Shifting, Emotional Control (EC), Working Memory (WM), and Plan Organize PO), 3 indices (Flexibility, Inhibitory Self-control (ISCI), and Emergent Metacognition EM), and a Global Executive Composite (GEC). Higher T-scores are less optimal.

Results: In adjusted analyses, prenatal exposure to methamphetamine plus alcohol was associated with the clinical scales of Shifting (r²=.19) and EC (r²=.17), indices of ISCI (r²=.17) and Flexibility (r²=.22), and the GEC (r²=.24). Males had significantly higher scores on EC than girls (Mean T-score=58.89 vs 53.90).

Conclusions: Methamphetamine plus alcohol exposure along with the home environment and continued heavy use of tobacco (>10 cigarettes/day) was associated with deficits in higher order cognitive processes prior to school entry.
Co-creating ante-natal support for parents expecting multiples

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Ohomairangi Trust is a Kaupapa Māori charitable trust providing early support programmes to families and whānau within Tāmaki Makaurau, Auckland in Aotearoa, New Zealand. With services, communities and resources – both human and material, being stretched as we recover post pandemic, the demand for support for families has increased.

Ohomairangi Trust’s approach assumes that individuals, families, whānau, hapū and communities have the competence to build their resilience, and that with appropriate encouragement, they can access individual and collective strengths that will allow them to engage with new information and support networks to enable effective agency.
Competence can be further nurtured by fostering social cohesion, hereby building some positive social networks and strengthening long term resilience.

Creating supports for parents expecting multiples was called for. Using the ante-natal space we worked together with parents of multiples and those expecting multiples, reflecting on and adapting the following topics - attachment, building nurturing relationships with 2 or more children simultaneously, looking forward to balancing time with two or more babies, the logistics of day to day routines (breastfeeding, changing, resources available to multiple parents, accessing support groups/people in area, finding information on entitlements for supports) mental health & wellbeing and conscious parenting.

Weaving stories and experiences from parents of multiples with their experience of Mellow Bumps 1+ we evaluated the added sessions - (ipu whenua 1+, anticipating physical and emotional needs and expectations, extra supports to be mindful of needed for labour) to create a safe, nurturing and supportive space. Families relate their stories, and we share our learnings.
Detection of Psychosocial Perinatal Risk Situations

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**INTRODUCTION**

Perinatal Psychology is a specific area of psychology that works with the beginning of life and its related problematic situations. Early detection of psychosocial factors that indicate potential risk situations for the dyad at the time of birth, allow to implement specific interventions in perinatal mental health.

**AIM of the study**

The aim of the study is the detection of Psychosocial-Perinatal-Risk situations at the time of birth; and to present the results of its application in a maternity Hospital in Buenos Aires, Argentina; allowing to deepen our understanding of the specific characteristics of these psychosocial risk factors during the perinatal period.

**MATERIAL and METHODS**

The sample is composed of 3000 mother-baby dyads of the hospital “Mi pueblo” in F. Varela, Buenos Aires, Argentina, who were interviewed administrating the Perinatal Psychological Interview (PPI) between May 2011 and January 2022: 871 dyads (29%) from the maternity department; 1971 dyads (65.7%) in the Neonatal Intensive Care Unit, 103 (3.4%) from OB/GYN.

The PPI was administrated to examine psychosocial factors that allow the early detection of Psychosocial-Perinatal-Risk situations.

**RESULTS/CONCLUSIONS**

34% of the sample was detected as psychosocial perinatal risk (1020/3000 dyads). Different types of risk situations were identified and categorized in 10 Psychosocial-Perinatal-Risk situations: risk related to Non-nesting 15.3%; Social risk 10.2%; Grief 11.3%; Adolescent risk 16.4%, Psychological risk 12%; risk related to Absence of support by their partner 13%; Family related 4.5%; Denial of pregnancy 4.8%; Institutional 4% and Physical risk 8.2%.

These findings demonstrate the importance of considering factors regarding emotional safety of women during the perinatal period, emphasizing the relevance of including Psychosocial-Perinatal-Risk situations that allow early detection and specific interventions in perinatal mental health.
User-Engaged Design in the Adaptation of VID-KIDS Home Visiting Program for Virtual Delivery

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INTRODUCTION: VID-KIDS (Video-Feedback Interaction Guidance for Improving Interactions between Depressed Mothers and Their Infants) is a positive parenting program designed to promote maternal-infant interaction quality in the context of postpartum depression (PPD). Initially designed and tested as a home-visiting program, the pandemic halted the in-person VID-KIDS study leaving vulnerable families without support for their mental health and parenting needs—thus providing the impetus for online adaptation.

AIM of the study: Using participatory design approaches, our multidisciplinary team (nurses and software engineers) worked collaboratively with mothers, VID-KIDS nurse interventionists, and administrators to develop and usability-test the VID-KIDS Virtual platform.

MATERIAL and METHODS: We undertook a four-phase study to co-design and pilot test VID-KIDS virtual platform. Phase 1: mothers (n=6), nurse-interventionists (n=4), and administrators (n=3) took part in virtual focus groups to explore recommendations about user needs and preferences. Key design elements were identified and incorporated into interface prototypes of the web-based application. Phase 2: nurse-interventionists (n = 4) and VID-KIDS administrators (n=3) took part in user interface design (UID) sessions with a software development team to design the VID-KIDS virtual wireframe prototype. Usability testing sessions followed to refine the prototype. In Phase 3, an agile, iterative software design approach was used to integrate user feedback (i.e., UID and usability testing) into an alpha prototype that underwent acceptance testing over additional design sessions. This process resulted in a minimal viable product (MVP) or beta prototype tested in Phase 4.

CONCLUSIONS: Most virtual health programs are designed with minimal input from target users, resulting in cumbersome applications that fail to address users’ specific and dynamic needs. VID-KIDS Virtual was designed based on user feedback at every phase of development, thus optimizing user-friendliness, acceptance, and uptake. VID-KIDS Virtual is responsive to current and emerging trends in mental health interventions and web-interface design.
Predicting Dyadic Emotional Availability Using Prenatal EA

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Introduction
Emotional availability (EA) is a construct expanding on attachment theory by including the dyadic, emotional quality of adult-child relationships. It is correlated with attachment styles, emotion regulation, and school readiness. Considerable research on EA focuses on parent-child relationships, but few existing studies explore EA in the prenatal period. Our study used a newly developed prenatal movement/dance training to enhance maternal EA, wellbeing, and vital nonverbal communication.

Aim of the Study
Movement/dance workshops based on EA principles were designed to support mothers’ attunement, responsiveness, and outward emotional expression. These qualities were assessed before birth using observed prenatal EA (a new measure). We now seek to explore the extent to which prenatal EA predicts dyadic EA in infancy and early childhood.

Material and Methods
Pregnant mothers participated in one of three study conditions (dance only, dance plus psychosocial, or control) during the 2nd trimester. Observed and self-reported prenatal EA, maternal wellbeing, and maternal mood were assessed. Findings indicated that mothers in the intervention groups reported an increase in self-reported EA compared to those in the control group. Moreover, mothers in the intervention groups demonstrated a decrease in anxiety from pretest to posttest and reported lower depression at posttest than those in the control group. We now plan to follow up with all mothers (N = 22) to evaluate observed EA with the child after birth. All mothers consented to follow up and have been recontacted. Dyads will be invited to participate in 15–20-minute video observations via Zoom over the next 1–2 months.

Conclusions
We hypothesize that prenatal EA will predict dyadic observed EA after birth. Such findings may have both clinical and scientific value by connecting the first observational measure of EA in the prenatal period to parent-child EA, and in turn, related outcomes in childhood.
A Strengths-Based Approach to Supporting Parenting During Prolonged Adversity: Lessons Learned from the Pandemic

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Introduction

The COVID-19 pandemic created prolonged adversity for individuals worldwide. Emerging research has shown that the pandemic negatively impacted the health and environment of individuals. Moreover, decades of research has shown that caregiver and child well-being are interconnected, indicating that the impacts of the pandemic on caregivers likely contribute to changes in parenting practices and therefore potentially alter the caregiver-child relationship.

Aims of the Study

Study aims included understanding parenting difficulties and adaptations during the pandemic and how they relate to broader research focused on interventions to support families facing adversity.

Material and Methods

This study utilized individual interviews with a sample of caregivers (N=67) across four states (California, Georgia, Oklahoma, New Mexico). Interviews focused on understanding family experiences during the pandemic and were conducted by phone and audio recorded. Interviews were subsequently transcribed and analyzed by trained qualitative researchers.

Conclusions

Caregivers reported positive and negative parenting changes during the pandemic. Less than one-third of participants reported negative parenting changes such as harsher parenting practices and higher levels of irritability. With regard to positive parenting changes, more than half of caregivers reported increased quality time, heightened levels of attachment to their child(ren) and heightened levels of patience and flexibility with their child(ren). This research provides insight into the impact of prolonged stress on children and families and how families naturally respond to prolonged stress in resilient ways. Data aligns with resiliency models which can be used as a lens to view natural resiliency. In an effort to connect all of these concepts, the current workshop will provide research on the stressors and protective factors families experienced during the pandemic and how these factors can be viewed through resiliency models and interventions. Lastly, time will be spent engaging in activities to apply a strengths-based approach with families experiencing continuous traumatic stress.
Birth experience and mother-infant early relational health among mothers with and without COVID-19 during pregnancy

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Introduction. A mother’s experience during labor and delivery has the potential to influence the quality of the mother-infant relationship. Mothers who gave birth during the COVID-19 pandemic may face unique challenges that could impact early relational health.

Aim of the study. To investigate the impact of the birth experience on mother-infant early relational health among women who gave birth during the COVID-19 pandemic.

Materials and Methods. Participants were mother-infant dyads (n=375) enrolled in the COVID-19 Mother Baby Outcomes (COMBO) Initiative. A subset (n=122) of mothers had a history of COVID-19 infection prior to delivery. At 4-6 months postpartum, mothers reported on their birth experience using the Labor and Delivery Index, and the Birth Memories and Recall Questionnaire, and mother-infant bonding using the Postpartum Bonding Questionnaire. Dyads also engaged in a 3-minute interaction task via zoom. Videos were subsequently coded using the Welch Emotional Connection Scale to determine continuous and binary ratings of mother-infant emotional connection.

Results. Lower mother-reported bonding at 4-6 months was associated with lower birth satisfaction (r=-.202, p<.001) and greater emotional memory of the birth (r=.306, p<.001). Both effects remained significant (p<.05) after controlling for prenatal COVID-19 infection status, infant sex, mode of delivery, maternal age at delivery, primiparity, and maternal postpartum depression. Coded mother-infant emotional connection was not associated with birth satisfaction (r=.125, p=.05) or emotional memory of the birth (r=.062, p=.34). However, mothers from dyads who were emotionally connected reported higher scores on birth satisfaction (M=13.0) than those who were not emotionally connected (M=11.70, t(65.12)=−4.23, p<.001). Maternal prenatal infection with COVID-19 was not associated with early relational health outcomes (r=-.083-.059, p=.108-.336).

Conclusions. Findings highlight the importance of considering the birth experience and its impact on early relational health. Fostering supportive birth environments may help promote early relational health for mother-infant dyads.

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Introduction
Family-centred care (FCC) is considered the gold standard of care in perinatal NICUs around the world. However, evidence is lacking on the potential benefits of FCC in the surgical NICU population. COCOON is a specially-designed FCC model for this at risk population.

Aim or Purpose of the project or work described
COCOON aims to improve health outcomes and the NICU experience for infants and their families by supporting families to engage with, and participate in, their baby’s care throughout their NICU stay.

Description of the work or project
COCOON was developed through consultation with consumers, staff and other key stakeholders, in combination with international guidelines on the implementation of FCC and a review of the scientific literature in this area. A 3-pronged model was designed to incorporate family education, staff education and a suite of resources to support parents through their NICU journey entitled "The COCOON Care Bundle". Activity and quality data were assessed, including mixed method surveys of staff and parents, pre- and post-implementation to measure the impacts of COCOON.

Conclusions
Marked improvements were seen in staff knowledge of FCC from 40% to 95%, with greater familiarity of the key aspects needed to provide high-quality FCC. Parental engagement increased and feedback improved from “I don’t come in, I feel like I’m in the way” to “I was invited and encouraged to be involved with the care of my son, encouraged to be involved in care from the very outset. This created lots of confidence.” The development and implementation of the COCOON program has improved staff perceptions and delivery of FCC and parent involvement and experiences in the surgical NICU. The COCOON program continues to evolve with plans for a hospital wide roll out in 2023.
Out-of-home care and social and emotional wellbeing at age 5 - when is OOHC protective

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Introduction
Child abuse & neglect (CAN) is the dominant risk factor for mental illness in mid/late childhood and adolescence. Children with substantiated CAN removed to out-of-home care (OOHC) display the worst mental health,\textsuperscript{1,2} with symptoms of distress apparent by school start\textsuperscript{3,4}. OOHC is designed to keep children safe from imminent threat of serious harm, but mental health must be protected.

Aim
The aim is to better understand the circumstances under which child removal to OOHC improves social and emotional well-being and when it is further threatened.

Methods
Psychosocial wellbeing at age 5-6 years will be analysed for children with substantiated abuse, comparing those who have and have not entered OOHC and also children with different care experiences, using the Australian Early Development Census (AEDC). The AEDC, implemented during the first year of school, generates individual child development scores in five domains (physical, social, emotional, language and knowledge). Our study draws on the iCAN linked data set, covering 600,000+ South Australian's – connecting child protection records, schools census, AEDC, birth and death registry, midwifery records etc. The study uses propensity score matching to ascertain the impact of individual OOHC experience and child and family factors on social and emotional wellbeing.

Conclusions
Preliminary analysis suggests, on average children entering OOHC do poorly on social and emotional domains, but better on physical health, language and cognitive skills and communication and general knowledge than children with substantiated abuse or neglect not entering OOHC. By exploring in more depth which sub-populations (eg age of entry to care, type of care) do better or worse, we hope to provide evidence to inform child protection policy and practice, to enhance child psychosocial wellbeing.

\textsuperscript{1}Green et al MJA doi:10.5694/mja2.50392
\textsuperscript{2}Maclean et al BMJ Open doi:10.1136/bmjopen-2019-029675
\textsuperscript{4}Bell et al Child Abuse & Neglect doi:10.1016/j.chiabu.2017.12.001
Prevention Services for Post-Natal Depression: Exploring Perspectives of Mothers, Community Mothers, and Public Health Nurses.

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Introduction/Aim
Research in Ireland indicates that 11.1% of mothers of nine month old infants scored above the threshold for depression (Cruise, Layte, Stevenson, & O'Reilly, 2018). This study aimed to inform development of prevention services in Tipperary, Ireland by exploring the perspectives of knowledgeable stakeholders, including Mothers, Community Mothers (peer practitioners who provide support and information through home visiting), and Public Health Nurses. The objective was to explore and triangulate participants’ views on prevention of Post-Natal Depression (PND) in the community and facilitators/barriers to help-seeking.

Methods/Materials
Exploratory-descriptive qualitative design was utilised in this multimethod study. Data was collected with two focus groups (Mothers, n=6; Community Mothers, n=5) and seven individual semi-structured interviews (Mothers, n=3; Public Health Nurses, n=4). Thematic analysis was performed on all transcripts. Triangulation of data sources facilitated findings integration and enhanced understanding.

Results
The experience of challenges following the birth, as well as barriers and facilitators to seeking help for PND, were highlighted across the three studies. Four overarching themes were identified: (1) Challenges on the transition to motherhood, (2) Navigating power imbalance, (3) Empowering relationships, and (4) Where to from here.

Conclusions
Facilitators and barriers to help-seeking in the context of PND in Ireland were identified. The unique position of Community Mothers, who connect mothers and services, was highlighted. The research findings will inform next steps in service development. A systematic approach to address the identified barriers; including awareness raising, training Community Mothers in infant mental health intervention strategies, and the establishment of a referral pathway for psychological intervention, could form a part of future interventions.

References
Mentalizing under “pressure” – maternal mind-mindedness in an emotionally challenging situation and infant behaviours

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INTRODUCTION: Parents’ capacities to envision and interpret their infants’ mental states, thus mentalizing, can be measured as mind-mindedness (MM) and parental reflective functioning (PRF). Despite empirical indications that parental mentalization is linked with positive child development outcomes, its associations with infant behaviours are scarcely examined. Further, little is known about the relationship between MM and PRF. In this context, assessing parents’ mentalizing abilities in attachment-activating situations could be relevant since parental mentalization can be activated by certain levels of emotional arousal.

AIM of the study: Our study aims (a) to investigate maternal MM during an emotionally challenging interaction compared to a neutral situation while considering further links with PRF and (b) to explore associations between MM and infant behaviours.

MATERIAL and METHODS: A sample of N=76 mother-infant dyads, derived from a longitudinal cohort study, provided data for the present analysis at 7 months postpartum. Maternal MM indicators (appropriate and non-attuned) were assessed using observations of a 15-minute free-play situation and the Still-Face-Paradigm (SFP). PRF was assessed using the Parent Development Interview-Revised. Infant behaviours during the SFP will be analysed using the Infant and Caregiver Engagement Phases coding scheme. All measures are coded with inter-rater-reliabilities.

RESULTS: Preliminary analyses revealed higher appropriate MM during SFP compared to free-play. Higher levels of PRF were associated with less non-attuned MM during the SFP re-engagement episode. Interestingly, MM during SFP and free-play did not seem to be related. Infant interactive and self-regulatory behaviours are currently being coded and analysed with MM indicators.

CONCLUSIONS: Our study provides insights into parents’ mentalizing process, indicating activation of maternal MM during attachment-activating interaction and a link between higher levels of “offline” mentalizing reflection with “online” mentalizing attunement into infants’ internal states. Associations with infant behaviours will be analysed and discussed to reveal possible mechanisms of infant-parent mutual regulation.
A Novel Interactive Shared Reading Intervention: Feasibility and Effect on Infant Language and Cognitive Development

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INTRODUCTION
Shared reading between parents and children is an enjoyable activity conducted within the home. Using interactive reading techniques that encourage child verbal participation is found to support language development. Dialogic Reading, one such program, was developed for children between two and five years old. However, parents are recommended to begin reading before the infant’s first birthday. Few studies using Dialogic Reading together with children under the age of two have been conducted. As it is designed for verbally developed children, the evocative techniques used in Dialogic Reading may be too challenging when applied to pre-verbal infants.

AIM
This presentation presents a novel shared reading intervention. It includes interactive shared reading techniques and parental communicative behaviors that correspond to the infant’s level of linguistic sophistication. The shared reading techniques were selected to encourage infant participation as well as joint attention and include: parentese, vocal exaggerations, onomatopoeia, parental contingent response, gestures, wh-questions, and expansions.

MATERIAL and METHOD
Eleven parent-infant dyads participated in four intervention sessions, 60 minutes each, where the interactive reading techniques were modeled. Infants were between 10 and 16 months old. Feasibility and preliminary effects on infant cognitive development, expressive and impressive language development was assessed. Parent interviews served as support for the question of feasibility. Infant cognitive and language development was assessed using CSBS DP ICT and BAYLEY-III.

CONCLUSIONS
Interviews revealed feasibility for the design, the reading techniques, and implementation of the intervention. Analysis of assessment results, as compared to normed scores, revealed significant effects for expressive and impressive language development, though non-significant results for cognitive development. An unexpected and important finding was related to the connection between shared reading and parent-child relationship and well-being. Further studies, using robust research design, should be conducted forthcoming in order to better understand intervention effect and suitable populations.
Dissemination of research-based knowledge about infant socio-emotional development: The Understanding Your Baby video library

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Introduction
Understanding Your Baby (UYB) is a universal intervention aimed at supporting parental competence and infant development in first-time parents by enhancing parents’ ability to notice their infants’ behavioral cues and interpret them in terms of underlying mental states. The intervention is delivered by local health visitors in the context of the existing Danish home-visiting program, and an important part of the program is an online video library, which the health visitors refer parents to.

Aim of the study
The aim of the current study is to evaluate parents’ use and experiences of the UYB video library.

Material and Methods
The video library consists of 20 videos, divided into four age groups: 0-2 months, 2-4 months, 4-8 months, and 8-12 months. Each video is 2-4 minutes long and focuses on a specific subject relevant to socioemotional development in this age group, e.g. a video for parents with 4-8-month-old children focusing on infant frustration. Furthermore, the video library contains three additional videos focusing on themes that are relevant across all age groups (e.g., screen time).
First-time parents (567 mothers, 295 fathers) from ten Danish municipalities consented to participate in the study. The parents completed a questionnaire focusing on their use and experience of the UYB video library when their infants were 2, 4, 7, and 11 months old. The analyses will focus on when and how the parents used the video library and their experiences using the video library, including a comparison of the mothers’ and fathers’ use and experiences.

Conclusions
The analyses are still ongoing and the results will be presented at the conference. The results will be discussed in relation to the possibilities and challenges of an online video library being part of a universal home-based intervention in supporting parenting and infant mental health.
Working with parents experiencing mental ill health and their young children in communities and hospitals

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Introduction: When a parent becomes mentally ill, this can be particularly challenging for their children, regardless of age. The developmental and emotional needs of infants and very young children may be missed. There may be a reluctance to discuss parental mental illness when a sick child comes to the attention of health care professionals. Research and clinical family programs have established family supports; few have focused on hearing the voice of very young children in creating a family care plan.

Aim: The Village project in Austria co-developed an identification and support program for affected families. A core component was to understand and develop methods to actively support young children’s engagement, supporting conversations about their daily life, strengths, and fears. The experience of having a very sick child can also impact parental mental health.

Methods: In supporting parents, the providers discuss the everyday situation and support needs with the parents and children, using strength-based and empowerment principles. Interviews were conducted with the professionals, parents and children involved. Infant mental health methods can provide a voice for the infant.

Conclusions: Many parents report that they did not have enough support for themselves, including therapy and there were major barriers to care. Interviews with older children showed that they experienced high amount of stigma and fear. Particular methods such as the use of therapeutic play are needed in order to hear the voice of infants and very young children. Findings from the Village program demonstrated positive developments for families. Addressing the social and emotional needs of very young children whose parents experience mental ill-health may positively influence the mental health of both infants and parents. Long term research is needed to identify the full impacts of these interventions on the child's quality of life.
Perinatal infant and parent mental health services: a scoping review of national models and guidelines

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Background: Perinatal mental illness can lead to emotional, developmental and attachment issues for parent, infant, and child longer term and result in extensive economic costs. In Tyrol, Austria, stakeholder workshops identified a lack of awareness among the public and health professionals, a lack of screening and prevention activities, limited coordination of and gaps in services.

Aim: This scoping review aimed at identifying and summarising perinatal and infant mental healthcare models/pathways and guidelines, providing an overview of common characteristics and best-practice examples.

Methods: To include ‘best practice’ documents describing care models/pathways and evidence-based guidelines that focus on several aspects of care, including prevention, screening, referral, management of mental health during pregnancy and postpartum until the child’s first birthday.

Conclusions: Based on information from six documents (UK, Ireland, Canada, Australia), we described common characteristics and outlined an ‘ideal’ care model which should:
- be evidence-based, needs-based, person-centred, and equitable
- provide compassionate, supportive, empowering care, based on collaborative decision-making
- include integrated pathways and multi-professional, coordinated networks
- integrate interventions of primary prevention, counselling and effective early identification and screening
- have clearly defined referral pathways
- provide appropriate evidence-based treatment with timely access
- consider the mental health and wellbeing of the mother, but also of the child(ren) and the father/partner/co-parent, as well as the parent-infant relationship
- include people with lived experiences when designing and delivering PIMH care
- plan evaluation and/or monitoring of newly implemented interventions from the beginning

Open questions remain, including: identification and care for fathers/co-parents/partners with perinatal mental health problems, explicit inclusion and consideration of (mental) wellbeing of the infant as well as other children, and specific role of people with lived experiences. Results will be used for further discussion and serve as a basis for designing, further developing and implementing PIMH care in Austria.
Paternal postnatal distress on early father-baby interaction, relational withdrawal and psychomotor development.

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The perinatal period offers suitable conditions to develop psychiatric disorders (Dayan, 2007; Goodman, 2004). Despite a growing interest on the father in this context, a major gap remains in the French speaking population. Although the effects of paternal distress, mainly depression have been the subject of research for some years now, few studies have focused on the early period of child development. For example, there is a lack of consensus about the impact of paternal mental health on father-baby interactions (Field et al., 1999, Hossain et al., 1994).

The objectives of our research are therefore to assess the presence of distress in a sample of French-speaking fathers, in immediate and late postpartum, and to identify whether this distress is related to the infant's psychomotor development, early father-baby interactions and relational withdrawal in the late postpartum period.

Paternal distress (depression and anxiety) is investigated through Edinburgh Postnatal Depression Scale (Cox et al., 1987) and State-Trait Anxiety Inventory (Spielberger, 1983). Father-infant interactions are assessed using the Guide for the Evaluation of Adult-Infant Dialogue (De Roten & Fivaz-Depeursinge, 1992). The presence of relational withdrawal towards the father and towards the experimenter is assessed using the Baby Distress Alarm Scale (Guedeney & Fermanian, 2001). Psychomotor development is assessed with the BLR (Brunet & Lézine, 2001). Distress data were collected at two postpartum time points: 5 days (immediate postpartum) and 3 months after birth (late postpartum). Clinical characteristics of the dyad were assessed in the late postpartum.

The association between depressive, anxious or anxio-depressive state and the baby's clinical characteristics will be presented on the basis of 11 father-baby dyads that constitute our sample, in order to highlight a potential repercussion of the father's psychological state towards his baby. The moderating effect of maternal distress will also be discussed.
Neonatal irritability and its association with prenatal pregnancy-related anxiety and maternal self-confidence in caretaking

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Introduction: The development of infant’s ability to self-regulate is embedded in a complex interplay between parental and infant biopsychosocial factors, starting already prenatally. Pregnancy-related anxiety has been associated with negative emotionality and infant irritability which was vice versa related to impairment in parent-infant mental health and the early parent-infant-relationship. Little is known about earlier precursors of infant irritability such as the newborn’s ability to self-organize and self-regulate and potential predictors.

Aims of the study: The current study aims to investigate neonatal irritability in relation to prenatal pregnancy-related anxiety and postpartum maternal overprotection and self-confidence in caretaking.

Material and Methods: As part of a longitudinal study, 62 newborns were assessed with the NBAS (Neonatal Behavior Assessment Scale) three weeks after birth, while mothers completed self-report questionnaires regarding overprotection, self-confidence and neonatal irritability in caretaking, as well as pregnancy-related anxiety in the third trimester of pregnancy.

Results: Preliminary analyses showed significant correlations between prenatal pregnancy-related anxiety, particularly worries regarding the health of the unborn, with dimensions of the NBAS three weeks after birth, such as neonatal self-organization or general irritability. Moreover, maternal report of overprotection/ self-confidence in caretaking and infant irritability during feeding showed associations with the neonatal assessment, while other domains showed no concordance.

Conclusion: The value of multi-method approaches to assess infant and neonatal behavior beyond parental questionnaires will be discussed. Addressing parental anxiety as well as neonatal irritability already during the prenatal and neonatal care may help promoting parental self-confidence in caretaking directly, and indirectly also the early parent-infant relationship and further child development, from early on.
The Role of Negative Emotionality in the Development and Treatment of Early Externalising Behavioural Problems

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Introduction
Longitudinal research provides general support for negative emotionality as a risk factor for persistent early externalising behavioural problems (EBP) and some evidence of its mediation between coercive parenting and EBP. Negative emotionality can be measured early in development and may provide an earlier point of intervention. However, it remains unclear whether negative emotionality can be reduced by parenting interventions that target early EBP.

Aims of the study
The primary aim was to examine the developmental change in negative emotionality, both developmentally and in response to a parenting intervention, in association with changes in overreactive parenting and EBP during toddlerhood. We examined whether changes in parenting and EBP were mediated by changes in negative emotionality. This study also aimed to test whether reduced negative emotionality serves as a mediation mechanism linking improvements in parenting through an intervention and improvements in EBP.

Methods and Materials
The study was conducted with 300 toddlers at risk of behavioural difficulties and their parents, who were randomised to receive Video feedback Intervention to promote Positive Parenting and Sensitive Discipline (VIPP-SD) or treatment as usual. Participating families received home visit assessments at two time points: pre-randomisation and immediate post-intervention (5-month post-randomisation). During assessments, EBP was measured using an early childhood version of the Preschool Parental Account of Children’s Symptoms, negative emotionality was indexed by the caregiver-reported child dysregulation profile on the CBCL1.5-5 and parenting behaviours were measured using the self-reported Parenting Scale. The latent difference score approach was conducted to test the hypothesised mediation models.

Conclusions
We found that decreased negative emotionality mediated improvements in overreactive parenting and EBP, indicating the role of negative emotionality in coercive parent-child processes that contribute to early EBP. We also experimentally tested whether negative emotionality could be a malleable target for VIPP-SD to reduce early EBP but found no evidence.
Maternal postnatal anxiety affects neural responses to the still face paradigm: a dual-EEG study

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Introduction
Frontal alpha asymmetry (FAA) is a physiological correlate of emotion regulation and a potential marker of risk for psychopathology. FAA can be affected by various factors, including maternal responsiveness in emotionally challenging situations. Individual differences in FAA may provide information to identify neural biomarkers to pinpoint mother-infant dyads who are at risk. A recent development in electroencephalography (EEG), called hyperscanning, allows for simultaneous assessment of FAA in mother-infant dyads during real-time, stressful events, such as the Still-Face Paradigm (SFP). This study aimed at identifying the neural bases of mother-child interactions in the context of maternal postnatal anxiety.

Methods
Dyadic EEG and behavioral data were collected from 38 mother-infant dyads. FAA was measured during smartphone-adapted SFP (Figure 1A). Information on maternal anxiety was collected using SCL-90, Postpartum Specific Anxiety Scale (PSAS) questionnaires. EEG data were preprocessed and mother and infant FAA were computed for each phase of the SFP. We assessed differences in dyadic FAA across SFP and examined how maternal anxiety associated with infant’s and maternal FAA. We also analyzed sex differences.

Preliminary Results
Behavioral data showed less positive affect and more negative affect during the still face episodes. On average, we observed a (non-significant) rightward shift in infant FAA during the first and second still-face episodes (Figure 1B). Inspection of maternal FAA showed that mothers had lower FAA scores during still-face episodes, in comparison to other episodes (non-significant; Figure 1C). We did not observe any significant correlation between mother and infant FAA scores. Regarding maternal anxiety, Spearman correlations showed a significant association between maternal postpartum anxiety and maternal FAA for the first still face episode. Looking at sex differences, FAA scores for the whole SFP were more negative for girls than boys. Maternal FAA scores also differed between mothers of girls and mothers of boys, with mothers of boys having more right frontal activity during the first still-face episode.

Conclusion
While the behavioral data showed a clear still face effect for the smartphone-adapted SFP, this was not reflected in the neural data. Still, the neural data did reveal that mothers with higher postpartum anxiety showed more right frontal alpha asymmetry during the first still face episode, suggesting negative affectivity and a need to redraw from the situation. Additionally, mother’s brains seemed to respond differently to the still face paradigm depending on infant sex.
Defining the Essential Activities of Infant and Early Childhood Mental Health Consultation: A Delphi Study

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Introduction:
Infant and Early Childhood Mental Health Consultation (IECMHC) has been implemented in a range of settings that serve young children, and there is a significant body of research affirming that IECMHC has been effective in reducing expulsion rates from early childhood settings, decreasing teacher-reported child challenging behaviors, and improving teacher-child relationships. Despite this promising evidence, the field lacks definitive guidance as to the essential activities of IECMHC — as distinct from related social emotional supports such as coaching.

Study Aim:
A Delphi method was selected to articulate the essential activities of IECMHC. For this method, researchers identified a panel of subject-matter experts and led them through an iterative process of data collection and analysis until consensus was reached.

Materials and Methods:
Potential panelists were recruited using a US-based sampling frame of IECMHC consultants and supervisors. Out of 154 applicants, 30 panelists were selected. Selections balanced the priorities of years of experience, geographic and racial/ethnic diversity and the quality of their responses. There were three iterative waves of survey data collection: initially, open-ended responses were requested and synthesized by the research team and shared back with panelists. In survey 2, the participants viewed the synthesized list and were asked to rate how essential they thought each element and activity was on a scale from 0-100. Consensus was set at 80% of participants rating the item as 80 or above.

Conclusion:
Through the Delphi Process, we identified five essential elements and 26 activities. Of importance, this list captures not only what consultants do, but how they do it. This work represents a breakthrough for the field in terms of advocacy and workforce preparation, and it paves the way for a measure of fidelity to IECMHC.
Infant Mental Health Pathways for the Real World: An implementation evaluation of the SUSI model

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INTRODUCTION
Early signs of emotional and relational problems in infants and very young children can be identified and addressed with appropriate provision of assessment and intervention. However, this requires both investment in specialist services, and effective service pathways that join up universal and specialist services.

AIM OF THE STUDY
To understand how to create effective service pathways that embed assessment and intervention models in ‘real-world’ care.

MATERIALS AND METHODS
We present a mixed methods implementation and service evaluation, using an adapted RE-AIM framework (re-aim.org), of a new under 5s mental health service in Southwark (London). The service offers assessment, intervention and consultation using the SUSI (Social-emotional Under 5s Screening and Intervention) model, which was previously demonstrated to be effective (Hardy et al., CCPP, 2015; Hardy & Murphy, Maudsley Learning, 2020). In parallel, to embed the service in the existing wider network and create effective pathways, we describe and evaluate a programme of infant mental health awareness training for groups of community professionals working in perinatal mental health, Children’s Centres, Early Help and nurseries.

CONCLUSIONS
We have identified three essential inter-dependent elements of an effective pathway:

1. Identifying early concerns in babies and young children and the parent-child dyad, through awareness-building training, referrals, and assessments.
2. Engaging and supporting parents through a low-burden, flexible (time and place), tailored offer.
3. Promoting acceptability and collaboration within the network and wider system, through building relationships, targeted and accessible training and consultation, and strategy development. These elements combine to offer an accessible, equitable, appropriate, integrated early intervention embedded in an effective service pathway to support infant mental health.

In this workshop, we will lead a discussion on how to create effective service pathways for infant mental health, and share learning to support pathway development in other local settings.
Screening for Maternal Depression in Home Visiting: The Important Role of Culture

Dr. Abigail Palmer Molina¹, Dr. Dorian Traube², Sierra Tavani², Yareli Cervantes², Marlie Bruns¹, Allison Kemner³
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Introduction: Home visiting (HV) programs are a vital public safety net program for young children and families in the United States. HV programs are highly impacted by maternal depression, with positive screening rates ranging from 35.5 to 57.2%. Increasingly HV programs have implemented universal screening procedures to identify mothers with depression for additional services, but only a small proportion of caregivers who screen positive are referred to services or initiate services. Studies show that there are many reasons for relatively low rates of service use following referrals, including differences in cultural values.

Aim of the study: This study gathered qualitative from mothers and home visitors about the barriers and facilitators to maternal depression screening and referral to services within the Parents as Teachers (PAT) home visiting program in the United States, with a focus on the important role of culture.

Material and Methods: Semi-structured interviews were conducted over the phone with 16 home visitors (called “parent educators”) and 15 mothers who participated in depression screening within PAT. Just under a third of PAT staff interviewed identified as Black or African American, another third identified as White, and just over a third identified as Hispanic or Latino. In addition, almost half of mothers identified as Hispanic or Latino, a quarter identified as White, just under a quarter identified as Black, and one mother identified as biracial. Three mothers were interviewed in Spanish.

Conclusions: Findings will be shared about family and staff experiences during screening and highlight the strategies that PAT parents educators utilized to effectively engage and screen mothers of different cultural backgrounds. These findings will promote maternal mental health equity within PAT and other home visiting programs.
Integrating the FAN into Evidence Based Home Visiting: A Mixed Methods Study

Dr Deborah Perry, 1
1Georgetown University,

Introduction:
In the United States, the Maternal Infant and Early Childhood Home Visiting program provides funding to states to expand access for perinatal people and infants to get home-based support. Despite the strong evidence of effectiveness from randomized controlled trials, implementation data show states and communities are struggling to scale these home visiting programs. A high proportion of families are withdrawing before the benefits of multi-year models are likely to be realized.

AIM of the study:
To address this issue locally, the DC Department of Health received supplemental funding to implement and evaluate the Facilitating Attuned iNteractions (FAN) as an intensive professional development strategy to increase home visitors’ capacity to engage with families and provide higher quality services.

MATERIAL and METHODS:
Data on rates of family retention prior to FAN implementation served as our comparison cohort. Supervisors rated all of the home visitors on their team monthly with the FAN Supervisor Log (ratings ranged from 1 to 5, with 5 being consistently used with all families at all visits this month). High FAN users were determined by ratings of 3 or higher during four or more consecutive months. Quality of home visiting was measured with independently scored observational data from video-taped home visits. Family retention was captured in an administrative database. Retention at 6 months post-enrollment was used as the primary outcome measure.

CONCLUSIONS:
While there were not statistically significant differences in overall retention rates for families in our comparison and implementation cohorts, a more targeted analysis revealed high FAN users retained a larger proportion of families in the implementation cohort over families’ first six months of enrollment than low FAN users (63% versus 37%, p=.059). When implemented with high fidelity, training and coaching in the FAN led to better quality home visits and fewer families dropping out.
Work discussion group for nursery educators: a Brazilian researcher's experience with this group listening device

Amanda Schöffel Sehn, Rita de Cassia Sobreira Lopes

Introduction: Nursery educators rarely have time or opportunity to reflect on their daily routine with infants and small children. Aim: The aim of this study was to offer a group listening space for nursery educators to reflect on the challenges involved in the function of infant care and education in daycare centers. Method: There were two editions of the work discussion group, with five nursery educators participating in the first one, three of which also participated in the second. The participants were nursery educators working in public daycare centers in Porto Alegre/Brazil. Each edition was composed by three meetings and was conducted by three facilitators. During each meeting the nursery educators were invited to speak freely about their professional practices. At the end, each facilitator wrote a report that was read and discussed in a weekly group supervision. Results: Qualitative analysis revealed that the work discussion group seemed to offer a potential space for the nursery educators to reflect on their different daily work routines. An atmosphere of complicity was created between the nursery educators that enabled them to share a diversity of experiences. In the group discussions they were able to have their experiences recognized and validated by their colleagues, and to recognize themselves in their colleagues’ experiences. By the work discussion group the nursery educators became aware of how they often used more mechanized and controlling forms of care and education in order to facilitate their work and to protect themselves from excessive intimacy. We also identified that they valued the space created for professional reflection, which produced both identification and surprise reactions. Conclusions: The work discussion group was shown to be an effective and potent listening group device. It clearly simulated reflexivity, helping nursery educators to critically reflect on their work routine involving infants and small children.
Introduction: There is a consensus about the idea that the earlier the intervention the better the prognosis. Hence, the diagnosis of autism can be made from the age of 3 years, which makes the management of autism somewhat late. Screening for risk of autism before the age of 3 years is now considered a public health issue because it could make it possible to advance the time of care, thus improving the child developmental progresses. Very early detection (i.e. before 1 year) especially in at-risk populations (e.g. siblings of children diagnosed with autism) may be all the more relevant, in the perspective of inflecting or even shifting the child developmental trajectory.

Aim of the study: We present a literature review on tools screening for risk of autism in infants before 12 months.

Material and methods: Our research focused on documents related to the screening for ASD risk in babies before or at 12 months, published in English or in French from PubMed, PsycInfo and Cochrane. We have identified observational screening tools (parent questionnaire, or inventory for professional examiners) focusing on infant behavioral or interactive patterns and also other screening tools exploring biological or body or motor parameters of the infant. We will describe these screening tools, their psychometric properties, their use on at-risk populations (such as siblings) in order to discuss the most suitable tools for the detection of autism under 12 months of age.

Conclusion: Some tools are easy to implement and showed interesting psychometric properties, that could make them usable on at-risk populations such as siblings. Some of them focusing on physical and motor assessment have a good predictivity, but the predictive value of some other motor patterns should be more studied and specified. Very early detection and preemptive intervention should be an important public health issue.
INTRODUCTION Providing trauma informed care to children and families who experience abuse can lead to better outcomes for individuals and communities for years to come (Garza, et al., 2019). The National Child Traumatic Stress Network’s Trauma-Informed Organizational Assessment (TIOA) was developed to help organizations who serve families that have experienced trauma.

AIM This project will administer the TIOA through a statewide network of 17 Family Support Centers in Western United States to evaluate the degree and quality of current organizational practices.

METHODS The TIOA includes nine domains of trauma-informed care including trauma screening, workforce development, and strengthening resilience and protective factors. After completing the TIOA with one center in early 2022, with a response rate of over 90%, the statewide network is now working to administer the TIOA at all sites in early 2023. Every staff member from every center will complete the TIOA, with the goal of obtaining at least an 80% response rate at each site. The TIOA takes about one to one and a half hours to complete and all employees will be given time during work hours to complete the assessment.

CONCLUSIONS Results from the single center assessment have already been used to improve leadership and communication with its staff members. Results from each center will be analyzed and presented individually, as well as from a statewide perspective. This will be informative to both individual centers as well as the statewide network, and a description of how results will be used to drive change that will help support children and families as well as staff will be presented.

Observations and care in psychomotricity with sensory-motor approach in few-months-old at-risk-infants: a preemptive threefold intervention

Mrs Muriel Chauvet¹,², Mrs Marie-Christine Laznik³, Mrs Annik Beaulieu³, Ms. Catherine Saint-Georges³,⁴

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Nowadays, we can be quite affirmative that a large proportion of babies at risk of neurodevelopmental disorders present anomalies in the way they organize their body. More precisely, the fragility of their sensory-motor equipment is expressed by tonic and postural disharmonies and sensory peculiarities which are often in the foreground. Assessing the difficulties of these babies and treating them in psychomotricity in conjunction with their parents is fundamental. Indeed, the biological, tonic, and emotional mesh that is the construction of the body constitutes the foundation of the psychic activity and the representation still in construction. This mesh is also the basis of instrumental and relational capacities. Over the last 15 years, we have improved our results in treating at-risk babies by combining psychotherapeutic follow-up with care around their body organization, in psychomotricity and osteopathy. We are now planning a multicentric clinical trial assessing the impact of this preemptive threefold intervention on a sample of siblings screened at-risk with PREAUT grid.

As an illustration, let me introduce you to Enrico, an autistic brother that I met at 4 months: With a fragile equipment (poor general movements and gastro-esophageal reflux), the conditions of a difficult birth, Enrico presented a precarious sensory-tonic balance. He was a very irritable baby with important regulation difficulties when confronted to the variations of his physical and human environment. His postural development was based on an imbalance between flexion and extension favoring an extension pattern. Food diversification was difficult because of digestive pains but also because of the painful traces of a frenectomy. It is therefore urgent to rule out the possibility of a pediatric eating disorder.

Thanks to a threefold preemptive intervention, Enrico improved his sensory integration capacities, reharmonizes his posturo-tonic imbalances, stabilizes his regulation and invests with pleasure his oral space with a beautiful food curiosity.
The Impact of a Parent-Toddler-Group on the Development of Children at Risk: The Case Nikolai

Mag., Ba Ma Christin Reisenhofer

University of Vienna, Vienna, Austria

Subsequent to the establishment of the first groups with parents and young children by Mr. and Mrs. Robertson in the 1960s, a particular psychoanalytic concept of Parent-Toddler-Groups was developed at the Anna Freud Centre in London. Parents attend these groups weekly with their children who are in their second or third year of life. Two psychotherapists are guiding the group processes in order to enable parents to shape interactions and relationships according to the developmental needs of young children during informal conversations and play sessions. Nowadays, Parent-Toddler Groups exist in different countries and are offered particularly when early developmental problems are identified, which are linked with particular dynamics in the relationships between parents and children.

When in 2020 the first Parent-Toddler-Groups have been established in Vienna, a research project started in order to investigate the following research questions:

- What do children and parents experience during Parent-Toddler-Group sessions?
- What is the impact of these experiences (i) on the interactions and relations in the families as well as (ii) on the development of the children with special respect to the identified developmental problems of the children?

"The Impact of Parent-Toddler-Groups on the Development of Children in the Context of Family Relations" is the title of the research project. The project is being carried out - with the support of Inge Pretorius (London) - in a cooperative network of three institutions: the research unit "Psychoanalysis and Education" (University of Vienna), the Child Guidance Clinic in Vienna and the Austrian Association of Individual Psychology (ÖVIP).

During the congress session, two papers will be devoted to the concept of parent-toddler groups and research design. Four additional paper presentations will present first research results concerning the development of a child named Nikolai.

List of suggested speakers:

- Dr. Peter Zumer/Mag. Sabine Freilinger
- Univ.-Prof. Dr. Wilfried Datler/Mag. Christin Reisenhofer, BA MA
- Mag. Judith Thaller/Mag. Alexa Weber
- Prof. Dr. Margit Datler
The concept of the therapeutic "Parent-Toddler-Group" in Vienna

Mag.phil. Sabine Freilinger¹, Dr Peter Zumer¹
¹Child Guidance Clinic Vienna, Vienna, Österreich

In this presentation, which is a part of the session “The Impact of a Parent-Toddler-Group on the Development of Children at Risk: The Case Nikolai”, the concept and development of a parent-toddler group at the Child Guidance Clinic in Vienna is in the focus.

The former Anna Freud Center in London offered so-called "Parent-Toddler Groups", which are intended to enable parents to shape interactions and relationships according to the developmental needs of young children during informal conversations and play sessions under the guidance of psychotherapists (Zaphiriou Woods, Pretorius 2011). The over-arching aim of the group is to promote toddler’s development, regarding the attachment between parents and toddlers, to strengthen their relationship, to enhance separation and individuation, so that toddlers can gain independence (ibid.).

Motivated by a study trip of the Austrian Association for Individual Psychology (ÖVIP), a group based on the concept of the "Parent-Toddler Groups" of the former Anna Freud Center in London was established in Vienna at the location of the Child Guidance Clinic. The established group is accompanied by a scientific evaluation (2020-2023) lead by Prof. Dr. Wilfried Datler, Head of the Department of Psychoanalytic Pedagogy at the University of Vienna.

In addition to presenting the concept of the PTG, the planned article will describe the circumstances and challenges (such as COVID, the start of the group, discontinuations and continuity) that were experienced on the one hand with the start and progress of the parent-toddler group from the perspective of the participating parents and psychotherapists and on the other hand with the scientific monitoring of a psychotherapeutic offer for families. These reflections on the establishment and conception of the parent-infant group and the scientific support are illustrated by the presentation of a case study.

The research design of "The Viennese Parent-Toddler-Group Study"

Univ.-Prof. Dr. Wilfried Datler¹, Mag., Ba Ma Christin Reisenhofer¹
¹University of Vienna, Vienna, Austria

With reference to many years of experience with the observation of children in families and day care centres, a report is given on a current research project being carried out in Vienna in cooperation with the Institutes for Educational Assistance (Child Guidance Clinic) and the Austrian Association for Individual Psychology (ÖVIP). The focus is on the offer of a "Parent-Toddler Group" according to the concept of the "Parent-Toddler Groups" of the Anna Freud Center in London as well as its scientific accompaniment.

The objective of a parent and toddler group, including this one in Vienna, is to strengthen and promote the development of children and their relationships with their parents. This is based on the assumption that parents and other important caregivers have an important influence on the psychological development of their children through the interaction and relationship experiences that the children have with them. However, during the early years of a child's life, their guardians are often confronted with challenges that make it difficult for them to give their child impulses for their development.

The aim of the scientific accompaniment is to investigate the experiences of parents and children in the group, the changes that are encouraged in the family and the implications for the development of the children. Within the framework of a multi-perspective research approach, Young Child Observation according to the Tavistock concept is used in the groups as well as in the families. In this talk we will discuss from the perspective of the university research team, what speaks in favour of the chosen research approach, what significance is attached to the families' previous experiences and what methodological considerations already come into play in the initiation processes.

Nikolai’s experience of attending a therapeutic parent-toddler group from the perspective of the leading therapists

Mag.phil. Judith Thaller¹, Ms Alexa Weber¹
¹Child Guidance Clinic Vienna, Vienna, Austria

In this talk, the focus is on an individual case, which is discussed from various perspectives in different presentations. The perspective of the therapists leading the group is taken in this presentation in order to illustrate the individual case of "Nikolai".

Motivated by a study trip of the Austrian Association for Individual Psychology (ÖVIP), the parent-toddler group, based on the concept of the "Parent-Toddler Groups" of the former Anna Freud Center in London, was established 2021 in Vienna at the location of the Child Guidance Clinic. The aim of the group is to influence the relationship experiences of the children and their parents to provide developmental impulses within and outside the group setting. In this way, early developmental conditions are to be strengthened in order to promote the psychological development of toddlers.

Nikolai, a 3-year-old boy, participated together with his parents in this therapeutic parent-toddler group and scientific accompaniment. The underlying issue mentioned by the mother for attending the group was Niki’s refusal to eat and to speak. Due to Niki’s weight loss and the result of the developmental test, which showed that his speech development was a risk factor, the therapists in charge of the group felt that Niki’s participation in the group was necessary. In addition, a significant separation problem and a struggle for control over specific situations, associated with this, acts of control and compulsion, led additionally to the participation of Niki and his parents in the group.

Additionally, examples are given of how situations in the group were used to understand the meaning of Nikolai’s refusal to eat and speak both for his own development and for the mother-child relationship; and what interventions have been provided in the group to support Nikolai’s development as well as the development of the mother-child relationship.
Young Child Observation of Nikolai during his participation in a therapeutic parent toddler group

Dr. Phil. Margit Datler¹
¹University College of Teacher Education Vienna/Krems (KPH), Vienna, Österreich

In this paper, the use of Young Child Observation according to the Tavistock Model is presented as a unique perspective of focusing on Nikolai. It will be illustrated how Nikolai experienced significant situations in the therapeutic parent-toddler group and in what way these considerations helped to understand why Nikolai refused to eat and speak. Furthermore, it will be discussed which experiences might have stimulated and supported which developments. In this context, it will be highlighted in which way the method of Young Child Observation supports and complements (enhances) the therapists' reflections.

According to the concept of the "Parent-Toddler Groups" of the Anna Freud Center in London, a therapeutic parent-toddler group was established at the Child Guidance Centre Vienna. Using the method of Young Child Observation according to the Tavistock concept, Niki, a two-year-old boy, was observed over a period of five months while he visited the group weekly for 90 minutes with his parents. Due to the pandemic and the Corona disease in Niki's family, further observations could only take place irregularly. After each observation, an observation protocol was written, which was interpreted in weekly Young Child seminars in a group of four participants. It was examined what Niki might have experienced during the individual sequences of an observation unit, what relationship experiences he had and what influence this relationship experiences might have had on his development in the parent-toddler group. In the period from January 2021 to June 2021, nine observation protocols with a length of 71 pages were written.

Struggling for a helpful working alliance in the context of a parent-toddler group

Mag., Ba Ma Christin Reisenhofer¹
¹University of Vienna, Vienna, Österreich

In this presentation, the results of the analysis of interviews conducted with the mother of Nikolai, who both participated in a parent-toddler group, are highlighted.

A depth-hermeneutic analysis of this interview was carried out, an approach which examines the narrative content of texts and images through their effect on the researcher’s experience. (König 2015) With this approach not only the social contexts in which social phenomena take place can be taken into consideration. Also, the pre- and unconscious fantasies, desires and fears can be accessed, and the experiential world of the subject can be explored. It is shown which ambivalent feelings the mother felt towards her child and the parent-toddler group. Some of these emotions led to an earlier end of the participation in the group than had been planned. Nevertheless, the relationship between Nikolai and his parents started to change. It will be discussed which group experiences helped the mother to improve the quality of the relationship with her son who refused to eat and talk.

The parent-toddler group, based on the concept of the “Parent-Toddler Groups” of the former Anna Freud Center in London, was established 2021 in Vienna at the location of the Child Guidance Clinic. The established group is accompanied by a scientific accompaniment lead by Prof. Dr. Wilfried Datler, Head of the Department of Psychoanalytic Pedagogy at the University of Vienna. The aim of the group is to influence the relationship experiences of the children and their parents to provide developmental impulses within and outside the group setting. In this way, early developmental conditions are to be strengthened in order to promote the psychological development of toddlers.

Young Child Observation of Nikolai's experience in his family during visiting a therapeutic parent-toddler group

Univ.-Prof. Dr. Wilfried Datler1
1University of Vienna, Vienna, Austria

In this talk, the focus is on the relationship experiences of 3-year-old Nikolai and his parents who attended a therapeutic parent-toddler group, the so-called Toddler Group, at the Child Guidance Clinic in Vienna. Using the observation method of Young Child Observation (Tavistock observation method), Nikolai was observed weekly in his everyday family life while he attended the group with his parents. These observations lasted one hour each and were written down in descriptive observation protocols. The observation material includes 14 observation protocols in the family and 11 observation protocols in the group. The observation period covers 6 months, starting in January and ending in June 2021.

This presentation will focus on initial findings that arose in the course of analysing the observation protocols and discussing them in a seminar. The focus is on the experiences Niki had at home during the group visit, his relationship experiences and how these changed over time.

Throughout the analysis of the material, Niki repeatedly showed a desire for individuation and control. The relationship experiences that Niki had with his mother during the morning meal situation and the (non-)verbal interactions are particularly significant regarding his desire for individuation. We discuss how Niki perceives the morning meal situations as conflictual (described by the observer as "breakfast battleground") and how he struggles to gain control over how and how much food he is eating. Niki experiences his mother in these eating situations as controlling, intrusive and literally forceful (by directly feeding him for example buttered toast). Niki reacts to these experiences with refusal and resistance, whereupon a struggle for power develops between mother and child. By not granting Niki any control in eating situations, eating at the breakfast table becomes a battlefield.

Against this background, in this presentation we will draw connections between Niki’s relationship experiences with his mother and the conflictual eating situations.

Funder, A, Datler, M & Datler, W 2010, 'Struggling Against a Feeling of Becoming Lost: A Young Boy’s Painful Transition to Day Care', Infant Observation: the international journal of infant observation and its applications, Jg. 13, Nr. 1, S. 65-87.
Can we early change the way the pre-autistic difficulties of a baby disrupt its environment?

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As early as 2008, Geraldine Dawson, pointed out that susceptibility genes and other risk factors don’t lead directly to abnormal development of neural circuits and autistic syndrome. This happened because the baby’s organic and sensory difficulties disrupted his environment producing cascading effects leading to abnormal circuitry development. She even hypothesized that when the environment was particularly fragile, it could affect gene expression and increase the abnormal development of neuronal circuits. From that time on, she thought that intervening in this environment could remarkably improve the baby’s neural organization. Our transdisciplinary team acts on the baby’s organic difficulties, generally related to motor problems and pain, but also on the environment. With the agreement of both parents, we are going to show movies made during the treatment of a baby, whose brother is an autistic child. We will see how the therapist allows the parents to modify their mode of relationship with the baby according to its innate difficulties. How to find forms of shared pleasure, though this baby is so poorly equipped that he seems to reject any adult approach. How to talk to it with a prosody that enchants him. We know in the literature how these babies induce “regulations up” that finally lead them to close themselves even more. The therapist is like an interpreter who allows parents to find their way with a baby whose equipment problems make him incomprehensible. We will listen the mother in all the difficulties she encounters in understanding him and even in coping with some of his symptoms. This baby later presented a typical development, like dozens of others treated by our team. They are the pilot cases for our current clinical trial project assessing a very early threefold (psychotherapeutic, psychomotor and osteopathic) preemptive intervention with autistic siblings screened positive with PREAUT grid.
Relational Savoring: A Brief, Strengths-Based Intervention Delivered with High Fidelity by Paraprofessionals

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¹University of California Irvine, Irvine, USA, ²University of Wisconsin, Madison, Madison, USA, ³Pomona College, Claremont, USA

Existing programs for parents of infants and toddlers largely focus on addressing difficulties within the parent-child relationship (e.g., helping parents manage tantrums). Focusing on negative parent-child interactions carries two risks: 1) it can alienate parents by asking them to air their parenting challenges early in the therapeutic relationship with a person of power (the therapist), a risk that may be greater among underprivileged or ethnic minority parents; 2) discussing parenting interactions involving negative emotions may require a higher level of therapist training, ultimately reducing the disseminability of such interventions. Programs that focus on interactions involving positive emotions occurring between parents and children hold untapped potential in mitigating these challenges, ultimately holding great appeal for ethnic minority populations. This presentation will report on data collected from a randomized controlled trial of relational savoring, a strengths-based intervention grounded in principles of attachment theory and positive psychology that involves helping parents reflect on moments of positive connectedness with their children and is designed to be delivered by paraprofessionals. Relational savoring impacts parents’ emotions, parenting sensitivity, and mentalizing, with stronger effects among Latina mothers (Borelli et al., 2022). Using data from this randomized controlled trial of N = 164 mothers of 18-26 month olds, the current presentation will report new analyses evaluating whether 1) therapist fidelity to the treatment protocol is associated with treatment outcomes, as well as 2) whether therapist training level (pre-bachelor’s or post-bachelor’s) is associated with therapist fidelity to the treatment protocol, and 3) whether therapist training moderates the association between fidelity and treatment outcomes. These findings will contribute to our knowledge regarding the implementation of this intervention, as well as the degree to which educational background influences implementation and outcomes, yielding important implications for dissemination of this scalable and culturally-sensitive intervention.
Preschool Children’s Coping and Caregiver Support in Families with Maternal Substance Misuse: A Qualitative Study

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INTRODUCTION: Maternal substance misuse affects caregiving, which influences children’s coping skills. However, little is known about how children of mothers with substance misuse describe their coping in stressful situations.

AIM of the study: The aim of our study was to explore children’s coping with everyday conflict situations as described by the 4-year-old children of mothers with substance misuse in story stem narratives.

MATERIAL and METHODS: We studied coping and caregiver support among 29 children 4 years of age recruited from a children’s health clinic serving families with maternal substance misuse in Finland. Children completed a revised Attachment Story Completion Task that we examined with qualitative content analysis.

CONCLUSIONS: We identified children’s experiences with coping in stressful situations with optimal and non-optimal caregiver support. Experiences with optimal caregiver support included (a) empathy, (b) solicitude, (c) intimacy, (d) reassurance, (e) being a role model, (f) concrete help, and (g) shared joy. Ones with non-optimal caregiver support included (a) punishment, (b) abandonment, (c) unresponsiveness, (d) physical aggression, (e) aggressive protection, and (f) parentification.

Children’s strategies for coping without caregiver involvement were (a) magic, (b) avoidance, (c) inappropriate laughing, (d) self-reliance, or (e) a lack of strategy. Our findings highlight that preschool children of mothers with substance misuse employ various coping strategies in stressful situations that either include caregiver support or indicate non-optimal support. Children also tended to use maladaptive coping strategies when a caregiver was not involved. Understanding children’s coping with stress in families with maternal substance misuse is essential to supporting their socioemotional development and providing adequate interventions.
Introduction: In the process of development, the child has 5 basic mental needs, which lead to the development of an intermittent type of attachment, and this determines the clinical manifestations of early trauma during life and the formation of five adaptive styles.

Purpose: The development of personal capacities takes place, as shame-based identification and pride-based counter-identification. At the early stages of development, fixation of reactions takes place on the basis of the action of the sympathetic and parasympathetic systems that respond to stress or threat. As it matures, external information is encoded into a cortical object. The child sends signals to the mother, which the mother converts into appropriate actions, which are the prototype of the child's own actions.

A relationship with a real mother, who is sensitive to the child’s needs accordingly and on time, leads to the formation of a supporting, emotionally stabilizing emotional-linguistic internal object. The absence of the object is real or due to the changed sensitivity of the mother, "dead mother" according to A. Green. An "objectless" structure is created. There is no sense of supporting feelings, thoughts, imaginations. Unwell for no specific reason. Eye expressions of a mother who cannot cope with her own stressful experiences and projects her damaged feelings into the child.

Description: Differentiation of the consequences of psychological trauma: Early developmental origin and caused by unsatisfactory circumstances in later periods of life, Shock trauma allows you to correctly build a treatment strategy.

Conclusion: Psychological approaches to treatment. Management of treatment the Connectivity of mental processes. Clinical example: The results of work with female psychotherapists who were pregnant and gave birth during the war.
Introduction: Promotion of early childhood development and health at the earliest possible stage is anchored in the SDGs. The Austrian Early Childhood Intervention Programme was evaluated as Best Practice for the EU NCDs initiative in July 2022. It is an outreach programme that specifically targets families during pregnancy or with a child aged 0-3 years who are experiencing stress.

Aim of the study: The concept underlying the Austrian programme builds on current scientific evidence (neuroscience, epigenetics, public health, etc.) on the high relevance of early childhood for health and quality of life in later life as well as on findings on the accessibility and effective support of socio-economically disadvantaged groups. The programme is designed to have a positive influence on the social determinants of health and to promote a healthy upbringing of the children. The long-term purpose of the programme is to contribute to health equity. It must be checked again and again whether these goals are being achieved.

Materials and methods: Data from our documentation system is analysed and reported annually. In addition, evaluation studies were/are carried out as well as other research activities. Besides feedback from the parents at the end of their support, those, who gave their consent, are contacted annually with different short questionnaires.

Results: Evaluation, research as well as the unique documentation system show, that the objectives can be achieved: Families benefit from participating in the programme as their burdens can be reduced and their resources strengthened. Data from documentation and evaluation proof that socially / socioeconomically disadvantaged families are reached very well by the programme; thus a contribution to health equity seems to be realistic.

Conclusions: The implementation of the concept is successful so far, the intermediate objectives are being met. The impact model suggests that the long-term goals can also be achieved.
P-344: Infant and toddler teachers’ reports of stress and workplace support during the COVID-19 pandemic

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INTRODUCTION
Working as an infant/toddler teacher is a rewarding job, but is filled with high stress and emotional fatigue. These concerns were exacerbated during the pandemic. Studies have identified teachers’ work-related concerns, but few studies have examined the lived-experiences of infant/toddler teachers during the COVID-19 pandemic.

STUDY AIM
This study examined teachers’ reports of stress, well-being, and workplace supports during the pandemic.

METHODS
Participants were 22 center-based infant/toddler teachers (Mage = 37.40, SD = 8.80; 54.5% Black, 18.2% White, 4.5% Asian, 18.2% multiple categories) in the United States recruited at the outset of the pandemic. Most teachers had an Associates’ degree (36.4%) or higher (40.9%). Participants were interviewed via Zoom about their experiences of work-related stressors and supports. Interviews were transcribed verbatim and analyzed via DeDoose Version 8.1.8 using a grounded theory approach.

RESULTS
Major themes included stressors and workplace supports. Sub-themes for stressors included difficulties in managing uncertainties/change, challenges in delivering infant/toddler programming remotely, and stress related to children and families. Both personally and professionally, the uncertainties of the pandemic and the ongoing adjustment required at work and at home were frequent sources of stress. Adjusting to remote work including delivering infant/toddler content remotely, communicating with families, completing non-teaching work, and access to resources to work from home were major stressors. Teachers were deeply worried about children and families not receiving services, and they missed “their” children and families. Finally, teachers reported consistent communication and the provision of informational and material resources (e.g., curricular and personal information including financial support and food pantries for teachers) as most helpful.

CONCLUSIONS
Despite the complexity of and emotional investment of their work, employers were able to successfully support teachers overall. These results can help employers understand how to more successfully support teachers in the future.
P-255: "Effectiveness of a Static Web-based Postnatal Parenting programme: Understanding your Baby, by Solihull Approach"

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Background: The birth of a child is often one of the most joyous occasions in a parent's life. However, postpartum is also recognized as a period of significant transition that can lead to profound emotional distress.

Aim of the study: Evaluate the effectiveness of a static web-based postnatal parenting intervention "Understanding your Baby".

Design: Pre- and post-intervention outcomes were analysed using a quasi-experimental repeated measures design.

Materials: Karitane Parenting Confidence Scale (KPCS).

Participants: A nonclinical sample of 2,313 parents in the UK.

Results: These preliminary results demonstrated statistically significant improvements in 14 of the 15 items of the Karitane Parenting Confidence Scale, providing promising evidence of the effectiveness and use of the online parenting education programme. The statistical comparison revealed a significant difference between the total mean scores per subject at the start of the course (36.24, SD= 8.25) and after its completion (39.33, SD= 7.33, p= <.000).

Conclusion: The results provide promising evidence regarding the effectiveness of the Solihull Approach's online postnatal parenting programme, "Understanding Your Baby".
P-024: Supporting maternal and infant well-being after family violence: Findings from a residential and day program

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Introduction. Family violence can undermine mothers’ attachment to their infants, self-esteem, parenting confidence, and personal and psychological safety. Mother-Infant Village (MI Village) is a day program and residential village for mothers and infants who have experienced family violence in Victoria, Australia. MI Village provides a trauma-informed and recovery-oriented service that intervenes early to improve mother and infant mental health and safety by offering therapeutic, educative and practical inputs.

Aims. Using longitudinal data from client and staff surveys, a process evaluation of the first 12 months of MI Village program delivery (2021) aimed to provide early findings on program implementation, barriers encountered, and progress toward service goals.

Methods. Data were gathered at up to two time points for staff and up to three time points for clients. Purpose-devised client evaluation surveys comprised measures designed to support therapeutic reflection and assessed domains of maternal postnatal attachment, self-esteem, trauma recovery, goals, and family safety. Staff surveys gathered reflections on staff goals, program experiences, barriers to and enablers of client progress, and recommendations for ongoing program delivery.

Conclusions. Despite implementation challenges associated with COVID-19-related restrictions, all staff felt the program was successful in promoting mother and infant safety and wellbeing. Mothers attributed positive change in themselves and their relationships with their infants to the various supports offered. The MI Village residential stream is uniquely important in offering women a rental history to support their future independent living. Improving residents’ self-efficacy and relational skills in a safe, medium-term housing solution offers women a chance to ‘break the cycle’ of violent relationships and unstable housing. Process evaluation of the first 12 months of program delivery provides support for the continuation of this and similar service models. Considerations for therapeutic program delivery are outlined with reference to mitigating developmental risks to infants in contexts of family violence.
Introduction and Aim of the study

Early educators have some of the highest rates of stress, depression and turn-over. Adult well-being, or lack of it, has been shown to impact children's behaviors, teacher's interactions with children, suspension and expulsion practices, and children's engagement in the classroom. Much of the research available is on preschool teachers and teachers in Head Start classrooms. This study focused on family child care providers and combined quantitative and qualitative data to compare family child care providers well-being and their level of engagement with professional development.

Material and Methods

This study utilized surveys and interviews to compare family child care providers’ self-reported work stress, perceived personal stress, depression, and program characteristics, and the teachers’ utilization of professional supports such as workshops, coursework, coaching and mentoring, and reflective practice, with the goal of answering the question of whether family child care providers who are actively engaged in professional development experience less workplace stress, higher child engagement and lower problem behaviors.

Results

Providers in the study reported engaging with professional development for information and social supports, reflection on the children and families they are currently serving - specifically expressing the value in revisiting training topics, and for the sustainability of their work over time. The cohort in this study did not report using suspension or expulsion in the previous year; instead they reflected on the need to understand children in the context of their family and community. While they experienced workplace stressors, the family child care providers in this study scored low on screenings for stress and depression and reported experiencing the rewards as well as the challenges in their work. This finding aligns with those of prior research regarding the importance of professional development for maximizing the well-being of both children and their care providers.
P-323: RIPOD (risk of postpartum depression): postpartum follow-ups, risks and prediction for cases, and neuroimaging data

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As part of the RiPoD study, a large cohort (n = 700) of new mothers were recruited 1-6 days postpartum at the university hospital in Aachen and were observed for a period of 12 weeks. While 9% of them were found to develop postpartum depression (PPD), 13% developed postpartum adjustment disorder (AD). The PD and AD cases were accurately identified by means of a combination of clinical and remote assessment tools (Hahn et al. 2021). In the exploration cohort, a balanced accuracy of 87% was achieved in week 3 postpartum using a combination of baseline and follow-up depression EPDS scores and mood scores (online mood assessment) for the differentiation between PPD and ND. The results were confirmed in the independent replication cohort. Within the first 6 weeks postpartum, the clinical manifestation of AD and PPD resembled each other based on personal and family history of depression, stressful life events, depressive symptoms, and attachment to the child. Being unmarried, having a lower household income and less support at home were found to contribute to the development of PPD, whereas birth- and child-related complications appeared to trigger AD. A comparison between cumulative hair cortisol and cortisone levels in the third trimester of pregnancy and the first 12 weeks postpartum revealed that only ND and AD (and not PPD) had pregnancy-related physiological adaptation in cortisol/cortisone levels, which reverted to the pre-pregnancy baseline following delivery (Stickel et al. 2021). Using magnetic resonance imaging approximately 2 days after delivery, we also found that women who developed either AD or PPD within 12 weeks did not differ from ND immediately after delivery on the basis of structural and functional neuroimaging data (Schnakenberg et al. 2021). In the very early postpartum period, the mothers showed a significant reduction in gray matter volume in brain areas related to socio-cognitive and emotional processes compared to their nulliparous counterparts, indicating an effect of pregnancy on brain structure (Chechko et al, 2022).
P-238: Factor structure of the Edinburgh Postnatal Depression Scale among fathers

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Introduction: Growing evidence identifies that fathers are at increased risk of distress in the perinatal period, with ongoing impacts on mental health, infant development, and family relationships. The Edinburgh Postnatal Depression Scale (EPDS) is widely accepted to screen for perinatal distress among mothers. For fathers, however, the psychometric properties and interpretation of the EPDS require explication. Using a large population-based sample of mothers from the Avon Longitudinal Study of Parents and Children (ALSPAC), Coates et al. (2017) established that a three-factor conceptualisation best characterises the EPDS among mothers; anhedonia, anxiety and depression factors emerged at multiple timepoints spanning the perinatal period.

Aim: We sought to determine the extent to which the three-factor structure appropriately characterised EPDS responses among ALSPAC fathers.

Methods: As the Coates et al. (2017) model was specified a priori, confirmatory factor analyses were employed to test the suitability of the three-factor EPDS model among fathers in the ALSPAC cohort. We also tested the one and two-factor models previously tested by Coates et al. among ALSPAC mothers.

Results: For both mothers and fathers, EPDS items capture aspects of anhedonia, anxiety and depression as identified in the three-factor solution. Nevertheless, mothers and fathers experience aspects of perinatal distress differently, requiring varied interpretation of screening scores and clinical decision-making. These variations should be considered when screening for psychological distress among expectant and new fathers.

Conclusions: The three-factor structure provides further insight into the meaning of EPDS items, likely to be of benefit for clinical interpretation and research. We propose that EPDS factors and corresponding subscales may be useful to explore which items are more predictive of father-infant relational quality and thus guide targeted early interventions aiming to optimise infant mental health.

In the wake of the 2020 COVID-19 pandemic, nationwide lockdowns were imposed in Bangladesh as the country began preparing for an unprecedented crisis following the first confirmed cases in early March 2020. Schools and offices were closed indefinitely and institutions across the board rushed to establish safety protocols. As COVID-19 worsened, BRAC sought to establish pathways that would continue to foster a shared connection with children and families who were cut off and isolated due to social distancing policies. After a series of intervention pilots, reviews, and iterations, the Pashe Achhi Telecommunication model was created to facilitate remote connections, in the form of play-based learning and psychosocial wellbeing, for displaced and socially isolated children and families of Rohingya communities living in Bangladesh’s Humanitarian camps.

This presentation will describe the Pashe Achhi model, a remote, telecommunication-based intervention, which was created in response to the COVID-19 pandemic, to connect with children and families living in isolation with little opportunity to interact beyond the small family. The model’s primary objectives were to ensure an enduring connection with beneficiaries, foster mental health through psychosocial support, and encourage learning through play and parent-child interactions to promote healthy development.

The ways that this model integrated a telecounselling framework with key concepts from BRAC’s learning-through-play programs for the beneficiaries will be described. Stories from families and from our experiences will be presented.
P-362: Perinatal complications and childhood behaviour: is the association modified by sociodemographic risk?

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Introduction:
Numerous adverse pre and perinatal exposures have been individually associated with risk for psychiatric illness in the offspring. However, such exposures frequently co-occur with each other and with sociodemographic risk (SR) factors such as young maternal age and low income, raising questions about the interactive impact of pre/perinatal and SR in childhood mental health.

Aims:
The aim is to explore whether children exposed to cumulative perinatal (pregnancy, delivery & birth) complications have increased risk of behavioural difficulties at 5 & 9 years compared to non-exposed children.
1) Are perinatal complications associated with higher SDQ score?
2) Are perinatal complications associated with increased risk of clinically significant SDQ scores?
3) Are the above relationships moderated by SR?

Materials/methods:
Data from Growing Up in Ireland (GUI) – a longitudinal, nationally representative cohort of 11,000 infants who were recruited at 9 months old in Ireland will be used for secondary analysis. Retrospectively-reported perinatal complications at 9-months and strengths & difficulties (SDQ) total score at 5 and 9 years will be examined. Cumulative SR will be measured by combining maternal age, migrancy, family income and parental education levels.

Conclusions:
This study may highlight the need to consider both cumulative perinatal complications and SR as a means of identifying children who could benefit from promotive intervention to offset adverse outcomes & to support women who experience multiple perinatal complications.
P-037: When Mothers and Fathers Are “Gone”: Predicting Intergenerational Cycles of Risk in Opioid-Involved Parents

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Introduction and Aim of the Study:

Childhood adversity and the opioid epidemic are two major concerns for child welfare systems. Little is known, however, regarding the mechanisms that perpetuate intergenerational cycles of adverse childhood experiences (ACEs) and insecure/disorganized attachment (Vaillancourt et al., 2017). Moreover, most attachment and parenting research focused on mothers, with only 16 studies existing on father-child attachment (Ahnert & Schoppe-Sullivan, 2020) and only one study examining opioid-involved fathers (Peisch et al., 2018). Thus, using a high-risk American sample of 101 parents (75 mothers, 26 fathers) who were opioid-involved and who had a child in the 0- to 5-year range, we examined direct and indirect pathways among parents’ reported ACEs, parent-child attachment patterns, substance use severity, depression, and trauma symptoms.

Material and Methods:

High-risk parents receiving medication-assisted treatment for opioid-involvement were recruited from an outpatient methadone clinic and residential substance-treatment facilities in Central Florida. Parents provided ratings on measures regarding their ACEs, attachment, substance use, depression, and trauma symptoms.

Results:

PROCESS analyses indicated that mothers’ ACEs predicted significantly disorganized attachment with their young children, with depression and trauma symptoms explaining greater variance than ACEs alone. Results suggested that mothers’ psychological sequela following ACEs may carry greater risk for mother-child disorganized attachment patterns than childhood adversity itself. Contrary to hypotheses, fathers’ ACEs were found to be unrelated to insecure/disorganized attachment with their young children, and substance use severity was not predictive of parent-child attachment patterns for mothers and fathers.

Conclusions:

Our study highlighted striking differences across mothers’ and fathers’ perceptions of attachment. Mothers’ depression and trauma symptoms, along with their substance involvement, may threaten attachment security, whereas there is still much to be learned regarding father-child attachment. Our findings demonstrated the utility of trauma- and attachment-informed parenting interventions for high-risk mothers and fathers in breaking intergenerational cycles of trauma.
P-367: Collateral effects of a mentalization-based intervention for pregnant women on the relationship with the partner

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An important body of literature documented a drop in marital satisfaction during the transition to parenthood. Such difficulties could lead to more childcare stress, reduced postpartum communication, and less couple intimacy (Bogdan, 2022). This study aims to evaluate the collateral effects of the STEP program, a prenatal mentalization-based intervention, on promoting partner relationship during the transition to parenthood.

One hundred and sixty-one pregnant women (61.6% primiparous) participated in the STEP program (n = 37; Mage = 29.08, SD = 4.33) or were assigned to a comparison group of women receiving usual prenatal care (n = 115; Mage = 30.11, SD = 4.56). Following the completion of the intervention, both groups self-reported on changes in the relationship with their partner (Changes in domains of functioning during pregnancy; Berthelot et al., 2020) and women from the intervention arm participated in a semi-structured interview on their appreciation of the program.

Women who participated in STEP identified greater positive changes in their relationship with their partner than women from the comparison group, t(150)= -2.75, p=.007. They reported higher satisfaction [t(150)= -2.55, p=.01] and better communication [t(150)= -2.82, p=.01] with the other parent and a greater interest concerning their partner’s internal world [t(150)= -3.22, p=.002]. During the interview, which did not specifically address partner relationship, 12 women spontaneously identified that the intervention contributed to positive changes in their relationship with their partner. The qualitative analysis revealed that these women were more comfortable in communicating their needs to their partner, more inclined to involve them in their pregnancy and were more prone to discuss about their expectations concerning family life and their need for support during this period of transition.

Our findings suggest that prenatal mentalization-based interventions may have positive collateral effects on the relationship with the other parent, even in interventions not focusing explicitly on this relationship.
P-274: Prospective association between maternal trauma and infant social-emotional development

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Childhood trauma is frequent in the general population of pregnant women and has been associated with complex psychological symptoms and neurobiological alterations during the perinatal period. These problems may in turn represent risk factors for offspring early development. However, little is known about the association between maternal trauma and offspring social-emotional development in the first year of life. The present study evaluated the association between maternal trauma and infant social-emotional development at six months, controlling for the effect of maternal prenatal and postnatal distress.

A total of 200 women (mean age=28.42, SD=3.38) were recruited online and during prenatal medical appointments (T1) and were followed-up at six months postnatal (T2; 50% girls). Participants completed the Childhood Trauma Questionnaire at T1, the Kessler Psychological Distress Scale at T1 and T2, and the Ages and Stages Questionnaire, Social-Emotional at T2. Multiple regression analyses showed that the severity of trauma experienced by mothers during childhood negatively predicted infant social-emotional development (B=0.32, p=.002), over and beyond the effect of pre- (B=0.58, p=.02) and postnatal (B=.07, p=.40) anxio-depressive symptoms. Furthermore, children whose mothers experienced trauma were 2.36 times more likely to display clinically significant developmental problems than children whose mothers did not experience trauma (p=.02).

The findings suggest that the intergenerational repercussions of maternal trauma may be observed from the very first months of life and call for the implementation of trauma-informed and trauma-focused prenatal interventions with expecting parents.
Introduction and Aim of the Study

Challenges with emotion regulation may have origins in infancy and forecast later social and cognitive developmental delays, academic difficulties, and psychopathology. The aims of this study were to test: (1) whether indicators of emotion dysregulation in infancy predict dysregulation in toddlerhood and (2) whether those associations depended on maternal sensitivity.

Material and Methods

When children were 7 months, infants’ baseline respiratory sinus arrhythmia (RSA), RSA reactivity, and observed distress were collected during the Still Face Paradigm (SFP). Mothers’ reports of infant regulation and orientation and observations of maternal sensitivity were also collected at that time. Mothers’ reports of toddlers’ dysregulation were collected at 18 months.

Results

A set of hierarchical regressions indicated that low baseline RSA and less change in RSA from baseline to stressor predicted greater dysregulation at 18 months, but only for infants who experienced low maternal sensitivity (baseline: \( \beta = -0.09, t = -2.26, p = 0.03 \); change: \( \beta = 0.07, t = 3.67, p = 0.0004 \)). Baseline RSA and RSA reactivity were not significantly associated with later dysregulation for infants with highly sensitive mothers. Infants who exhibited low distress during the SFP and infants who had lower regulatory and orienting abilities at 7 months had higher dysregulation at 18 months regardless of maternal sensitivity (distress: \( \beta = -0.20, t = -2.16, p = 0.03 \); regulation and orienting: \( \beta = -0.22, t = -2.30, p = 0.02 \)).

Conclusions

Altogether, these results suggest that dysregulation in toddlerhood has biobehavioral origins in infancy. High caregiver sensitivity appears to buffer the risks related to physiological indicators of infant emotion dysregulation.
P-099: Virtual Collection of the Home Observation for Measurement of Environment (HOME) Inventory

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INTRODUCTION
The COVID-19 pandemic has accelerated movement from in-person to virtual implementation of services and research (Sampaio et al., 2021). The rapid transition has afforded opportunities to connect with underserved populations, but it also presents challenges and it cannot be assumed that in-person and virtual data collection modalities are equivalent as it pertains to all types of information, particularly in cases where the information being collected is nuanced and complex (Mohammed et al., 2021).

AIM
This study examined the feasibility and the usefulness of a virtual assessment of the home environment using the widely used measure of the home environment, the Home Observation for Measurement of the Environment (HOME) Inventory (Bradley, 1994).

MATERIAL and METHODS
A convenience sample of 53 families living in two states in the U.S. were assessed with the virtual and in-person HOME, counterbalanced by order with different interviewers. The mean age of child participants was 17.4 months (SD=8.3) and gender was roughly balanced (male 46.9%, female 53.1%). The sample was White (74.5%, Black 17.0%; multiple races 8.5%). Interviewers reported that technology complications did not interfere with 36 (67.9%) of the virtual visits. The counterbalance was implemented successfully with a 54% and 46% split in order of the first visit. HOME scores on each dimension were similar (see Table 1) with the exception of the Acceptance Dimension where the score for the in-person score was higher (M=6.53, SD = .61) than the virtual assessment (M=6.32, SD = .80, t(1)=2.39, p = .01). After having received both an interview in-person and virtually, a majority parents reported preferring the virtual (63.3%) over the in-person interview (36.7%).

CONCLUSIONS
Results from this study indicate that the HOME Inventory can be administered virtually for many families and that the data collected would be useful for research and applied purposes.
P-378: Childbirth experienced by fathers: links with depression, parental self-efficacy and postnatal sense of security.

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Introduction and aims of the study.: Childbirth is a unique and life-changing event that is likely to have an impact on the way parents will live through the days and months following the birth. While this topic has been extensively studied in mothers, research investigating fathers' experiences of childbirth is still scarce. The aim of this study was to investigate the influence of the childbirth experience by primiparous fathers living in France on their level of postnatal depression, parental self-efficacy, and postnatal sense of security.

Material and Methods. This research is part of a larger study on postpartum fathers, validated by the Research Ethics Committee (CER U-Paris). A total of 250 men answered sociodemographic questions and filled up the Edinburg Postnatal Depression Scale (EPDS), the First-Time Father Questionnaire (FTFQ), the Parent Expectations Survey (PES) and the Parents’ Postnatal Sense of Security Instrument (PPSSI).

Results. 80 fathers (32%) scored above the cut-off score of 10 at the EPDS, thus presenting a risk of postnatal depression. A negative birth experience was associated with a higher rate of postnatal depressive symptoms and a lower level of postnatal security. However, no relationship was found between childbirth experience and sense of parental efficacy. The data show no significant effect of delivery type on childbirth experience, postpartum depression, parenting self-efficacy, and postpartum sense of security.

Conclusions. Similar to mothers, the way fathers experience the birth of their partner can have consequences for the way they go through the postpartum period. In order to prevent possible depressive affects that may impact the relationship with their child, and to strengthen their sense of security when returning home, it is important to provide fathers with appropriate support throughout the perinatal period.
P-245: Partner support, dyadic coping and depressive symptoms in couples during pregnancy

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Introduction: Pregnancy is a vulnerable period for future parents who are at greater risk of depression. This risk is even greater in the absence of emotional support.

Aim of the study: The aim of this exploratory research was to investigate the association between partner support and dyadic coping strategies in the risk of antenatal depression.

Material and method: The sample was composed of 126 women and 81 men. They completed an online questionnaire between 4 and 9 months of pregnancy. The questionnaire included a socio-demographic information, the marital support questionnaire (QSC), the Dyadic Coping Inventory (DCI) and Edinburgh Postnatal Depression Scale (EPDS).

Results: The results showed differences between men and women. For men, this risk is associated with lower perceived marital support. For women, is associated with dyadic coping strategies perceived as less satisfactory and less effective. (Recruitment is still in progress and dyadic statistical analyzes will be carried out on a larger sample).

Conclusions: Couples’ relationships may be an important factor that should be better explored in the context of depression during pregnancy, for both women and men.

Key words: antenatal depression, dyadic coping, partner support, pregnancy
P-166: Maternal Breastmilk Composition Boosts Infant Oxytocin, Immunity, and Social Behavior

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The benefits of breastfeeding to infants’ and mothers’ physical health and psychological well-being have long been documented. The postpartum months define a sensitive period for the maturation of neuroendocrine and immune systems as well as a critical time point for the initiation of the mother-infant bond, with breastfeeding playing an essential role in the consolidation of maternal-infant attachment. Although extant research has demonstrated the short- and long-term benefits of breastfeeding, there are no studies, to our knowledge, that tested how specific biomarkers associated with the immune and affiliation systems in the mother’s milk support the maturation of the mother-child relationship and infants’ social behavior.

In the current study, 55 dyads of mothers and infants 4-7 months old participated. We measured oxytocin (OT) and secretory immunoglobulin A (s-IgA) levels in the mother’s breast milk and infants’ saliva. OT is a hormone that regulates breastfeeding and involves in social relationships, and s-IgA is one of the main biomarkers of the immune system in human milk serving as a first-line protector. We examined the association between these biomarkers and mother-child behavior using a Structural equation model. We found that while mother’s OT and s-IgA levels in breast milk did not correlate with dyadic behaviors, an indirect association was found: maternal breast milk OT correlated with s-IgA levels in breast milk, which linked to infants’ salivary OT and s-IgA levels. Infants’ s-IgA levels were linked in turn to mother-child synchronous behavior and infant’s s-IgA and OT were associated with infants’ involvement score. Our findings are the first to highlight the effects of maternal biomarkers in breast milk on infants’ biobehavioral systems in the first months of life.
P-309: Would you like a text with that? Rural caregivers' preferences for receiving developmental information.

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Introduction and Aim of the Study
This study aims to understand caregivers' interests, preferences for, and concerns about enrolling in a voluntary text-messaging program to supplement in-office child development consultation through a large, but rural pediatrics clinic. The pediatrics clinic hosts 8 physicians and one HealthySteps child development specialist. The specialist's time is in high demand, and ways to expand contact with families is a priority item. The use of text messaging as a possible touchpoint to provide families with relevant developmental information is one option being explored. Prior to adopting or piloting such a program, however, this study aims to explore how families might utilize this program.

Material and Methods
A QR code linking to a Qualtrics survey was posted in each clinic room following IRB and clinic approval. Caregivers complete the 12-item survey anonymously in as little as five to ten minutes. Items include questions about topics of interest to the family as well as interest in the text-messaging format. Family demographic information is also captured.

Results
The survey was posted in July 2022 and remains open and active. As such, data has not yet been analyzed.

Conclusions
Information about whether or not families are interested in a text format, as well as special topics of interest and the ages of children for whom they would like to receive information will all be reported. Information about preferences for frequency of contact will also be available.
Since our society is becoming increasingly diverse, the question of who belongs to the group and who does not, becomes most important. It has been shown that the experience of belonging is highly important for individual well-being as well as for child development, early learning and social behavior (e.g. Over 2016; Kyrönlampi et al., 2021). The sense of belonging supports developmental processes of self-coherence, personal agency and evolving identity, especially in early childhood (Johansson & Puroila, 2021) and is seen as a main source of human motivation. Various authors underline a connection between democratic societies and the basic need of all people to be accepted as part of a group. The experience of belonging is therefore more than an individual feeling: it affects all types of relationships and thus becomes a political issue with consequences for society as a whole (Dusi et al., 2014). (Early) childhood education and care institutions offer a place where children form diverse backgrounds experience the sense of belonging for the first time.

The current study aims to investigate how a sense of belonging can be supported in education and care institutions for all children, respecting their diversity.

We are using an ethnographically inspired interpretative phenomenological analyses methodology to consider the children's right to be heard directly (United Nations, 1989). In addition, the perspectives of parents and professionals are included.

Children between the ages of three to eight years experience belonging in education and care institutions for the first time. Furthermore, there are transitions of great importance between daycare-center, kindergarten and primary school in Switzerland. Understanding how a sense of belonging is developed is highly meaningful for their learning and (social) participation in a community.
Introduction:
Interpersonal violence (IPV) and trauma are prevalent and interconnected societal concerns. Mothercraft’s “Connections: A Group Intervention for Mothers and Children Experiencing Violence in Relationships” is an evidenced-based, manualized intervention focuses on mothers’ experiences with IPV, its impact on the development of their infants, their parenting, and their self-esteem. Following a successful 5-year initiative where facilitators from 34 community-based projects across Canada were certified to deliver Connections and impact of this dissemination was evaluated for communities, organizations, facilitators, and families (Andrews et.al., 2021), we are enhancing these community partnerships.

Methods:
Our poster will introduce Connections for Breaking the Cycle of Violence (C-BTC) a four-year federally funded initiative (Public Health Agency of Canada) to prevent violence and the intergenerational trauma transmission to families with infants and young children. Through continued and enhanced partnerships with 15 community-based projects that span the country, an increased number of service providers will receive training to become certified Connections facilitators; as well, service providers and identified community partners from the 15 projects will receive training in approaches that will further enhance practice to support and reduce risk for pregnant people, mothers, and children who are exposed to IPV. Mechanisms of change for participants in the Connections intervention will be evaluated.

Results and Conclusions:
We will provide context for C-BTC by briefly describing the results from our previous initiative related to processes of community engagement and fidelity of the training and intervention. We will describe our plans for continued relationship development with and support for our partner organizations and their communities. We will present methodologies and tools for data collection for the three phases of C-BTC: capacity building training, certified training, and Connections intervention evaluation. We will share resources related to the Connections intervention, including the manuals (available in English, French and for Canadian Indigenous communities).
P-077: Relationship between birth conditions and maternal influence in the language development of premature children

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Introduction: Preterm birth is an urgent situation that causes trauma to both mothers and babies. The functioning of preterm newborns is complex, and several interventions occur during hospitalization, generating a condition of psychic vulnerability among mothers. However, when interacting with their children, maternal behaviors serve as moderating variables of the biological risk of birth as they exert a differential effect on vulnerable children. They can attenuate and worsen the adverse effects. Delay in language acquisition is one of the disorders reported in the literature on premature children. Preterm babies’ frequency and extent of verbal behavior are reduced compared to the typical pattern, especially in expressive aspects (i.e., expressive vocabulary, oral speech, and acquisition of speech phonemes) and communicative skills, compared to children born at term.

Purpose: To verify the birth conditions and maternal influence on the language development of premature infants. Method: Participants included 69 mothers and their children, preterm at birth and from 0 to 24 months of corrected age. Anamnesis was carried out with the parents, and Early Language Milestone Scale was applied through questioning and observing the children’s language behavior. The protocol Early Language Milestone results were analyzed separately and in association with the results of the participants’ anamnesis (information collected regarding pregnancy, birth data, hospitalization, and mother-child interactions). For this purpose, descriptive percentages and tests, such as Chi-square, Spearman, and Mann–Whitney, were conducted. Conclusion: This study contrasted with the existing literature because most children were within the expected performance range for their corrected age. Biological and environmental risks can exacerbate development. However, the mother’s role as a primary caregiver and a multidisciplinary team monitoring may have minimized the risks associated with prematurity, assisting in the children’s language development.
P-020: Early Childhood Partnerships: Results From a Virtual Collaborative Pilot

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Introduction and Aims
The Early Childhood Partnerships (ECP) initiative is an innovative virtual collaboration among three states. The mission is to contribute to the knowledge and skills of interdisciplinary early childhood leaders. The pilot was designed to increase trainee knowledge surrounding best practices in supporting children and their families, and to increase interdisciplinary collaboration and networking across states. Information and resources related to children (0-8 years of age) who are at developmental risk (due to poverty and Adverse Childhood Experiences), and/or with neurodevelopmental disabilities, behavioral and mental health disorders, and chronic medical conditions and their families were provided.

Material and Methods
Each state in the Early Childhood Partnerships (ECP) engaged 2-6 trainees from their program who chose to specialize in Early Childhood. Trainees engaged in 6-10 hours of monthly activities with community partners. Virtual collaborative opportunities focused on the following: early childhood mental health; family engagement, functional assessment, racial equity and service equity; professional development products to implement best practices; advocacy and public policy. Evaluations were created for all events and used for quality improvement.

Results
Results demonstrated that the pilot is a promising way to engage interdisciplinary professionals at both state and national levels. Participants increased their knowledge and skills in the following topics: early childhood mental health, interdisciplinary teamwork, family/person centered practices, and policy related to children with disabilities and their families.

Conclusions
This collaborative model can be used for professionals (for example researchers, or policy makers, and infant/early childhood mental health practitioners) to network, engage, and learn from one another. The model can be used to address knowledge gaps among the service delivery systems, reduce silos in the service delivery system, and improve the quality of systems designed to serve young children and their families.
P-025: Parents’ perceptions about the effect of using cannabis when taking care of their child

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Most research on cannabis use in parents has focused on prenatal consumption and its impacts on offspring neurodevelopment. However, little is known about the repercussions of using cannabis when caregiving.

Aim of the study
The present study aims to document (1) cannabis use patterns in parents who self-identified as using cannabis and (2) their perceptions about the effect of using cannabis when caregiving.

Material and Methods
One hundred and nine parents (70% mothers; Mage=35.7, SD=7.39) who self-identified as having used cannabis at least once during the last year completed an anonymous online survey assessing cannabis use patterns and perceptions concerning the effect of the substance on the quality of parenting, the child (Mage=4.91, SD=3.71), and the parent-child relationship.

Results
In our sample, 32.4% of parents (n=35) reported using cannabis between 2 and 6 days per week, and almost half were daily cannabis users (45.5%; n=49). Half of parents (49.5%; n=54) met the criteria of a cannabis-use disorder. Seventy-four percent (n=79) revealed caregiving under the influence of cannabis, while the remaining parents used cannabis in the absence of the child. Participants generally believed that their use of cannabis had no effect or a positive effect on the quality of their parenting [89.0-95.4%], on their child [82.6-88.1%] and on their relationship with their child [89.9-91.8%]. There was a positive correlation between the frequency of cannabis use and the extent to which parents perceived the substance to have beneficial effects on parenting (r=0.27, p=.004) and on the parent-child relationship (r=0.28, p=.003).

Conclusions
Our findings seem to suggest that parenting under the influence is trivialized in parents using cannabis. Scientific research on parental cannabis use is urgently needed to clarify the association between cannabis use and parenting. The context of recent legalization in different countries needs such data to guide interventions and policies.
Moderating effect of trauma in the association between prenatal personality dysfunction and postnatal maternal bonding

Aim of the study
The aims of the study were 1) to examine the association between prenatal personality dysfunction and postnatal maternal bonding and 2) to evaluate whether this association was moderated by mothers’ exposure to childhood trauma.

Material and Methods
A sample of 118 mothers (Mage = 29.61, SD = 4.61, 58.5% primiparous) completed self-reported questionnaires during the second trimester of pregnancy (T1) and between 6 and 12 months postpartum (T2). More than half (55.1%) reported having been exposed to trauma according to the cut-offs of the Childhood Interpersonal Trauma Checklist. Personality dysfunction and the quality of maternal bonding were assessed using the Self and Interpersonal Functioning Scale and the Maternal Postnatal Attachment Scale.

Results
Multiple linear regressions revealed that personality dysfunction, $B = -2.62, 95\% CI [-3.74; -1.51]$, but not maternal trauma, $B = 0.21, 95\% CI [-0.73; 1.14]$, predicted maternal postnatal bonding ($R^2=16\%, F (2,115) = 11.02, p<.001$). A marginally significant moderation effect of trauma was however observed in the association between the severity of prenatal personality dysfunction and the quality of postnatal maternal bonding, $b=-2.22, t (114) = -1.92, p=.06$. Indeed, higher levels of personality dysfunction were associated with a significant decrease in the quality of postnatal bonding only in mothers having been exposed to childhood trauma, $b = -3.44, t (144) = -4.91, p<.001$.

Conclusions
Our findings that personality dysfunction prospectively predicted poorer maternal bonding and that such associations were particularly apparent in women who experienced childhood trauma call for trauma-informed prenatal interventions targeting women who developed some levels of personality dysfunction in the aftermath of trauma.
P-160: Parenting Behaviors as Mediators in Relationships Between Coparenting Adjustment and Young Children’s Internalizing/Externalizing Behaviors

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Introduction

Research has suggested that marital and parenting stress is related to significant strain on the parent-young child relationship as well as to increased adverse outcomes for young children’s development. Such outcomes may include behavior problems that can derail young children’s socioemotional capabilities with their parents and in other interpersonal relationships.

Aim

Although research has examined associations among the coparenting relationship, parenting behaviors, and young children’s behavior problems, little attention has been given to the mediational value of parenting behaviors in the relationship between the marital/coparenting relationship and young children’s behavior problems. Specifically for this study, it was hypothesized that coparenting adjustment would be related to parenting behaviors and to young children’s behavior problems. Further, it was anticipated that parenting behaviors would mediate the relationship between coparenting adjustment and young children’s behavior problems.

Material and Methods

Data was collected from a diverse group of 146 mothers and 137 fathers with young children (M age = 5.35-years, SD = 1.65-years). Mothers and fathers completed the Dyadic Adjustment Scale as a measure of coparenting adjustment, the Parent-Child Relationship Inventory as a measure of their parenting, and the Child Behavior Checklist as a measure of their young children’s behavior problems as a part of a more extensive study in a Psychology Department-based community clinic.

Results/Conclusions

Hypotheses were examined using correlation and regression analyses that showed different patterns of relationships for mothers and fathers. Of particular interest, the relationship of mothers’ coparenting adjustment and young children’s externalizing behavior problems was mediated by parenting support. In addition, the relationship of fathers’ coparenting adjustment and young children’s internalizing and externalizing behavior problems was mediated by limit setting. It is hoped that the study’s findings will further the understanding of how to remediate young children’s behavior problems by addressing adjustment in the coparenting relationship and parenting behaviors.
P-236: Comparative study of two interventions in childcare centers on the externalized behaviors of young children.

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INTRODUCTION:
50% of children’s externalizing problem behaviors (EPB) that emerge around age 3 or 4 persist throughout their life span and are associated with a wide range of negative outcomes. Findings have shown that the teacher-child relationship can represent a protective factor for children’s EPB. For this reason, several interventions have emerged, in particular interventions aimed at improving teacher-child interactions.

AIM of the study:
This study aims to investigate the effects of interventions conducted with teachers on the improvement of teacher-child interaction, and consequently its effect on child’s EPB aged 20 to 36 months in childcare centers. The effects of a video feedback intervention based on attachment theory and the notion of a mentalizing community aimed at promoting teachers’ sensitivity and the quality of teacher-child interactions will be compared to those of a positive discipline intervention and a group of children and teachers who did not receive any intervention.

MATERIAL and METHODS:
True experimental design will be conducted. 90 children will be randomly assigned to one of three conditions: positive discipline intervention, video-feedback intervention, or control group. Both interventions consisted of five sessions with five to six teachers. The PICCOLO (Parenting Interactions with Children: Checklist of Observations Linked to Outcomes), the ESA (Escala de sensibilidad del adulto), and the TAQ (Toddler Attention Questionnaire) were used to assess the quality of teacher-child interaction, and two questionnaires were used to assess the child's EPB.

DISCUSSION:
The preliminary results will be presented and discussed.
P-289: Maternal antenatal depressive symptoms, infant regulatory problems and child emotional and behavioural problems

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Introduction Maternal antenatal depressive symptoms (MDS) are known to be associated with infant regulatory problems (IRP) and emotional and behavioural problems later in childhood. Aim was to test the hypothesis that IRP at the age of 6 months would moderate the effect of antenatal MDS on child’s internalizing and externalizing problems at the age of 4-5 years.

Material and Methods Normal population Finnish mothers and their firstborn children have been followed from pregnancy onwards. The questionnaires completed by the mother were the Edinburgh Postnatal Depression Scale (EPDS) for determining MDS antenatally, the Neoatal Perceptions Inventory (NPI) for eliciting IRP at the age of six months, and the Child Behavior Checklist (CBCL) for determining child’s Internalizing and Externalizing problems (T score cut-off ≥ 60) at the age of 4-5 years (n = 157). Standardised values of the square root of EPDS, and NPI were used.

Results MDS antenatally were indicatively associated with IRP at six months (B = 0.14; p = 0.082). At the age of 4-5 years, neither IRP, nor the MDS-IRP-interaction were associated with Internalizing Problems, whereas MDS (OR = 1.7; p = 0.084) was indicatively associated with higher scoring in Internalizing Problems. Concerning the Externalizing Problems, both MDS (OR = 1.7; p = 0.035) and IRP (OR = 1.6; p = 0.024) were associated with higher scoring. The MDS-IRP-interaction term remained indicatively (OR = 0.7; p = 0.089) in the model.

Conclusions Current study suggests that IRP indicatively moderates the effect of antenatal MDS on child’s risk for behavioural but not emotional problems 4-5 years later. MDS alone indicatively increase child’s risk for emotional problems. The risk for behavioural problems is increased by both MDS and IRP but fewer IRP decrease the effect.
Introduction and Aim of the study: Paternal sensitivity, referring to a father’s ability to accurately perceive, interpret, and respond effectively to a child’s needs (Ainsworth et al., 1978), has implications for child developmental outcomes, including the development of secure father-child attachment (Lucassen et al., 2011). However, paternal sensitivity may be influenced by contextual factors. For example, family systems theory suggests that relationships between family members are interconnected (Browne et al., 2015). Thus, the relationship between parents may influence the parent-child relationship. Accordingly, the present research meta-analytically examined the association between parent relationship quality and paternal sensitivity.

Materials and Methods: A systematic search yielded a total of 35 studies (3,469 fathers) which met inclusion criteria. A random-effects meta-analysis assessing parent relationship quality and paternal sensitivity was conducted. Moderator analyses were performed.

Results: The current research demonstrated a significant association between parental relationship quality and paternal sensitivity: $r = .13$, 95% CI [.07, .19]. Moderator analyses were not significant.

Conclusions: The results supported the notion that higher parental relationship quality is associated with greater paternal sensitivity. These findings strengthen our understanding of family systems theory and the contextual factors that influence fathers’ roles.


P-140: Eyes on Home Visits! An Observational Study of the Facilitation of Caregiver-Child Interactions

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Introduction
While there is considerable evidence that early childhood home visiting programs support a variety of child and family outcomes, results are often mixed and have modest effects. Precision home visiting examines the dynamic relationships between families, home visitors, environmental factors and strategies as they relate to improved outcomes for young children.

While the study of precision home visiting can seem daunting with complex contextual and relational factors under consideration, there is much we already know about the types of caregiving behaviors that should be supported. Thus, precision home visiting becomes more a question of how home visitors support these behaviors across a variety of caregivers and environmental contexts rather than what behaviors to support or why they should be supported.

Methods
A modified grounded theory approach was used to study the facilitation of caregiver-child interactions. Sixteen home visit video recordings from MIECHV funded programs were observed (eight previously rated as high quality and eight adequate quality). Two graduate students open-coded videos and then applied axial coding to examine contextual factors related to facilitation.

Results
Axial coding examined the causal conditions, context, intervening conditions, strategies and resulting consequences surrounding facilitation events. Specific behaviors and environmental factors were compared for the high and adequate quality home visits revealing 10 behaviors that seem to greatly increase the likelihood of successful facilitation. Home visitor behaviors related to planning with parents, coaching and encouraging were found with greater frequency in high quality facilitation videos. In addition, specific caregiver responses (consequences) were more evident in high quality observations.

Conclusions
The current study was conducted to advance the professional development efforts for improving facilitation of caregiver-child interactions during home visits, which is central to home visit theory of change but difficult to consistently implement. Results provided specific information about key home visitor behaviors to support.
P-070: Developmental Care Practices in Irish Neonatal Units: A Parents’ Perspective

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Introduction and Aims
Neonatal unit experiences can have a significant impact on the way that parents connect and engage with their infant. Within this environment, family-centred care is currently part of practice in some neonatal units and previous studies have identified that it can have positive effects on the wellbeing of the infants and their family dyads. This study sought to gain insight into the experiences of families who have had first-hand experiences within neonatal units across Ireland.

Materials and Methods:
This research was conducted using a survey designed to address the specific aims of the study. The inclusion of open-ended questions provided opportunities for parents to provide detailed information regarding their experiences. The survey was piloted with a veteran advisory panel who had experience in Irish neonatal units to ensure clarity and cultural sensitivity to the survey respondents. Surveys were distributed virtually through social media in collaboration with the Irish Neonatal Health Alliance (INHA).

Results:
In total 90 parents responded to the survey. The results identified the activities and experiences within neonatal units which assisted them in feeling close and connected to their infants, including feeding their infant and skin-to-skin. It also identified some challenges including a lack of parental space in the neonatal unit, and how this impacted their ability to be present on the unit and bond with their infant. Parents in the survey felt there was variation among how staff made them feel on the neonatal unit, from welcome to a hinderance.

Conclusion:
The responses to the survey highlighted strengths within Irish neonatal care as well as areas where improvement could be made in the provision of developmental care in Ireland. Through addressing specific barriers to parental presence and participation on the neonatal unit, there is potential to improve parents’ engagement and connection with their infant.
P-122: Paternal challenging sensitivity during play and sensitive guidance of dialogue: Similar or different?

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Young children’s relationships with fathers and mothers contribute to their psychological security, however while mothers’ sensitivity is directed to children’s emotional needs, fathers’ sensitivity is directed to children’s exploration needs and play (Bretherton, 2010). This study examined the assumption that fathers will show more sensitivity during play interaction with their children compared to an emotional conversation about events involving negative emotions. Hence, paternal sensitivity was evaluated in two father-child dyadic interactions.

Fifty-five 5-years-old children and their fathers were observed in a challenging play interaction, and in a joint discourse about child-experienced emotional events. Fathers also completed questionnaires. Fathers’ sensitive challenging during play was coded with SCIP (Grossmann et al., 2002), and their sensitive guidance of dialogue was coded with the AEED (Koren-Karie, et al., 2000). A dependent samples t-test revealed a significant difference (t(109)=2.372, p<.02). Fathers’ sensitive challenging (M=7.21, SD=1.61) was higher than their sensitive guidance (M=6.41, SD=1.73). Furthermore, child temperamental surgency contributed 17.9% to the explained variance in sensitive challenging, as higher surgency was associated with more sensitive challenging. Child surgency also contributed 14.5% to the explained variance in sensitive guidance, but higher surgency was associated with lower sensitive guidance. Findings suggest that fathers’ sensitivity in play and in emotional dialogue involve different skills, and fathers tend to offer more sensitive challenging to children’s exploration needs.

P-233: Building Early Childhood Practitioners' capacity in Infant Mental Health

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There is a growing international awareness of the importance of building workforce competency and upskilling those working with young children, and their families (Priddis et al. 2017). This presentation will explore the development and evaluation of an Infant Mental Health (IMH) training programme for Early Childhood Practitioners in Ireland.

This specific infant mental health training programme was developed by Let’s Grow Together! Infant & Childhood Partnerships CLG (LGT) as the result of a stakeholder collaboration to identify training gaps that existed within childcare provision in Cork City. The training model was underpinned using the principles of Infant Mental Health and was tailored and guided by the Irish Association for Infant Mental Health (I-AIMH) Competency Framework ® (2018) and and the principles of Aistear and Siolta (the National Early Childhood curriculum and quality frameworks of Ireland). Mentoring was also provided to participants to assess the impact of this programme and provide practical supports to further embed the training into practice.

Following a pilot of the programme in 2021, the training programme was implemented by IMH Practitioners in two early years’ centres with fifteen practitioners participating. A mixed-methods research study was designed to monitor and evaluate the programme outcomes. The research methods in the study included pre- and post-training questionnaires, and pre- and post-training, on-site observation using the Child Caregiver Interaction Scale.

Preliminary results indicate that the programme increased practitioners understanding of the principles of IMH and its importance on early childhood development. The findings demonstrate increased capabilities in practitioner’s perceived ability to understand and interpret social and emotional developmental stages in young children. The findings also indicate an increase in practitioners’ confidence and competence in supporting parents, such as reducing parental stress around responding to emotional dysregulation and separation anxiety.
P-169: LINK International Forum for "Best Practices" in Authentic Assessment for Early Childhood Intervention

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INTRODUCTION & AIM OF STUDY:
We have conducted a unique virtual, Zoom-based "social validity study" of 83 international (n=18 countries) & interdisciplinary professionals (8 disciplines) in the fields of early childhood intervention & infant mental health.

We seek consensus on current professional processes, practices, pros-cons, new perspectives & needed changes on the why, how, what, whom, when, & where of early childhood assessment for applied & research purposes.

MATERIALS & METHODS:
Our methodology relied on the following:
* 8 disciplinary focus groups
* 3 meetings of each via Zoom
* Facilitation by a focus-group leader
* Debates & discussions
* Consensus decision-making using the Nominal Group Technique process
* Completion of a LINK Forum Qualtrics Survey by all (91 items) of importance/quality ratings & open-ended comments
* In-vivo coding/transcription of discussion-debate themes

RESULTS & CONCLUSIONS:
The following results & conclusions in 6 overarching categories were generated from the LINK Forum process on "best practices" and new directions for assessment to accomplish the major purposes of the early childhood intervention field:

Essential Assessment Purpose:
* To determine severity of neurodevelopmental & neurobehavioral needs for individualized intervention & goal-planning
* To document individual progress & intervention impact

Essential Assessment Format:
* To ensure ecological assessments based on structured observations in natural environments and everyday settings and routines
* To promote parent-professional teamwork

Essential Assessment Content:
* To observe real-life skills with engagement in real-world settings & activities
* To ensure the focus on functional competencies
* To sample environmental supports to promote adaptation and progress

Essential Assessment Methods:
* To expand the use of clinical judgment/informed opinion measures
* To ensure the broader use of integrated frameworks such as the ICF-CY & DC:0-5 which focus on authenticity, activities, and participation, universal design
* To develop methods with greater cultural alignments and applicability
* To embrace & expand the use and applicability of DEC & NAEYC Professional Standards
P-243: A pilot study on the effects of an attachment-based intervention in Japan

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INTRODUCTION
The Circle of Security Parenting (COSP) is an attachment-based intervention for community-based implementation. COSP consists of eight sessions for parents to review the stock video footage, while the original 20-week Circle of Security (COS) program involves individualized video feedback.

AIM of the study
This longitudinal study examined whether the COSP and individualized video feedback improved parent-child relationship quality.

MATERIAL and METHODs
We recruited 28 mother-child dyads from an urban community in Japan (Mage children at start=32.2 months; 61.5% boys). Twenty-six dyads attended more than 70% of the sessions conducted over 17 to 18 weeks. We assessed child attachment quality using the Strange Situation procedure (SSP), maternal sensitivity with the Ainsworth observation scale (i.e., episode 2 from the SSP, the reading task, and the clean-up task), and parental stress with the Parental Stress Index (PSI), each at the baseline (T1), after COSP (T2), after the individualized video review sessions (T3), and at a 6-month follow-up (T4). At T1 and T4, we conducted an Adult Attachment Interview (AAI) with mothers.

CONCLUSIONS
We examined changes between T1 and T2, T3, and T4. At T2, 69.2% of the participants reported reduced parental stress in the child domain. At T3, 76.9% of mothers’ sensitivity scores improved compared to T1. At T4, 70% of children’s attachment improved (classified as B), and 35.7% of mothers’ attachment improved (classified as F) compared to T1. The study provides preliminary evidence that the COSP may be effective in reducing parental stress in the child domain, that the video-feedback session may enhance the maternal sensitivity, and that these changes may be beneficial to improvements in child attachment quality.
P-260: Concurrent validity of ASQ-3 with Bayley Scales of Infant Development-III at 2 years: Singapore Cohort

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Introduction: With increasing acceptance of universal developmental screening in primary care, it is essential to evaluate the local validity and psychometric properties of commonly used questionnaires like the parent-completed Ages and Stages Questionnaires, 3rd Edition (ASQ-3) in identifying developmental delays.

Aim: The aim of this study is to assess the convergent validity of the ASQ-3 with the Bayley Scales of Infant Development-3rd edition (Bayley-III) in identifying developmental delay in a low-risk term cohort in Singapore.

Methods: ASQ-3 and Bayley-III data collected prospectively with generation of ASQ-3 cut-off scores using three different criteria: 1-standard deviation (SD)(Criterion-I) or 2-SD(Criterion-II) below the mean, and using a Receiver Operator Curve (ROC)(Criterion-III). Sensitivity, specificity, positive(PPV) and negative(NPV) predictive values were calculated. Correlations between the ASQ-3 and Bayley-III domains were evaluated using Pearson coefficients.

Results: With all three criteria across different domains ASQ-3 showed high specificity (72–99%) and NPV (69–98%), but lower sensitivity (19–74%) and PPV (11–59%). Criterion-I identified 11–21% of children as “at-risk of developmental delay” and was the most promising, with high specificity (82-91%), NPV (69-74%) and overall agreement of 64-71%. Moderate-strong correlations were seen between ASQ-3 Communication and Bayley-III Language scales (r=0.44-0.59, p<0.01). Lowest sensitivities were seen in the motor domains.

Conclusions: ASQ-3 is reliable in low-risk settings in identifying typically developing children not at risk of developmental delay, but has modest sensitivity. Moderate-strong correlations seen in the communication domain are clinically important for early identification of language delay, one of the most prevalent areas of early childhood developmental delay.
P-065: Promoting early relationships: Mother’s experiences of cuddling very preterm babies in the delivery room.

Dr Deanna Gibbs1,2, Dr Parisut Kimkool3, Dr Shirley Huang3, Dr Jayanta Banerjee3,4, Dr Aniko Deierl3

INTRODUCTION and AIM of the Study
Early skin-to-skin (SSC) in delivery rooms and neonatal intensive care units is beneficial for term and late preterm infants and their parents. In practice, extremely preterm infants are separated from their mothers immediately after birth, as resuscitation and stabilisation take precedence. The necessity of admission and highly technical environment of a NICU result in physical separation of parents and infant as well as delays to the early attachment process. While cuddles in the delivery room are not completely the same as SSC, visual and physical contact in the delivery room may facilitate early mother-infant interaction and reduce the trauma of separation. Our aim in this study was to explore mothers' experience of a delivery room cuddle.

MATERIAL and METHOD
A descriptive qualitative study was conducted using the principles of emotional touchpoints to map parent experiences. Individual interviews were conducted with six mothers who had experienced a delivery room cuddle with their preterm infant (gestational age at birth 24+5 – 29+0 weeks; birth weight 540–1019g). Interviews were transcribed and analysed using thematic analysis.

RESULTS
Analysis of the participants' experiences revealed five themes: fears and hopes around delivery; the moment of delivery—recognising uncertainty; reclaiming normalcy; forming connections; and the journey ahead as an empowered parent.

CONCLUSIONS
Mothers of preterm babies expressed different fears at the time of delivery, but all reported positive emotions about the cuddle with their baby. This preliminary study shows that cuddles in the delivery room shows promising benefits for mothers and child as it facilitates the development of early parent-infant relationships and reduces the trauma of separation. All parents highlighted that this moment gave them opportunity to claim at least a brief sense of normalcy around delivery.
INTRODUCTION
Childbirth is a significant positive life event for many parents. However, meta-analyses suggested 10 to 15% of parents report post-partum depression [1]. Certain personality traits seem to increase vulnerability to postpartum depression [2]. For example, considering a dyadic perspective, higher actor neuroticism and lower partner agreeableness predicted higher levels of depressive symptoms in actor [3]. Moreover, the effect of personality traits on postpartum depression would be explained by cognitive processes, such as attentional bias towards the baby’s negative emotions [4]. To our knowledge, no study focused on the interpretation bias as a mechanism underlying the effect of personality traits on postpartum depression. Yet, working like a pair of glasses through which parents see their parental environment as a threatening and negative place, interpretation bias would negatively affect parents’ mental health and lead to higher levels of post-partum depression.

AIM of the study
The aim of the current study was to evaluate the effect of personality traits on postpartum depression, with the interpretation bias as a mediator within a dyadic perspective.

MATERIAL and METHOD
In study 1, a short questionnaire (i.e., 11 items) on perinatal interpretation bias has been developed and validated. In study 2, the proposed mediational role of the interpretation bias was investigated in a parental sample, using the Actor-Partner Interdependence Mediation Model.

CONCLUSION
Actor and partner personality traits would influence post-partum depression in actor, with interpretation bias as a mediator.

P-156: Mothers’ rejection sensitivity and children’s social cognitions: The mediating role of maternal supportive behaviors

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Introduction: Children’s cognitions regarding social relationships in early childhood predict their social competence and wellbeing over time, making it imperative to identify what shapes these cognitions. Several studies have suggested parents’ predisposition to aggression, anxiety, altruism, and sociability can affect children’s social cognitions.

Aim: The aim of the present study was to extend this body of work in two ways. First, we examined a parental predisposition, rejection sensitivity, not explored thus far. Second, we investigated the process by which parental predisposition to rejection sensitivity may affect children’s social cognitions. Specifically, we examined whether mothers’ behaviors in situations that might suggest their children were rejected would mediate the link between a maternal predisposition to rejection sensitivity and children’s social cognitions.

Material and Methods: Participants were 122 Jewish Israeli mothers and their kindergarten children (50.82% female; MChild age in months = 67.52, SD = 6.35). Mothers completed the Adult Rejection Sensitivity Questionnaire and reported their likely behaviors in scenarios suggesting the rejection of their children by peers. Children were interviewed using the response evaluation scale for the rejection stories in the Social Information Processing Interview–Preschool Version and the peer acceptance subscale of the Pictorial Scale of Perceived Competence and Social Acceptance for Young Children.

Results: Results revealed indirect links between mothers’ rejection sensitivity and children’s maladaptive response evaluations and lower social self-perceptions, through fewer supportive maternal behaviors.

Conclusions: These findings highlight the need to consider parents’ dispositions and behaviors in the context of their children’s peer interactions for a more complete understanding of the development of children’s social competence.
P-154: From inner to dyadic connection: effect of a mindfulness-based intervention on mother-infant dyadic synchrony

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INTRODUCTION AND AIM OF THE STUDY: Several studies showed the impact of mindfulness-based interventions not only on intrapersonal skills (e.g., experiencing a state of attention to present events without judging the experience) but also on interpersonal processes (e.g., improving the quality of social interactions), based on the assumption that we connect better with others if we are aware of and connected with our own experience. Likewise, mindfulness-based intervention protocols directed to mothers aimed to promote the quality of mother-infant relationship by improving maternal mindfulness abilities.

The aim of this study was to test the effectiveness of a mindfulness-based intervention directed to mothers of 9 months old infants in enhancing dyadic synchrony as defined by the mutual adaptation of attention and affect between the mother and the infant during the interaction.

MATERIAL AND METHODS: 30 mother-infant dyads (Mean age = 10 months) randomly divided into an experimental group and a waitlist-control group, were videotaped during 3 minutes face-to-face interaction. The quality of dyadic synchrony was coded using Fogel’s Relational Coding System. Mothers completed the Five Facet Mindfulness Questionnaire and the Interpersonal Mindfulness in Parenting Scale to assess maternal dispositional mindfulness and mindful parenting. The experimental group attended a 5 weeks mindfulness-based intervention, that consisted in listening twice a week to audios related to main mindfulness topics (i.e., mindful breathing, body scan, mindful walking, expanded awareness, loving kindness). After 5 weeks the quality of dyadic synchrony and maternal mindfulness were reassessed.

RESULTS: Preliminary results showed positive associations between maternal mindfulness and the quality of dyadic synchrony, and the effectiveness of mindfulness-based interventions in improving it.

CONCLUSIONS: These results suggest the importance of interventions that promote maternal mindfulness abilities through an improved understanding and awareness of self and others. These interventions could have cascade positive effects on children’s healthy development.
P-101: Being Dad: An exploration of fathers’ voices on the hopes and struggles of fatherhood.

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Introduction and Aim
Societal expectations regarding the role of fathers in the lives of their children from pregnancy, post-birth and throughout childhood have increased significantly. A large body of evidence identifies the positive impact for children of supportive and engaged fathers, with key benefits for children in the future in terms of social, emotional and academic factors ((Opondo, Redshaw, Savage McGlynn and Quigley, 2016) However, despite the shifting societal discourse on involved fatherhood and the benefits that accrue for the whole family, some men are struggling to be involved and engaged as equal caregivers to their children and are encountering a myriad of obstacles, including economic, structural, psychological, and interpersonal.

Methodology
This paper presents an exploration of the experiences of eleven Tallaght based Dads, capturing their voices and seeks to gain an in depth understanding of their experience in relation to their caregiving roles. A qualitative framework was utilised to allow for an in-depth, nuanced exploration of fatherhood. The research is based on one-to-one interviews and a short sociodemographic questionnaire.

Results
Thematic analysis identified the three major themes as embracing fatherhood, the desire for greater equality in caregiving and seeking parity of esteem in encounters with health care professionals.

Conclusion
Findings suggest the importance of further research on father engagement and the need for systematic data collection and analysis. Supporting the transition to fatherhood with resources and supports specifically developed for fathers is recommended. The paper also concludes that to achieve positive structural change in fathers’ experiences of interactions with health care professionals, a structured broad-based systemic approach to father inclusion training is required.

Reference
P-106: Parental sensitivity and family alliance: Influences of early family interactions on infants’ vagal tone

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Background. The quality of early parent-infant interactions can influence infants’ vagal tone, which is an indicator of emotion regulation. Physiological studies have been mainly conducted on mother-infant interactions and more rarely on father-infant or mother-father-infant interactions. The first aim of the present study is to investigate the associations between parental sensitivity and vagal tone during dyadic interactions and between family alliance and vagal tone during triadic interactions. Moreover, as the dyadic and triadic interactive contexts are not independent from one another, the second aim of the study is to investigate the possible moderation effects (1) of family alliance on the association between parental sensitivity and infants’ vagal tone and (2) of parental sensitivity on the association between family alliance and vagal tone. Method. This study includes 82 parents with their 3-month-old infants. Dyadic and triadic interactions were recorded in a standardized laboratory situation to assess parental sensitivity and family alliance. Infant’s ECG was recorded to obtain vagal tone. Results. Results showed that maternal sensitivity and family alliance predicted infants’ vagal tone, whereas it was not the case for paternal sensitivity. No significant moderation effect was found, however there was a marginal moderation effect of family alliance on the association between paternal sensitivity and infants’ vagal tone. Discussion. Maternal sensitivity and family alliance are associated with infants’ vagal tone and are not moderated by the quality of other contexts of interaction. However, the association between paternal sensitivity and infants’ vagal tone seem to be more influenced by family functioning. This could be explained by societal factors, since fathers in Switzerland almost no paternity leave and therefore have spent much less time alone with their infant in the perinatal period than mothers.
P-168: Preliminary validation of a five-minute assessment of parental reflective functioning

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1
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Introduction

Presently, the “gold standard” measure of parental reflective functioning is scored using Parental Development Interview (PDI), which is costly and time intensive to use. To overcome these barriers, a new measure of reflective functioning, the Reflective Functioning Five Minute Speech Sample (RF-FMSS), was developed specifically for a mentalizing intervention for foster parents. Preliminary results indicated that the RF-FMSS correlated with a self-report measure of parental RF and it was sensitive to change in RF following a brief mentalizing intervention for foster carers. The aims of this study are to evaluate the psychometric properties of this new measure and compare and contrast the RF-FMSS to the PDI, examining concurrent validity while exploring how they differ and how it might be utilized both in research and clinically.

Methods

During 2019-2021, a total of 62 parents in central Texas were recruited and completed this study. All parents were given both a PDI and a RF-FMSS. This sample of parents had a mean age of 38, consisting of 70% females and 30% males. All interviews were transcribed and coded by coders rated as reliable for coding RF on the PDI.

Results

Preliminary results have evaluated 15 of the 62 parents and indicate the correspondence between RF scores on the two measures was exact for 9 cases (60% of the sample), and within one-point difference for a further 3 cases (20%). Thus, for 80% of this initial sample, the scores were within an acceptable range of reliability.

Conclusion

The remaining data is presently being analyzed, however, these initial results indicate the RF-FMSS might correlate well with the PDI, particularly for low and high scoring parents. This preliminary data along with previous studies indicating it is sensitive to changes in RF, lends support that it could be a valid new measure of parental reflective functioning.
P-345: Early childcare settings in Israel: Structural quality, caregiver sensitivity and children's behavior

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Introduction: Day care centers differ in their structural and process factors. Size of the group and the numeric ratio between caregiver and children might affect the quality of caregiver sensitivity and children's behavior in the setting. In Israel, 58\% of children aged 3-36 months are in childcare settings for many hours a day, most of them are in low structural quality. Therefore, it is important to study the interaction between structural and process qualities of childcare.

Aim of the study: To examine the role that structural quality plays in the relationship between the caregiver's emotional responsiveness and the child's involvement during play and activity. The study also examined whether the expression of aggression varies with different structural qualities.

Material and Method: 84 early childhood care settings were classified into either standard structural quality (29) or non-standard (55), based on the size of the group and the numeric ratio between caregivers and children. Caregivers and children (aged 6 to 24 months) in the group were filmed in various episodes that were coded for caregivers' responsiveness, children's involvement, and aggression.

Results: The emotional responsiveness of the caregivers in standard quality settings was significantly higher than that of those in low-quality settings. The level of aggression in the group was lower in standard quality settings compared with that of non-standard quality. A significant positive correlation was found between emotional responsiveness and involvement at settings of standard quality. However, no significant correlation between the two variables was found in settings of non-standard quality.

Conclusions: The findings attest to the impact of structural quality as a necessary condition for ensuring process quality and for facilitating beneficial relationships between adults and children. Non-standard structural quality might become a risk factor for children's wellbeing in childcare group settings.
P-325: Practitioners’ Experiences of Delivering Online and Face-to-Face Group-based Parenting Interventions: a Qualitative Investigation

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Introduction and Aim of the study

Despite their novelty, research suggests online parenting interventions are well received by parents and lead to positive outcomes. For instance, Spencer et al. (2020) found significant positive effects in both parent and child outcomes in a meta-analysis of 28 studies. It is unclear, however, how practitioners who deliver these interventions perceive their efficacy especially compared to face-to-face interventions. The current study explores the experiences of practitioners as they may influence both the use of online delivery and parent’s receptivity.

The aim of this study was to explore practitioners’ perspectives of delivering Mellow Parenting (MP) groups online, an attachment-based facilitated parenting intervention. The study also explored the perspective of dual-trained practitioners' (experience delivering online and face-to-face MP interventions).

Material and Methods

Semi-structured interviews were conducted with 15 practitioners', all practitioners had delivered at least one online MP programme. Most practitioners had delivered both online and face-to-face Mellow programmes (80%). Interview transcripts were analysed using an inductive approach to reflexive thematic analysis and analysis was conducted by the first and second author with the aid of NVivo software.

Results

Initial findings have revealed three overarching themes exploring practitioners' experiences of delivering online parenting interventions: (1) expected and unexpected practical benefits of online; (2) barriers in connecting and emotionally supporting participants online; (3) technology challenges arising, often overcome with more online experience.

Conclusions

The results from this study will help in our understanding of the strengths, challenges and differences that emerge with online parenting interventions from the perspective of practitioners. Offering parenting programme developers the opportunity to better understand practitioners' perspective and the role they play in improving parent and child outcomes.

References

Introduction and aims
Parents’ mentalization capacities have been found to be an important predictor of infant attachment security. The perinatal period is being recognised as a window of opportunity for early intervention for parents-to-be who are experiencing difficulties or are at especial risk. In response to this, a variety of interventions have been developed which explicitly target parental mentalization as part of their theory of change and that are offered as early as from pregnancy. The aims of this review were to evaluate the effectiveness of mentalization-based interventions in improving parental reflective functioning and secondary outcomes of parent-infant interaction and infant attachment, as well as to identify the components of such interventions.

Methods
A systematic review and meta-analysis were conducted searching electronic databases up to July 2021. Eligible studies were identified, data was extracted, and quality was appraised. Pooled risks were estimated using random effect models. Additionally, a thematic analysis of the components of the included interventions was carried out.

Results
Twelve studies (RCTs) were included, providing a total of 829 participants. Meta-analyses showed a significant moderate improvement in PRF (SMD: 0.38, 95% CI [0.06, 0.70]), a significant improvement in infant attachment security (OR: 1.86; 95% CI [1.20, 2.87]), and reduction in infant attachment insecurity (OR: 0.53; 95% CI [0.29, 0.95]) disorganisation (OR: 0.50; 95% CI [0.28, 0.91]), and maternal depression (SMD: -0.16; 95% CI [-0.31, -0.0]). Through inductive analysis we identified (1) components that provide support or information to parents, (2) components that promote the strengthening of relationships, and (3) components relating to the models of intervention used in the programmes.

Conclusion
Interventions with a focus on mentalization that are offered as early as from pregnancy can play an important role in improving parental reflective functioning and infant attachment as well as in reducing the prevalence of attachment disorganisation.
P-290: A Pilot Study to Explore the Continuity of Mental Health Services from Infancy Through Adolescence

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INTRODUCTION: Without coordinated treatment, infancy through adolescence, children are likely to develop lasting social emotional problems. Following an in-depth literature review that identified the need to address gaps in service, the researchers conceptualized an infancy through adolescence pilot project designed to improve the continuity of mental health services in rural American communities (New Jersey and Pennsylvania). The pilot project included the development of a multidisciplinary team to address this systemic health need. The team analyzed rural mental health coordinated services provided infancy through adolescence with the end goal of implementing a computerized, shared, longitudinal tracking system beginning with infants receiving mental health services through their high school graduation. Also, childhood mental health intervention checkpoints and parent education on childhood mental health indicators and navigating the mental health system is at the heart of the project.

AIMS: This presentation demonstrates a theoretically based pilot project designed to develop and implement a shared, computerized longitudinal tracking system for children receiving IMH services through high school. The presentation includes discussing the mental health intervention checkpoints infancy through adolescence and parent education on childhood mental health indicators and how to navigate the mental health system.

MATERIALS AND METHODS: Methods for the pilot project include an in-depth literature review, surveys, interviews, case studies, and technological environmental scanning.

CONCLUSIONS: As of date, gaps in mental health services infancy through adolescence within New Jersey and Pennsylvania rural communities have been identified. We have developed a multi-disciplinary team across two states who are collaborating to create and implement a computerized, shared, longitudinal tracking system for children receiving IMH services through high school graduation. Intra- and inter-agency surveys have been developed and are in process. Environmental scanning for other similar programs is constant.
P-264: Insights into the complex immune environment during pregnancy and association with the developing human connectome

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Introduction: Maternal health and intrauterine exposures during pregnancy play a major role in molding infant neurodevelopment—one influence is maternal immune activation (MIA). Animal models show MIA affects the developing brain, disrupting the regulation of developing neurotransmitter systems. Human studies are sparse, but increasingly show the complex role of multiple immune markers in later risk for neurodevelopmental conditions. However, evidence of MIA influencing newborn brain organization and function is limited and few markers are explored. Aim: This study proposes an analysis of 46 markers of MIA from the third trimester of pregnancy to understand potential unique phenotypic profiles and common associations of expressed maternal immune markers during pregnancy with the developing human connectome in healthy pregnancies.

Sample: 74 healthy women with singleton pregnancies underwent blood draws between 34-37 weeks gestation. Adaptive (e.g., IgG) and innate (e.g., cytokines), totaling 46 markers of MIA, were collected. For preliminary analyses of MIA in relation to the newborn brain, 30 participants aged 0-6 months underwent MRIs. Findings: Principal component analysis identified the first 5 PCs explains ~68% of the variance and the first 10 explains ~83% (top PC is 42.1%). Using the top PC each edge in the connectome was correlated with the immune profiles. Several regions trended towards significance—one survived correction and included 359 edges. Summary: This is the first study beginning to observe the influence of 46 maternal immune markers on the developing human connectome. Multiple areas of the developing human connectome are influenced by MIA during the 3rd trimester of pregnancy. The highest number of edges was observed in the inferior parietal lobe of the left hemisphere—a region associated with functions from basic attention to language and social cognition. Deviations in prenatal exposure to MIA may longitudinally impact infant behaviour in these areas essential for human interaction.
P-342: Associations between Physiological and Emotion Regulation in Early Childhood Teachers

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Introduction
In educational settings, early childhood teachers are faced with highly complex social situations and are often required to deal with challenging situations that entail them to regulate their own emotions. Research points to relations between teachers’ poor emotional regulation (ER) abilities and maladaptive reaction patterns to children’s emotions. Hence, it is important to better understand how ER strategies are linked to teachers’ ability to self-regulate in the classroom context. One measure associated with ER is respiratory sinus arrhythmia (RSA), which indexes parasympathetic control of the heart via the vagus nerve. RSA withdrawal (RSAW), or the decrease in RSA (from baseline) that occurs during challenging contexts, is thought to support behaviors indicative of adaptive coping. Blunted RSAW are thought to index impaired ER capacity.

Aim
To examine the association between teachers’ use of emotional suppression strategies and their ability to regulate their physiological responses to children’s temper tantrums.

Methods
Seventy-two early childhood teachers (M seniority=10.58, SD=9.28) participated. RSAW was measured by an electrocardiograph recorder, while watching 2 videos of children exhibiting tantrum behaviors in childcare contexts and a neutral-content video before and after each one. Teachers completed questionnaires on their ER.

Results
Teachers showed RSAW while watching children tantrum behaviors (p<.05), suggesting active physiological regulation. During recovery phases, RSA levels did not return to baseline and stayed significantly low throughout the experiment, indicating incomplete physiological recovery (p<.05). Furthermore, higher use of emotional suppression was associated with lower RSAW (r=-.42, p<.01).

Conclusions
Research findings indicate that children tantrum behaviors elicit teachers’ physiological arousal, suggesting elevated stress response. Teachers high on suppression showed less adaptive physiological coping, affecting their ability to respond in a regulated, adequate manner to children’s needs. Findings highlight the need of developing interventions targeting adaptive strategies that support teachers’ self-regulation in the classroom context.
P-157: Cardiac vagal tone and effortful control in infancy: the moderating role of father-infant interactive synchrony

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INTRODUCTION: Psychophysiological studies have found associations between mother-reported children’s effort control (EF), as a dimension of temperament related to self-regulation, and two cardiac vagal tone measures, basal cardiac vagal tone (BVT) and changes in cardiac vagal tone (CVT) during mother-infant interactions. No studies have tested these associations during father-infant interactions. Parent-infant interactive synchrony, a measure of the quality of interactions, facilitates the transition from mutual to self-regulation in infancy. We aim to investigate the association between the father-reported infant’s EF, BVT, and CVT; and father-infant interactive synchrony as a moderator.

METHODS: Interactions between fathers (N=62) and 3-month-old infants were recorded in a standardized laboratory situation to assess father-infant interactive synchrony. Infant’s ECG was recorded to obtain cardiac vagal tone. Fathers reported the infants’ EF through questionnaires. Analyses controlled for the influence of the infant’s gender, the father’s education, and the positive (more engagement) and negative (less disengagement) direction of vagal tone changes.

RESULTS: BVT and CVT are associated with the father-reported infant’s EF, such that high BVT predicts more EF, and high CVT predicts less EF. These associations are not moderated by interactive synchrony and are not influenced by infants’ gender, father’s education, and directions of vagal tone changes. Correlational analyses revealed that high CVT has positive correlations with the positive direction of vagal tone changes.

CONCLUSIONS: There are associations between (i) infants’ ability to regulate independently of social interaction (when high BVT) and more father-reported EF, and (ii) infants’ greater use of behavioral and emotional strategies during father-infant interactions (when high BVT) and less father-reported EF. The rare father-infant interactions without the mother present could explain the lack of influence of synchrony at three months and the less father-reported EF. Less EF might reflect fathers’ understanding of infants’ increased strategies of engagement as a manifestation of poor self-regulation.
P-235: Perinatal Imaging in Partnership with Families: Understanding Newborn Voices

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Introduction and Aim of the Study
The Perinatal Imaging in partnership with families (PIPKIN) project is a longitudinal project aiming to examine early infant socio-cognitive brain and behavioural development in the context of families. PIPKIN incorporates dense data collection across the first month of life, using portable technology so we may examine development within the infants home and across a range of sociodemographic backgrounds. Here we present the neonatal PIPKIN protocol, with emphasis on more firmly establishing the Brazelton Neonatal Behavioural Assessment Scale (NBAS) in research, alongside neuroimaging measures.

Material and Methods
The experimental setup consists of portable LUMO functional near-infrared spectroscopy (fNIRS) equipment, which can be taken into the home to examine early brain markers of auditory habituation and visual social tasks. Alongside this a the NBAS, which examines early infant socio-cognitive behaviours, sleep and state, will be administered. Three home visits will occur within the first month of life: two within the first two weeks and one at one-month, allowing for these early developmental trajectories to be investigated.

Results
Data acquisition has been successfully piloted in the home, with preliminary analyses demonstrating good data quality across NIRS tasks, and acceptability and interest within families. However, of eight infants piloted with the NBAS so far, only three managed to reach completion, emphasizing the need for a more flexible approach to the NBAS across research sessions.

Conclusions
Here we present the implementation of brain and behavioural tasks to examine early infant socio-cognitive development in the home setting. By understanding how such capacities emerge in their natural environments, we will be better placed to design and implement effective interventions for those most vulnerable to adverse outcomes. Further, by investigating the use of the NBAS alongside other developmental markers, we aim to establish its role in research more fully.
P-310: Infant and Toddler Language Development Trajectories across Linguistically Diverse Households

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Introduction/Aim of the Study

Dual experiences of poverty and developing in homes where English is not the primary language has placed many young children at risk for underdeveloped school readiness (Pianta et al., 2020). The aim of this study was to comparatively examine language development trajectories in infants and toddlers from English- or Spanish-speaking low-income households who participated in child-development-focused home visiting.

Materials/Methods

Participants were drawn from two home visiting programs and assessed with distinct measures: a) 76 Early Head Start children assessed via observation with the Early Communication Index (Luze et al., 2001), and b) 238 ParentChild+ children assessed by parent report on MacArthur-Bates Communicative Development Inventory (Fenson et al., 2007) and Communication and Symbolic Behavior Scale (Wetherby & Prizant, 2002). Measures were completed at three timepoints.

Results

For each measure, similar patterns of growth and no statistically significant differences were found for children from English- and Spanish-speaking homes.

Conclusions

Results suggest an absence of a language development gap for this population, which conflicts with previous school readiness research. Implications for home visiting and later schooling will be discussed.

References

P-321: Construction of the Views on Normal Infant Sleep Questionnaire (VNIS) - Pilot Study

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Introduction and Aim of the study: Parents’ understanding of “normal” infant sleep varies across cultures and over time. Although in the UK bed-sharing is discouraged by the National Health Service, in one study nearly half of all neonates bed-shared at least once¹. No validated instrument exists to understand parents’ prenatal views on infant sleep, which may influence their decisions postnatally. The Views on Normal Infant Sleep Questionnaire (VNIS) will: be a tool for midwives to assess parents’ knowledge gaps and provide tailored perinatal care; increase reliability of postnatal self-report measures; allow for cross-cultural comparisons; provide a baseline for researchers to use in longitudinal studies.

Participants: N=100 primi- and multiparous women (≥ 28 weeks’ gestation; UK resident; Age 18+). This study has ethical approval from Liverpool John Moores University and follows the Helsinki Declaration guidelines.

Material and Methods: Participants will complete a 31-item parent-report online questionnaire with items on sleep location, feeding, and infant wakefulness and sleep patterns. We will run an exploratory factor analysis to indicate the broad structure of the items. A correlation matrix will be used to exclude redundant items, followed by a confirmatory factor analysis (CFA) with a minimum 0.32-standardized factor loading. Goodness-of-fit of the CFA model will be assessed by the root mean square error of approximation and its associated 90%-confidence interval, and by the comparative fit index.

Results: Results of the pilot study will be used to adjust the questionnaire for use in a subsequent longitudinal study (N=500 primi- and multi-paras). CFA will be repeated in the larger sample to validate the questionnaire.

Conclusions: The VNIS will be a valuable scale to assess parents' understanding of "normal" infant sleep.

This study examined the association between mothers’ childhood experiences, their current states of mind and their wishes for their children’s future. Forty-one mothers were given the Adult Attachment Interview (AAI) which primarily inquires about their childhood experiences with their parents but also includes a question about their top three wishes for their children 20 years into the future. Following the previous study (Behrens & Umemura, 2017), five different types of wishes were identified: Well-being, relationship, personal fulfillment, achievement, and personality/character, which were consequently quantified based on the emotion-oriented-ness scale. This crude 3-point scale rates wishes that are affective or more emotion-oriented as a 3 whereas more instrumental or materialistic wishes receive a 1. Out of three wishes, we focused on the first wish. The findings showed that mothers’ wish score was significantly, negatively correlated with Rejection (r=-.530, p=.004) and Neglect (r=-.554, p=.002) experience scores and positively correlated with Loving scores (r=.552, p=.002). These findings indicate that mothers who reported Loving experiences with their mothers are more likely to wish happiness for their child, a construct that we define as "emotion-oriented." Mothers who were rejected or neglected were more likely to wish that their child's material and instrumental needs are met. Finally, mothers’ wish score was significantly, negatively correlated with Derogation (r=-.377, p=.044), high scores indicative of their insecure-dismissing states of mind. To the best of our knowledge, this is the first study that investigated the link between the quality of mothers’ wishes for their children and their own childhood attachment experiences and states of mind.

P-302: Effortful control as a resilience factor for children with developmental delays facing the Covid-19 pandemic

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Introduction and Aim of the study
The Covid-19 pandemic brought many challenges to families, changing everyday life rapidly and drastically. Parents faced financial concerns, a sudden increase in caregiving burden, health worries as well as the stress of being in quarantine. These adverse effects likely impacted parents’ abilities to provide sensitive caregiving and support to their children. Since children with developmental delays (DD) and their families have pre-existing vulnerabilities, their adaptation to the pandemic might have been more challenging, and the pandemic's negative impact on them even greater. The current examination looks into families of children with DD and the effect maternal Covid-19-related worries had on children's well-being. Children's effortful control (EC) was examined as a resilience factor since it was previously linked to child adjustment in the face of adversity.

Material and Methods
In T1, pre-pandemic, 84 families from low to medium SES were recruited during the children's diagnostic process in the Shamir medical center's child development center (Child's age M=3.5 sd=0.94). Mothers completed questionnaires on children's EC. T2 took place during the first quarantine in Israel. Families were contacted and asked to complete online questionnaires; 56 families participated in T2 (child's age M=5.9 sd=1.33). Mothers reported on their child's quality of life (QoL) and Child behavior problems using well-accepted questionnaires. Mothers were also asked about their concerns about the family's health, finances, and parental responsibilities.

Results
Children with low and medium levels of EC showed more behavioral problems and lower QoL when their mothers reported having higher levels of worry. High levels of EC were found to act as a buffer against the link between maternal worry and the child’s adjustment. Implications for intervention will be discussed.
P-214: Social Inequality and Infant Mental Health

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Introduction and Aim of the study
An analysis of routinely recorded data held at a national and local level was undertaken as part of a needs assessment exercise to inform the development of an infant mental health service in one area of Scotland.

Material and Methods
The data reflected the services from which it was drawn, many of which were woman- or infant-focussed, thus information about fathers and the wider family was not captured.

Results
We found evidence that income deprivation was linked to a range of adversities. There was also evidence of an inverse care law with unequal access to services providing support to women and their babies in the perinatal period.

Conclusions
The study confirmed that many parents have difficulties in their lives, and a significant number of infants have experiences that can compromise their wellbeing and development. The complex interplay between these factors merits further investigation. A clear social gradient runs through the data and provides evidence that structural inequalities in society may predetermine unequal developmental outcomes for infants. The analysis highlighted the relative risks of experiencing adversity, which were more likely to be experienced by infants living in socioeconomically deprived areas. For example, babies and parents living in deprived were more likely to be affected by substance use and mental health difficulties. Concerns can arise unexpectedly after birth in all families if, for example, an infant is born prematurely or has significant developmental problems, but these too were associated with social deprivation. These associations should inform the delivery of public health initiatives as well as service design to ensure that those most in need are prioritised.
Early signs of social development in extremely preterm infants

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[Introduction] Extremely preterm birth is an environmental factor for autism spectrum disorder (ASD). Data shows that 7.1% of extremely preterm infants have been diagnosed with ASD at age 10 years (Josepf et al., 2017). However, half of extremely preterm infants diagnosed with ASD had no early signs of ASD such as “difficulty with eye contact” by the age of two (Kim et al., 2016). [Aim of Study] We examined early signs of social development in extremely preterm infants. [Material and Methods] Eleven extremely preterm infants (week of conception: M = 25w1d (SD = 8.00d) and birth weight: M = 686.18g (SD = 127.50g)) were included. We assessed M-CHAT at the modified 1.5-year point and ADOS-2 at early 2 years (CA: M = 25.82months, (SD =1.60)). A clinical psychologist who interviewed the parents assessed M-CHAT. [Conclusions] Of the infants, 30.77% were positive for ASD on M-CHAT, whereas 63.64% were concerned about ASD on the ADOS-2. Three of the infants who were negative for ASD on the M-CHAT were positive for ASD on the ADOS-2. Most children passed the M-CHAT for pointing to requests (pass rate: 90.91%) and pointing to interests (pass rate: 90.91%); in the ADOS, most children passed “pointing: pointing to objects at a distance/coordinating gaze” (pass rate: 45.45%) and “requests: gaze and integrating and requesting other behaviors” (pass rate: 63.64%) and “integrating gaze with other behaviors during interpersonal outreach” (pass rate: 27.27%) were less likely to pass. The results suggest the need to focus on whether pointing is simply present or absent in the social development of extremely preterm infants, accompanied by gaze and vocalization, and whether gaze is accompanied by other behaviors and vocalizations. In addition, a need exists to support the development of joint attention and engagement with others from an early stage.
P-317: How does early childhood teacher emotion dysregulation and job stress relate to preschoolers’ self-regulation?

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Introduction and Study Aim: Teachers’ emotion regulation is theorized to be important for fostering positive classroom environments (Jennings & Greenberg, 2009). Empirical research in early care education settings supports this assertion as workplace stress is associated with increased emotion dysregulation (Hatton-Bowers et al., 2022) and worsened self-regulation in children (Neuenschwander et al., 2017). Thus, it is important to identify factors that negatively impact children as well as understand factors that ameliorate dysregulation and stress. For example, mindfulness is linked to effective emotion regulation strategy use and buffers stress. We hypothesized emotion dysregulation and job stress would each uniquely predict preschoolers’ self-regulation. Further, we explored if mindfulness moderated the associations between emotion dysregulation and job stress to preschoolers’ self-regulation.

Material and Method: 50 early childhood teachers completed online surveys and reported on their emotion dysregulation, workplace stress, and mindfulness. 162 parents reported on preschoolers’ self-regulation.

Results: Results suggest that teacher emotion dysregulation, and not job stress, was negatively associated with preschoolers’ self-regulation (β = -0.258, p = .034). Mindfulness was not a significant moderator for emotion dysregulation or job stress on self-regulation.

Conclusion: Results provide evidence for supporting preschool teachers’ emotion regulation skills to nurture a classroom environment where children can develop strong self-regulation.


P-257: GROW: Pilot of a Relationship-Based Training Program for Foster, Adoptive and Kinship Parents

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Introduction: A U.S. health and human services department contracted a university to develop, pilot, evaluate, and implement a mandatory statewide curriculum for foster, adoptive, and kinship (FAK) parents seeking licensure. The pilot evaluation of GROW, a relationship-based training, provides preliminary evidence about GROW’s efficacy to prepare FAK parents for caring for infants and young children.

Aims of the Study: Aims included assessing GROW pilot attendees’: 1) knowledge of infant-early childhood parenting tasks; and 2) confidence about their abilities to meet the trauma-informed parenting needs of infants and young children in FAK care.

Materials & Methods: Using pilot data, descriptive statistics summarized GROW attendees’ parenting confidence and parenting knowledge. Independent sample t-tests were conducted to assess for differences between the infant-toddler parenting knowledge and confidence of parents attending GROW (n = 53) versus a control group of parents who attended the existing FAK parent training (n = 92).

Results: Levene’s Test for equality of variances (F = 5.69, p = .02) required the calculation of a t value without the assumption of variances (t(141.54) = 4.91, p < .0001, d = .43) where GROW pilot participants (M = 3.63, SD = .31) reported a greater degree of infant-early childhood parenting confidence when compared to the control group (M = 3.31, SD = .49). A Levene’s test (F = 7.31, p = .01) required the calculation of a t value without the assumption of variances (t(143) = 6.58, p < .0001, d = .67) where GROW pilot participants (M = 4.54, SD = .45) reported a greater degree of infant-early childhood parenting knowledge when compared to the control group (M = 3.87, SD = .77).

Conclusion: The pilot evaluation provides preliminary findings that GROW, a relationship-based FAK parent training program, is successful in supporting FAK parents’ infant-early childhood knowledge and confidence.
Introduction
In Japan, the effectiveness of health checkups for 5-year-old children as a system for early support for developmental disorders is attracting attention. This study examined the relationship between the results of 5-year-old children’s health checkups and the results of parental ratings of the Japanese version of the SDQ by utilizing the strength and difficulties questionnaire (SDQ) in 5-year-old children’s health checkups.

Material and Methods
Children aged five were examined in Kanie-cho, Aichi Prefecture, Japan, from 2010 to 2012. Of 884 children for whom parental consent was obtained and no missing values were included in the analysis.

Results
The results of the chi-square test showed significant differences in the relationship between the presence or absence of follow-up at the 5-year-old health checkup and grouping by SDQ scores (Low Need group or Some Need + High Need group) for each subscale of the SDQ or total difficulties score (TDS), indicating that the proportion of children receiving Some Need or High Need on the SDQ was significantly higher for those requiring follow-up at the 5-year-old health checkup. Additionally, a chi-square test of the relationship between the presence or absence of the diagnostic categories of PDD, ADHD, MR, LD, and motor skill disorder and the grouping by SDQ scores at the follow-up after the 5-year-old child's health checkup revealed a significant difference between the two groups; in terms of prosocial the results showed significant differences in prosocial behavior, hyperactivity-inattention, conduct problems, peer problems, and TDS.

Conclusions
The above results suggest a relationship between the presence or absence of follow-up, and the presence or absence of developmental problems in 5-year-old children’s health checkups and the adjustment status of the children as perceived by their parents. It demonstrates that using the SDQ to quantify parents’ concerns in 5-year-old children’s health checkups is effective.
P-277: Developmental trends and changes in Japanese children, comparing assessment data from 1983 and 2020

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Introduction and Aim of the study: In the recent years, children have undergone various changing circumstances. This study aimed to investigate the developmental trends and changes in Japanese preschool children over 40 years.

Material and Methods: Data were collected using standardized testing materials of the Kyoto Scale of Psychological Development (KSPD). Individual assessment data were gathered for 1026 and 1655 children, aged 1–13 years old, from 1983 and 2020, respectively. We compared the “50%-passing ages” for each of the 115 items in both samples at which 50% of children would succeed in the task of items.

Results: Many test items demonstrated minimal change; however, several items in various developmental areas reported remarkable acceleration, while others showed conspicuous delay. Particularly, for naming the four colors, red blue yellow and green, development was found to be accelerated by 12 months. However, development for second and third aspects of the origami tasks by 3–6 months and development for copying figures such as square, triangle, or diamond had been delayed by 9–11 months.

Conclusions: These developmental changes were attributed to rapid social and nurturance environmental changes. It may be essential to observe and understand these changes and support them better in the future.
P-055: The “Affective touch and neurodevelopment in preterm infants” Project: A preregistration poster

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Introduction:
The C-tactile social touch system, anchored on the close relationship between affective touch and C-tactile (CT) fibres, has been highlighted in the literature due to its potential for shaping neurodevelopmental trajectory. In its turn, a lack of early-life affective touch experiences is hypothesized to leave neurodevelopmental ‘scars’. This can be the case for preterm newborns, who are prevented from having access to normative early affective touch experiences while staying in the neonatal incubator.

Aim of the study:
The proposed project aims to study the efficacy of a C-tactile stimulation protocol to promote optimal neurodevelopment of preterm infants while hospitalized in the Neonatal Intensive Care Unit (NICU), with the ultimate objective to probe the fundamental role of CT-fibres in shaping neurodevelopment.

Material and Methods:
A randomized controlled trial (RCT) will be implemented, allocating hospitalized preterm newborns to receive C-tactile stimulation beyond standard care (experimental group) or to receive only standard care (control group).

Three milestones are proposed: 1) analyse the impact of C-tactile stimulation on preterm newborns’ physiological stability, by monitoring heart rate (bpm) and oxygen saturation (SpO2) values during baseline (T0) and intervention (T1) periods; 2) explore the extent to which C-tactile stimulation will shape the neurodevelopmental trajectory of preterm infants, through a follow-up neurodevelopmental assessment at 18 months of corrected age (T2); and 3) determine how epigenetic markers might mediate the relationship between C-tactile stimulation and neurodevelopmental outcomes.

Conclusions:
The proposed research project has the potential to contribute to a better understanding of the enrolled mechanisms, updating best practice, and improving neonatal care. Through this preregistration poster, the scientific community is invited to discuss the project at an early stage, providing an opportunity to improve its scientific quality and working towards an open-science framework.
P-158: Fatherhood in adolescence: young father-infant interaction at infant 3 months

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INTRODUCTION: The literature on adolescent and young fathers is still poor; few studies show that adolescent father’s life is characterized by several risk factors (Kiselica & Kiselica, 2014). Paternal style of interaction has specific characteristics that differentiate it from maternal style (Nordahl, 2014), focusing on physical play, such as tickling, rough and tumble play, chase and the horse on the knees. However, to our knowledge, only one study evaluated adolescent father-infant interactions, showing that young fathers were less sensitive and less engaged in social play with their babies than young mothers (McGovern, 1990).

AIMS: The aim of the study is to examine the quality of adolescent and young father interactions at infant 3 months.

MATERIALS AND METHOD: 33 adolescent and young father-infant dyads have been recruited. At infant 3 months, father-infant interaction was video-recorded and codified with Neuropsychomotor Video Analysis of Adult and Child Interaction-NVA\textsuperscript{®} (Moioli, 2017).

RESULTS: The results showed that adolescent and young father had low scores on NVA Sensitive category and high scores on intrusive and controlling NVA categories, placing in at high risk range. Infant had high score on NVA Controlling and Excluding-avoidant categories and low score on NVA Sensitive category, placing in at risk range.

CONCLUSIONS: Findings indicated that the quality of adolescent and young father-infant interactions is characterized by negative behaviors and low responsivity, highlighting the important clinical implication of promoting early intervention to support the father-child relationship.

P-038: Childhood Maltreatment, Parental Attitude, and Couple Functioning among Expecting Fathers: Does PTSD Play a Role?

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Introduction. The transition to fatherhood can be psychologically challenging, especially for men who have a history of childhood maltreatment (CM). To this day, anxiety and depression have been the focus of most studies regarding the adaptation of expecting fathers with a history of CM whereas some evidence suggests that symptoms of post-traumatic stress disorder (PTSD) would contribute negatively to expecting fathers’ parental confidence and couple functioning, over numerous mental health indicators including depression. Aim of the study. The present study aimed to evaluate the role of expecting fathers’ symptoms of PTSD in the association between CM and fathers’ adjustment, measured through antenatal attachment, parental confidence, and coercion/violence in marital conflicts (CVMC). Material and Methods. Two hundred and thirty-two men from the Province of Quebec, Canada, completed questionnaires between the second and the third trimester of pregnancy, namely the Childhood Trauma Questionnaire, the PTSD Checklist for DSM-5, the Maternal Confidence Questionnaire (adapted for men), the Paternal Antenatal Attachment Scales and the Conflict Tactics Scale. Results. A structural equation model (SEM) showed that the severity of CM predicted the severity of PTSD symptoms, which predicted a lower confidence in their parenting skills and more CVMC. In turn, expecting fathers’ lower parental confidence predicted a lower antenatal attachment. This SEM showed an excellent fit ($\chi^2 (6) = 8.31$, $p = .22$, CFI = .97, TLI = .95, RMSEA = .04, SRMR = .05). PTSD symptoms fully mediated the path from CM to parenting confidence ($\beta = -.06$, $p = .047$, 95% IC [-.12, -.001]) and CVMC ($\beta = .08$, $p = .03$, 95% IC [.01, .15]). Conclusions. PTSD symptoms play an important role in the path from expecting fathers’ CM to their parental attitude and couple functioning. Practitioners working with families should monitor PTSD symptoms among expecting fathers with a history of CM.
P-291: Paternal Trauma and Offspring Development in Early Childhood: Exploring the Moderation by Child Sex

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Introduction. Offspring of fathers or mothers with a history of childhood maltreatment (CM) are at increased risk of developmental problems. Some evidence points toward distinct intergenerational trajectories of maternal trauma according to child sex (CS). However, this has never been explored among offspring of fathers with a history of CM. Aim of the study. The present study evaluates if boys’ and girls’ development is associated differently to their fathers’ history of CM.

Methods. Sixty-four men from the Province of Quebec, Canada, completed the Childhood Trauma Questionnaire between the second and the third trimester of pregnancy. The Ages and Stages Questionnaire, Third Edition was completed by themselves (n=46) or their partner (n=18) when the child was aged between 5 and 36 months (48% girls). A moderation analysis was performed using the PROCESS macro for SPSS. Results. The overall regression model was not significant (\(F(3, 60) = 2.06, p = .12, R^2 = .09\)). Although child development was not significantly predicted by CS (\(b = -10.04, t(60) = -.86, p = .39, 95\% \text{ IC } [-33.27, 13.19]\)), the severity of fathers’ CM significantly and negatively predicted child development (\(b = -1.94, t(60) = -2.30, p = .03, 95\% \text{ IC } [-3.63, -.25]\)) and the moderating effect of CS was marginally significant (\(b = 2.16, t(60) = 1.86, p = .07, 95\% \text{ IC } [-.16, 4.48]\)). Only girls’ development was associated with severity of fathers’ CM (\(b = -1.94, t(60) = -2.30, p = .03, 95\% \text{ IC } [-3.63, -.25]\), not boys’ (\(b = .22, t(60) = 28, p = .78, 95\% \text{ IC } [-1.37, 1.81]\)). Conclusions. This study provides preliminary evidence of a moderating effect of CS in the intergenerational repercussions of paternal trauma. These findings should be replicated with a larger and more diverse sample.
P-209: The Challenges of Early Childhood Consultation on Mental Health, Emotional, Developmental, and Behavioral Disorders

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Introduction
In the United States, 23% of children have a disorder of mental health, emotion, development or behavior (MEDB). A severe workforce shortage in consultants specializing in MEDB care has increased the burden of identifying these disorders on pediatric primary care clinicians (PPCCs), who report being under prepared to manage these conditions. In response to this crisis, new strategies have been established to improve access to early childhood consultants.

Aim
To report the frequency of diagnostic overshadow comorbidity of early childhood MEDB disorders presented to consultants in child development and child and adolescent psychiatry in 3 different consultant venues; a PPCC to specialist phone consultation program, a multidisciplinary developmental consultation clinic, and a PPCC to specialists consultation using the extension community healthcare outcome (ECHO) model.

Method
Cases from three venues were reviewed (100 phone consultations, 101 multidisciplinary clinics, 85 ECHO consultations) to evaluate the frequency of comorbid MEDB conditions in early childhood consultations for concerns about development or behavior. Behavioral disorders were often the initial complaint for which consultation was sought. However, underlying developmental or trauma-related disorders were suspected or identified in 52-71% of cases for which behavior was the presenting concern. Co-morbid MEDB disorders were identified or suspected in 52-76% of all cases, irrespective of the presenting venue.

Conclusion
Diagnosis overshadowing and comorbid MEDB disorders are very common in early childhood cases seeking consultation with specialists despite the venue of consultation.
P-216: Using the Candidacy Framework to Conceptualise Systems and Gaps when Developing Infant Mental Health Services

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The development of infant mental health (IMH) services globally is still in its early stages. This qualitative study aims to understand the challenges of setting up IMH services and explores the views and experiences of 14 key stakeholders who are part of the IMH implementation group in a large Scottish health board. Data was derived from 14 interviews. Six major themes were identified. This paper examines the biggest perceived factor “Systems” alongside the theme “Gaps in Current Service”. The theoretical framework of ‘candidacy’ is used to conceptualise the complex systemic layers of micro, meso and macro factors that contribute to the challenges of setting up services. At the micro level, key themes included the view that services must be accessible, involving families and individualised. At the meso level, in line with the aims of the service, multiagency integration, aspects of early intervention and clear operating conditions were all seen as important. Finally, at the macro level, perhaps the biggest challenge perceived by stakeholders is delivering a service that is entirely infant-focused. These findings will help inform policy makers about factors considered by professionals to be vital in the establishment of infant mental health services in Scotland and across the globe.
P-139: Parental Reflective Functioning as a Moderator of the Link Between Parental Stress and Technoference

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Introduction and Aim of the Study
The ubiquity of screens in the context of parenting may interfere with parent-child interactions and eventually harm parent-child relationships, especially with young children. Distracted parenting due to screen use has been labeled "parental technoference" (PT). Parental technoference was significantly associated with parental stress (PS). Although research indicates the negative implications of screen use, our study investigated resilient factors, in particular parental reflective functioning (PRF), as a moderator of the link between parental stress and technoference. We hypothesized that high levels of PRF would weaken the link between PS and PT.

Material and Methods
Twenty-eight mothers (M child age = 4.36 years; SD = 0.44) from southern Israel reported on their PS, PT, and PRF using well-validated questionnaires.

Results
The prementalizing mode (subscale of PRF), representing the parent’s inability to enter into the subjective world of their child, was related to both more stress (r = .59; p < .001) and technoference (r = .61; p < .001). Additionally, PRF acted as a resilience factor mitigating the link between parental stress and technoference, as seen in the significant interaction (r = .33; p < .029). This indicates that parental stress was linked to more technoference only when mothers had lower levels of PRF (r = .58; p < .01). However, when mothers had higher levels of PRF, no association was found (r = .03; p < .85).

Discussion
PRF reduces the link between parental stress and technoference. It seems that when parents are able to consider their child’s mind, they can better buffer the occurrence of technoference that may arise during stressful times. Further investigation of PRF may help promote beneficial parent-child interactions given the potential interruptive force of parental screen use.
P-305: Comparing maternal and paternal affective touch: a first step towards a contextual C-Tactile approach

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INTRODUCTION. It has now been accepted that affective touch plays a major role in the healthy development of young infants and that an essential subclass of unmyelinated low-threshold mechano-sensitive skin fibres (i.e., C-Tactile afferents) that conduct affective information about affective touch – occupies a far-reaching role. However, a lot of research relies on retrospective, cross-sectional, and laboratory studies, focusing on either the infant, mother, or at the best the mother-infant dyad, hindering a proper understanding of the development of affective touch in early life related to the context, including that of both parents’ — mother ànd father.

AIM of the study. In the current study we took a first step towards the role of touch in paternal care and compared the impact of paternal and maternal nurturing stroking touch on infants’ physiological self-regulation in terms of respiratory sinus arrhythmia (RSA).

MATERIAL and METHODS. We compared the impact of a 3-min stroking period with a pre-stroking baseline and post-stroking baseline of 25 (unrelated) mothers and 25 fathers (on their infants, aged 4–16 weeks. We registered infant electrocardiogram (ECG) and respiration to calculate infant RR-interval (RRI), respiration rate (fR) and RSA and analysed the stroking speed.

CONCLUSIONS. Infants showed a significant increase in RSA (mediated by heart rate and respiration) during and after stroking touch, no matter whether touch was delivered by fathers or mothers. These results show the need to examine how CT-sensitivity is built through the first months of life and in what extent the caregiving context may have an impact on that.
Introduction and Aim:
The COVID-19 pandemic produced adverse effects on family well-being including mental distress and decreased access to supportive services, particularly for low-income families. Warm Connections is an integrated behavioral health program that addresses the psychosocial needs of low-income families in partnership with the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC). WIC staff refer families to Warm Connections, which provides behavioral health support grounded in an infant mental health framework. This study examines:
1) Reasons for referral to Warm Connections pre- and post-pandemic onset.
2) How the mode of service delivery (in-person or virtual) impacted Warm Connections’ ability to effectively connect with families pre- and post-pandemic onset.

Materials and Methods:
This study was conducted in two WIC clinics with Warm Connections programming. The sample included WIC participants referred to Warm Connections between August 2019 - July 2021. Referral reasons included: parental stress/mental health, social determinants of health (SDOH), child behavior/development concerns, or multiple concerns/other. We used descriptive statistics to summarize sample characteristics and calculate the proportion of referrals received by referral type. We conducted chi-square tests to examine if referral reasons and outreach to families differed pre- and post-pandemic onset. Post-hoc analyses were used to determine which referral categories differed pre- and post-pandemic onset.

Results:
Referral reasons varied significantly pre- and post-pandemic onset. Significantly more referrals were made regarding SDOH post-pandemic onset (13.8%) compared to pre-pandemic (4.1%, p < .05). Providers’ transition to telehealth modality sufficiently served families.

Conclusions:
The quantity and nature of family needs shifted in response to the pandemic, while Warm Connections’ ability to provide accessible care was unchanged. Referrals increased dramatically during the pandemic’s onset, underscoring the significant needs of low-income families. Integrated behavioral health programs are promising approaches to address families’ psychosocial needs and can be successfully delivered in-person and remotely.
P-284: Development of infant emotion regulation: Examining the roles of maternal prenatal depression and fetal attachment.

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INTRODUCTION. Maternal prenatal depression has been associated with infant’s emerging emotion regulation abilities, and maternal-fetal attachment is also linked to infant outcomes. AIM OF THE STUDY. Our primary aim was to examine associations between maternal functioning and infants’ emotion regulation during the still-face paradigm (SFP) in a primarily Black/African-American sample. We hypothesized that maternal prenatal depression symptoms would be negatively associated with infant emotion regulation during the SFP, and higher maternal-fetal attachment would be positively associated with infant emotion regulation.

MATERIAL AND METHODS. Participants were 101 mother-infant dyads from a larger longitudinal study initiated in Detroit Michigan, USA. The Center for Epidemiological Studies Depression questionnaire measured maternal depressive symptoms prenatally and when infants were 7 months old. The Maternal Fetal Attachment Scale (MFAS) measured the attachment pregnant women had to their soon-to-be children. Emotional and behavioral responses from the double SFP, which repeats the still-face and reunion phases, were coded using the MACY-Infant-Parent Coding System.

RESULTS. Multiple regression analysis revealed that higher MFAS role-taking, seeing oneself as a parent and the fetus as their future child, was associated with significantly more infant attempted social engagement with mom during the first still-face episode, which previously has been associated with future secure attachment and positive infant outcomes (β=.35, p=.006). In an analysis of the second still-face episode, prenatal depressive symptoms were significantly associated with infant initiation with mom, which has been deemed a less effective emotion regulation strategy at this episode, when controlling for current depressive symptoms (β=.30, p=.010).

CONCLUSIONS. These results demonstrate the roles of prenatal maternal-fetal attachment and depressive symptoms in infant emotion regulation strategy use throughout the double SFP as infants learn mom will not respond and the task becomes more distressing.
P-294: PREDICTIVE ABILITY OF PERSISTENT MATERNAL MENTAL HEALTH DIFFICULTIES ON THE PRESENCE OF CHILD BEHAVIOR PROBLEMS

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Introduction and Aim of Study:
Postnatal Anxiety (PNA) and Postnatal Depression (PND) affects about 1 in 10 mothers and impacts child behaviour. However, there is limited research on what effect persistent PNA and/or PND, beyond infancy, have on preschool child behaviour.
To examine the effects of persistent PNA or PND on child behaviour (total, internalising and externalising) at 24 and 48 months of age.

Materials and Methods:
212 parents of children enrolled in the Growing Up in Singapore Towards Healthy Outcomes (GUSTO; n = 1152, birth cohort 2009–2010), a prospective longitudinal cohort study, completed the Child Behaviour Checklist (CBCL 1.5-5) at 24 and 48 months. Maternal PNA and PND symptoms at 3 and 24 months were identified using the Spielberger State-Trait Anxiety Inventory (>75th percentile) and Edinburgh Postnatal Depression Scale (≥13) respectively.
Demographics, child’s general and socio emotional development (Ages & Stages Questionnaire (ASQ-3; ASQ:SE-2) and parenting stress (Parenting Stress Index 3rd edition) were also analysed. A multivariate logistic regression was performed with mothers who had persistent or resolved PNA or PND at 24 months, against the CBCL at 24 and 48 months.

Results:
Persistent Maternal PNA and PND symptoms at 24 months were found in 11.3% and 10.3% respectively. The prevalence of child behaviour problems was 11.79% and 9.43% at 24 and 48 months, respectively. PNA or PND predicted total child behaviour problems at 24 months (OR= 4.645, CI [0.902-23.913]), at 48 months (OR= 12.546, ** CI [1.494-105.355], p value <0.05)), and internalising problems at 24 months (OR=4.084, CI [0.810-20.599]), and at 48 months [OR= 3.332, CI [0.782-14.201]).
Income was shown to be a significant predictive factor for behavioural problems at 24 months (OR = 4.367, CI [1.151-16.393]) and internalizing behavioural problems at 48 months (OR = 5.988, CI [1.618-22.222]).

Conclusion:
Persistent maternal mental health problems beyond infancy can impact preschool child behaviour.
Low income was shown to be a significant predictor of preschool externalising and internalising behaviour problems.
Unadjusted; **
P-234: Authentic Assessment of the Participation of Spanish Children in Home Routines

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INTRODUCTION:
Authentic assessment is crucial for identifying children’s true participation in home routines. So that, needed supports are identified and addressed throughout the intervention process. The Measure of Engagement Independence and Social Relationships (MEISRTM; McWilliam & Youngreen, 2019) measures the participation of children in home routines. It was originally intended for children from 0- to 36-months-old. Recently, it was extended to be used with children up to 6-years-old (MEISR 0-6, McWilliam et al., 2020). However, this new version has not been adapted for or tested in the Spanish population.

AIM:
The study aimed to test the reliability of the items and to confirm the factor structure of the MEISR 0-6 items.

MATERIAL & METHODS:
Participant children (N = 1415) were recruited from 42 early childhood intervention programs across 18 Spanish provinces. Children’s age ranged from 2- to 72-months (M = 34.83, SD = 15.44). Children’s caregivers completed the MEISR 0-6 and a sociodemographic questionnaire. The MEISR 0-6 (McWilliam et al., 2020) consists of 570 items distributed in 14 common home routines. Each item represents a skill that facilitates the child’s meaningful participation in that routine. Caregivers indicate whether that skill does not yet occur = 1 (i.e., challenges for participation); occurs sometimes = 2 (i.e., learning opportunities for participation); occurs often = 3 (i.e., mastered skills or strengths for participation). The percentage of items scored as challenges, learning opportunities or strengths are calculated for the total MEISR and for each routine. These percentages can be calculated for all items in the scale or for items up to the chronological age of the child. The MEISRTM 0-3 scores have shown high internal consistency, α= .99, in previous studies.

CONCLUSIONS:
The high internal consistency of the MEISR 0-6 item scores support its use to assess children’s participation in home routines.
One of the most prominent predictors for the healthy development of a newborn is the caregiving behavior of his mother, specifically maternal sensitivity and intrusiveness. Maternal Sensitivity is the mother’s ability to be aware of her baby’s cues, interpret and respond to them appropriately. Maternal Intrusiveness is the extent to which the mother interacts with her baby in an interruptive and controlling manner. Maternal behavior may be influenced by the infant's temperament. Infant’s Negative Emotionality (NE) is a temperamental disposition which poses risk for the emerging mother-infant relationship. Specifically, several studies suggest that infant's NE associates with compromised caregiving behaviors, yet findings remain inconsistent. The current study examined whether Maternal Mentalizing, in the form of Mind Mindedness (MM), i.e., mother’s ability to understand and interpret her own and her infant’s behavior in terms of underlying mental states, may exert a moderating protective effect. Mothers and their 4-month-old infants (N=148) were assessed in their homes. Maternal narratives were coded offline for MM (Meins et al., 1998). Infant NE was observed using a standard reactivity task (Kagan et al., 1994). Maternal caregiving behaviors (sensitivity/intrusiveness) were coded from video-recorded mother-infant interactions using the "Emotional Availability scale" (EA; Biringen, 1998). Analyses tested whether maternal Mind-Mindedness moderates the link between infant NE and maternal behaviors. Results revealed no direct associations between infant NE and Maternal behavior (sensitivity/intrusiveness). However, a significant interaction emerged between infant NE and maternal infant-focused mentalizing in predicting maternal intrusiveness. At low levels of maternal mentalizing, NE was significantly positively associated with maternal intrusiveness (β=.31, p=.03). At high levels of maternal mentalizing, there were no significant associations between infant NE and maternal intrusiveness (p=.11). Findings demonstrate the protective role of infant-focused maternal mentalizing in the context of infants’ temperamental risk in the form of high NE. Clinical implications are discussed.
P-011: Creating a parenting community of mothers to nurture children with developmental disorders based on IMH

Creating A Parenting Community Of Mothers To Nurture Children With Developmental Disorders Based On IMH Keiko Komoto¹,², Creating a parenting community of mothers to nurture children with developmental disorders based on IMH Kayoko Suzuki², Creating a parenting community of mothers to nurture children with developmental disorders based on IMH Akihito Sasaki², Creating a parenting community of mothers to nurture children with developmental disorders based on IMH Hiroji Okawa²¹
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Introduction
Parenting mentors refer to parents who had experienced parenting children with developmental disabilities by themselves. They provide sympathetic support and information on regional resources for parents having a similar situation. Today, the Ministry of Health, Labor, and Welfare in Japan recommends it as an effective family support system. However, mentor training is seldom available. Training parents to be parenting mentors and creating a parenting community are necessary.

Aim of the study
This study aimed to conduct parenting mentor trainings to promote understanding of Infant Mental Health (IMH) and mother–child relationships and to verify the effects. Methods for implementing parenting mentors were considered according to the training outcomes.

Material and Methods
Two mothers as parent mentor who are nature the developmental disorder and one pediatric nurse as a mentor-coordinator received training seminar. The training seminar include understanding about IMH, the influence of mother-child relationship to child development and listening skill, 12times over a year. After training seminar, they attended the parent training course (10times/course) as a parenting mentor. They investigated the self-efficacy and reflection as a mentor activity by questionnaire at pre-post the parent training course.

Ethical Considerations
The study protocol was approved by the ethics committee of Tokyo Medical and Dental University (receipt No.M2019-042, date of approval: 2019.7.29).

Conclusions
The introduction of parenting mentors builds a supportive relationship between parents. Two parent mentors and a mentor-coordinator showed significant improvement in their ability to voluntarily interact with the participants of the parent training course and monitor them compared with that before starting mentor activities. Mothers who participated in the parent training course and had a mentor exhibited significantly less parenting stress than mothers who did not have a mentor. Comprehensive support for parenting mentors and to build an organized mentor train system are important.
P-047: Integrated family approach in mental health care

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Introduction
There is a high transmission of mental disorders from parent to child. Young children are especially vulnerable. There is little attention to parenthood and the children in adult mental health care and in youth mental health care little attention is paid to parental mental disorders.

Aim of the study
To increase the knowledge about supporting parents with a mental disorder with parenting and To increase the knowledge about key elements and barriers of an integrated family approach in mental health care.

Materials and Methods
Our research encompasses a literature review, a multiple case-study, and the outcomes of treatment on the parent-infant interaction.

Results
The findings will be presented. This will cover which are the intervention targets to prevent adverse outcomes in both parents and infants according to current knowledge of transmission of psychopathology. What are key elements of an integrated family approach in treatment according to mental health professionals and patients? The outcomes of an integrated family approach in treatment on the quality of the parent-child interactions.

Conclusion
An integrated family approach in treatments of adult and child mental health services is needed to prevent parents and their young children from detrimental cascade effects and promote cascading resilience.
Introduction: In migrant families converge contextual transformations that can compromise adult caregivers’ parental skills to carry out a successful parenting. Objective: To approach to the guidelines, practices and beliefs about breeding and parenthood in Pakistani families living in Catalonia, to describe the differential characteristics between the context of origin/reception associated with opportunities and barriers in parenting practices and to determine the use that they make of support networks and area resources. Method: 20 women participated, divided into three focus groups (6 and 7 members). They were established in Catalonia (<5 years of residence) and had children (between 10 and 40 months old). The data was collected through a focus group interview divided into 4 thematic sections. A constant comparison analysis was performed which generated an indirect observation instrument (concordance between independent observers Kappa 0.79).

Conclusions: Pakistani mothers living in Catalonia understand motherhood as an inalienable goal that gives meaning and significance to their lives. It also implies more responsibilities and a considerable decrease in time for themselves. They express changes in their relationship with different family members. Motherhood strengthens bonds and their position within the extended family structure. Couple relationships change, gender roles are highly differentiated, being the mother who assumes the greatest responsibility for the care of family members and for the transmission of family and cultural values. Mothers associate the well-being and the healthy development of their children with the need of taking care of themselves physically and emotionally, as well as of providing them with a conflict-free environment. Acculturation and the loss of original cultural practices and values area source of concern. A short external and public support network is observed, as well as a limited use of maternity support services. Instead, informal networks between women in the community are a source of information and care.
Multiple prenatal risk factors were measured in 1036 Norwegian pregnant women participating in the prospective longitudinal community-based study Little in Norway. Mother-infant interactions were videotaped and scored with the ERHS at 12 months, and PSI and ITSEA were administered to the mothers 18 months after birth. This includes both self-report and observational data. First, we analyzed response patterns to identify latent classes, indicating separate risk profiles within our sample. Second, we investigated how these classes related to later mother-child interactional quality, parenting stress, and child internalizing and externalizing behaviour. Results identified three specific prenatal risk profiles; broad risk (7.52%), mental health risk (21.62%) and low risk (70.86%). The broad risk group showed an increased risk for poorer mother-infant interactions compared to the low risk group. The mental health risk group showed adverse outcomes on externalizing and parenting stress compared to the low risk group, and even the broad risk group. The mental health group showed more adverse outcomes on all measures, when compared with the low risk group.

The study highlights that families at risk can be identified as early as during pregnancy, and that prenatal risk factors cluster together in specific risk constellations that are differentially related to parent and child outcomes.

REFERENCES.
P-033: Trait anger, father-infant bonds and subsequent parenting stress: A longitudinal study of Australian men

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INTRODUCTION: Parent anger presents a risk to family safety and child development. Trait anger in men may also compromise the early relational context of fathers and offspring, yet evidence is lacking.

AIM: To examine effects of trait anger in men on parenting stress in the toddler years, and the mediatinal role of father-infant bonding.

MATERIAL AND METHODS: Data were from 177 Australian fathers of 205 children. Trait anger subscales (angry temperament and angry reaction), father-infant bonding subscales (patience and tolerance, affection and pride, and pleasure in interaction) and subsequent parenting stress subscales (parental distress, difficult child, and parent-child dysfunctional interaction) were assessed. At each of the subscale levels, mediational path models examined whether father-infant bonding explained the relationship between trait anger and parenting stress. Models were presented where there was at least a small correlation between the mediator and both the predictor and outcome.

CONCLUSIONS: Patience and tolerance was the only domain of father-infant bonding correlated with both trait anger and all parenting stress outcomes. Patience and tolerance fully mediated relationships between trait angry temperament and all subscales of parenting stress. Trait angry reactions had only a direct effect on parental distress. In conclusion, men’s trait anger both indirectly (through patience and tolerance in the father-infant bond) and directly impacts their experiences of parenting stress in the toddler years. Early interventions to manage trait anger and improve father-infant bonding may benefit fathers and children.
P-054: The psychosocial situation of families after pediatric cancer – results from a qualitative study

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Introduction: Around 300,000 to 400,000 infants, children and adolescents are affected by cancer every year. Pediatric cancer can place a burden on children and their families and is associated to long-term effects on well-being and quality of life for all family members. After the end of treatment, reintegration can be a challenge for the whole family. Long-term consequences due to the treatment may persist and require adaption in daily life. During follow-up care, children’s psychosocial situation can still be affected by the disease and treatment. Additionally, parents and siblings may experience psychosocial stress such as worry, anxiety and depressive symptoms.

Aim of the study: As part of a larger mixed-method study on children with pediatric cancer and their families during follow-up care, this qualitative study aimed at investigating the psychosocial situation and needs of children, their siblings and parents following the acute cancer treatment.

Material and methods: We conducted interviews with N = 30 parents of children aged younger than 17 years, who were in follow-up care. Families were recruited from two sites. The interviews were performed by our research team using semi-structured interview guidelines. The data was analyzed using qualitative content analyses according to Mayring with the software MAXQDA.

Conclusions: We will present preliminary results of the interviews with parents on the phase of follow-up care after the acute treatment. This study may shed light into the psychosocial situation, stressful events and coping of families with children who survived pediatric cancer. The results can provide a basis for further recommendations to optimize follow-up care and adapt healthcare service on the specific needs of families.
P-013: Partnering to Attain Cultural Specificity in Home-Based Communication and Language Interventions for Infants and Toddlers

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Introduction

Acquiring language competencies is critical in the first three years of life, and driven by language-rich interactions with adults. Socioeconomic disadvantage threatens development by posing health risks to children, limiting resources, and elevating parental mental health concerns. Little Talks was formulated in partnership with families experiencing disadvantage to ensure cultural responsiveness, feasibility, and effectiveness (Manz et al., in press).

Aim

The presentation will describe the community-based participatory research (CBPR) that formulated and evaluated Little Talks, as administered in Early Head Start (EHS) home-based programs. Additionally, this presentation will describe replication of CBPR to adapt Little Talks to Native communities.

Methods

Iterative development of Little Talks was initially conducted with Latine and African American families. Across three iterations, interviews with families were conducted to learn from their experiences using Little Talks. These data directed refinements of Little Talks and the creation of materials in English and Spanish. A 10-month randomized control trial (RCT) of Little Talks was conducted with 109 EHS children. Home visitor quality, parenting, parent depression, and children’s language growth were repeatedly assessed. HLM analyses were undertaken to evaluate Little Talks, attending to the interaction of families’ acculturation to the U.S. Underway is replication of the iterative process to adapt Little Talks for Native children.

Conclusion

RCT results documented Little Talks’ improvement on home visit quality, parent outcomes, and children’s language, with greatest benefit for children from families who were least acculturated to the U.S. These results show the CBPR effectiveness to initially form Little Talks, and the promise for replicating iterative development with Native children in home visiting.

P-123: Distress-promoting parent behaviours in a toddler vaccination context: A new research measure

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Introduction: Parents play a central role in supporting children through painful medical experiences, particularly during infancy. Previous research has shown that insensitive parent behaviour has stronger associations with infants’ pain-related distress than do sensitive parent behaviours.

Aim: The current study aimed to validate a novel observational measure of parent insensitive behaviour in an acute pain context (i.e., routine vaccinations).

Methods: 224 parent-toddler dyads were observed during toddlers’ 12-month, 18-month, or 24-month routine vaccinations in a pediatric primary care setting. Vaccination appointments were video-recorded and electrocardiograph (ECG) data were collected from parents. Parents reported on their state anxiety and parent and toddler behaviour were coded from video footage of appointments. To explore the psychometric properties of the measure, inter-rater reliability was examined (using intraclass correlations) and validity was examined (using correlations and cross-lagged path analyses) based on associations between distress-promoting parent behaviours (i.e., affect incongruence, attention disengagement, and physical distance) and parent soothing behaviours, state anxiety, and physiological arousal, as well as toddler pain-related distress behaviour.

Results: The measure exhibits strong inter-rater reliability. Parents’ use of distress-promoting behaviour during toddler vaccination is negatively associated with parents’ use of physical comfort and rocking and positively associated with toddlers’ pain-related distress. Results of a cross-lagged path analysis indicate significant positive concurrent and time-lagged associations between parents’ use of distress-promoting behaviour and toddlers’ pain-related distress behaviour. Collectively, results support the validity and reliability of this novel measure.

Conclusion: Parent behaviours that have been shown to promote and maintain child distress in other distress contexts also show significant associations with toddlers’ pain-related distress in an acute pain context. This suggests that teaching parents what not to do when their child is in pain may be equally important as teaching them what to do.
P-348: The role of emotional regulation in the relationship between attachment and depressive symptoms during postpartum.

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INTRODUCTION: Emotional regulation is central during the transition to motherhood in terms of mental health (Lin et al., 2019; Marques et al., 2018), quality of the mother-infant relationship (Rutherford et al., 2015) and child development. According to the literature, attachment is one of the determinants of emotional regulation capacities in adults (Mikulincer & Shaver, 2019). Moreover, attachment and emotional regulation are predictors of mental health among pregnant women. Indeed, insecure attachment has effects on affective disorders among mothers (e.g., Biancardi et al., 2020). Previous studies show a link between attachment representations and emotional regulation capacities, but the contributions of the different attachment figures remain unclear.

AIM of the study: Exploring the role of emotional regulation in the relationship between attachment and maternal depressive symptomatology during the postpartum period, and the dimensions of emotional regulation implicated in this relationship.

MATERIAL and METHODS: Attachment representations were assessed using the Attachment Multiple Model Interview (AMMI). Emotion regulation was assessed using the Difficulties in Emotion Regulation Scale. The Beck Depression Inventory-2nd version was administered to assess depressive symptoms during pregnancy. Finally, postpartum depressive symptomatology was assessed using the Edinburgh Postnatal Depression. In this longitudinal study, 46 participants were recruited during the end of pregnancy (M=7.69 month) (T₀), immediate postpartum, a month post-delivery (T₁), and mid-postpartum, between the third and fourth month postpartum (T₂).

CONCLUSIONS: As presented in the graph, Partial Least Squares-Path Modeling analysis (PLS-PM) showed that throughout pregnancy and postpartum, emotional regulation mediates the link between attachment representations to the partner and maternal depressive symptomatology. These results underline the importance of the quality of attachment to the spouse in depressive symptomatology that mothers will present during the perinatal period. The results offer insight on which dimensions of emotional regulation are implicated in the relationship between attachment to the partner and depressive symptoms.
P-159: Parental Smartphone Use and Parental Sensitivity: What is the Role of Parental Stress?

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Introduction

Smartphones are ubiquitous in everyday life. Parents’ smartphone use does not stop at the door to the nursery. Especially for first-time parents, parenting is challenging and confronts them with many new issues and questions. This can lead to increased parental stress. Parents see the smartphone as helpful in dealing with the challenges. However, parents’ use of smartphones when they are with their young children has led to a concern that they are no longer or only partly sensitive to children’s signals and can respond to them only with a delay or not at all. Initial studies found that parental smartphone use reduces parental sensitivity and responsiveness (for an overview, see Braune-Krickau et al., 2021).

Aim of the study

The aim of this study is to examine parental sensitivity and smartphone use and to investigate whether parental smartphone use has a long-term negative effect on parental sensitivity. In addition, we examine what influence parental stress may have.

Material and Methods

We used data from a subsample (N = 129) of a longitudinal study on the third trimester through 36 months postpartum, with total measurements at 6 time points. The data used were collected at three time points (3 months, 14 months, and 20 months postpartum) by questionnaires and video recordings. At the Congress, we will report initial findings in the form of a poster presentation.

Conclusion

Research implications for counselling and psychotherapy concerning early childhood issues will be drawn from the results.

P-346: Attachment to the partner and perinatal depression: the mediating role of early maladaptive schemas

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Introduction: Insecure attachment and early maladaptive schemas are two risk factors for perinatal depression. Giving birth can be challenging and thus urge mothers to rely on their partners for support. But if they feel insecure in this relationship, activation of early maladaptive schemas is likely, increasing the risk of depression.

Aim of the study: The aim of this study is to test whether the activation of early maladaptive schemas mediates the link between attachment to the romantic partner and depression.

Material and methods: The Attachment Multiple Model Interview, the Young schema questionnaire-short form 3, and the Edinburgh Postnatal Depression Scale were administered to 45 mothers of infants under 6 months, 21 of whom exhibited postpartum depression.

Conclusions: Partial Least Squares-Path Modeling analysis shows both a direct effect of attachment to the romantic partner on depression and an indirect effect, mediated by early maladaptive schemas. These direct and indirect effects explain 52.8% of the variance of depression scores. These findings highlight the need to focus on both attachment to the romantic partner and early maladaptive patterns in the treatment of perinatal depression.
P-265: Indirect effects of perinatal stressors in the association between maternal trauma and infant negative affectivity

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Pregnant women who have been exposed to childhood interpersonal trauma are at higher risk than women without history of trauma to experience stressors during pregnancy and the early years postpartum, which may play a role in the intergenerational trajectories of trauma.

The aim of this study was to evaluate 1) the association between maternal childhood trauma, pre- and postnatal stressors, and infant negative affectivity; and 2) the mediating role of stressful events in the association between maternal trauma and infant negative affectivity.

A sample of 119 pregnant women (33.6% with trauma, Mage = 29.72, SD = 4.6) was recruited in prenatal clinics. Participants completed the Childhood Trauma Questionnaire during the second trimester of pregnancy. Between 6 and 12 months postpartum (Mage = 9.03 months, SD = 5.06) they completed questionnaires assessing life stressors during pregnancy and after childbirth (Social Readjustment Rating Scale) and infant negative affectivity (Infant Behavior Questionnaire).

Bivariate correlations revealed that maternal trauma (r = 0.19, p = .04) and prenatal stressors (r = 0.24, p = .01) were associated with infant negative affectivity. No association was observed between postnatal stressors and negative affectivity. Results yielded an indirect effect of prenatal stressors in the association between maternal trauma and infant negative affectivity, B = 0.006, 95% CI [0.001, 0.013].

Our finding that maternal trauma influences infant development through prenatal, but not postnatal, stressors, points towards an important role of biological mechanisms in the intergenerational impacts of trauma. Further studies should evaluate whether the in-utero transmission of maternal trauma may be mitigated by prenatal interventions.
P-351: Validation of the Hungarian short ECR-R among mothers of infants in a nationally representative sample

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Introduction: The short form of the Hungarian Experiences in Close Relationships Revised (ECR-R-HU-SF) is a self-report questionnaire developed primarily for screening purposes. It contains 8 Likert-type items measuring attachment-related Avoidance and attachment-related Anxiety in romantic partner relationships. The original ECR-R has been validated in several languages and countries, but at the same time, the growing number of publications on shortened versions reflects the need of a time-saving tool for screening and monitoring purposes. The Hungarian short version of the ECR-R was previously validated in a nationally representative community sample (N=958; for ECR-R-HU, see Dupont et al., 2022). The factor structure and psychometric properties of the ECR-R-HU-SF were encouraging, and the corresponding scales of the short and long versions were highly correlated.

Aim of the study: The aim of the present study was to confirm the reliability and the validity of the ECR-R-HU-SF among mothers of very young children (≤ age 3 years) in a nationally representative community sample.

Material and Methods: The ECR-R-HU-SF was part of the self-administered questionnaires used in the study called ‘Infancy in 21st century Hungary’ (Danis et al., 2020), in which 980 mothers raising children aged 3-36 months were included. The sample was nationally representative regarding the children’s age, gender, and type of residence. The factor structure (CFA) and the psychometric properties (Cronbach’s alphas) of the ECR-R-HU-SF were tested. Construct validity was examined by correlations of the Avoidance and the Anxiety scales with instruments on perceived stress (PSS-4), depressed mood (DS1K), perceived warmth and invasion of the child (H-MORS-SF), and perceived social support and stress.

Conclusions: We can conclude that the reliability and validity of the Hungarian short version of the ECR-R are confirmed in a sample of mothers raising infants and toddlers.
P-181: Initiative & Reply - validation of the I&R Mother-Infant Interaction Coding Scale

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The mother-infant interaction is a reflection of their mutual relationship - it’s a measurable and visible part (Bruschweiler-Stern & Stern, 1989). Therefore, the assessment of the interaction gives a possibility to explore the relation which is crucial both for researchers and clinicians. Various mother-infant interaction measures were created whose forms are dependent on specific scientific assumptions (e.g. Zeanah et al., 2000). Similarly, the I&R Mother-Infant Interaction Coding Scale was used for the goals of the specific research project. The interaction was defined as coordinated behavior exchange shown by two active partners (Shugar, 1982). The main goal was to assess the coordination of mother and child actions. Two mutually exclusive behaviors were defined: initiative and reply. In the coding process, the coders mark both the mother’s and infant’s behavior on a timeline. As a result, two lines of behaviors were created. It gives a possibility to assess the course of interaction, the level of its coordination and its time structure.

The process of the scale validation included several steps. The first step was the consultation with the experts who distinguished the behavior units based on videotapes from the pilot research. Afterwards, three coders were trained to code the mother-infant interaction. They were assessing tapes and the level of reliability was checked after each attempt. The process of training and coding was repeated five times to obtain adequate reliability. The reliability was checked using the percentage agreement for all coders for each rating and finally was rated at 0.6.

The validated I&R Mother-Infant Interaction Coding Scale gives a possibility to code the interaction in an innovatively way. The researcher can assess neither dimensions of the interaction nor specific behaviors but categories of behavior - initiative and reply. It gives a possibility to study the course of the interaction.
P-273: Experiences of Counselors Working with Greif and Death in Early Childhood

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Introduction
The ability to both understand and work through grief within the early developmental ages of childhood has been controversial, but it is now believed that children are not only capable of navigating bereavement in early childhood but should be supported through that process by the securely attached adults in their lives (Brinkmann, 2020; Shapiro et al., 2014; Stuber & Mesrkhani, 2001). To best help bereaved children navigate a healthy bereavement process, the adults that work with children must be prepared to talk with children about death at an early developmental age (Brinkmann, 2020; Shapiro et al., 2014).

Aim of the study
This phenomenological study explored the lived experiences of counselors completing grief work with clients in early childhood (ages 0-5) that have experienced a death loss.

Material and Methods
Using a transcendental phenomenological approach, semi-structured interviews were completed with participants currently licensed in the united states with clinical experience working with this population and presenting problem.

Conclusions
Nine counselors completed the interview process, and through inductive coding, five themes emerged including: (1) Layered Grief and Dyadic Work, (2) Death Discomfort, (3) Sculpting Developmental Understanding, (4) “Sitting in the Fire/Rain,” and (5) Weight of the Work. The identified themes and shared experiences that emerged from this study provide vital information for the infant mental health community in treating grief with families and children. Resources, techniques, and approaches identified in this research will be shared.


P-369: Evolution of Group-Based Perinatal Mental Health Care During COVID-19

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Introduction/Aims: The emergence and prolonged course of the COVID-19 pandemic heightened stress for many pregnant and parenting individuals. Mental health concerns increased dramatically in response to social isolation, reduced access to care, and psychosocial stressors including job loss, financial strain, and school closures. The Healthy Expectations Program provides group-based perinatal mental health services and psychiatric care to treat Perinatal Mood and Anxiety Disorders (PMADs). Healthy Expectations rapidly transitioned to telehealth services in response to COVID-19 to address the growing need for care while mitigating the risk of disease transmission. This study examines:

1.) Participant demographics, enrollment, and completion rates pre- and post-pandemic onset
2.) Scores on the Edinburgh Postnatal Depression Scale pre- and post-pandemic onset
3.) Scores on the Generalized Anxiety Disorder-7 post-pandemic onset

Method/Results: This study was conducted at a tertiary care pediatric hospital in the Mountain West region of the United States. The sample included 87 participant dyads in the Mother-Infant Therapy group (MIT-G) between March 2019 and August 2022. Descriptive and inferential statistical analyses compared group characteristics and outcomes pre- and post-pandemic onset. Results indicate similar participant demographics over time, though the program served more participants with public insurance and fewer individuals of color during the pandemic. Rates of 12-week group completion via telehealth, EPDS, and GAD-7 scores showed significant improvement during COVID-19.

Conclusions: Group-based perinatal mental health services via telehealth offered valuable care during the COVID-19 public health crisis. Participants reported significant improvements in PMAD symptomatology and completed MIT-G at higher rates when offered virtually. Telehealth is a promising care adaptation for some pregnant and parenting individuals facing psychosocial stressors and may reduce barriers to care. Continued evaluation is needed to better understand how to improve access to care for individuals of color facing complex challenges related to longstanding systemic inequities rooted in structural racism.
P-259: Who do mindfulness interventions work for?: Examining early childhood teachers' differential responsiveness to CHIME

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Introduction:
Addressing the current crisis of early childhood (EC) teacher turnover is essential for supporting the development of young children, who are especially vulnerable to poor quality of care (Horm et al., 2016). Teacher wellbeing has been linked to both intention to leave (Viac & Fraser, 2020) and students’ learning and development (Smith & Lawrence, 2019). Mindfulness-based interventions have emerged as a promising approach for reducing teacher stress and burnout (Embse et al., 2019). It is unknown, however, whether responsiveness to these types of interventions may differ based on individual EC teachers’ baseline characteristics.

Aim:
The current study aims to investigate moderators of intervention responsiveness by examining whether the impact of an eight-week compassion-based mindfulness intervention on mental wellbeing differs for EC teachers with differing levels of job stress.

Method:
Approximately 87 EC teachers completed online surveys including demographics, the Warwick-Edinburg Well-Being Scale, the Child Care Worker Job Stress Inventory, and the Effort-Reward Imbalance Scale at both pre and post intervention during the COVID-19 pandemic. Preliminary analyses revealed that mental wellbeing was significantly correlated with both effort-reward imbalance ($r = .341$) and job stress ($r = .243$).

Results:
Previous work with the current intervention offered preliminary evidence that participation in the mindfulness compassion-based program enhanced early childhood teachers’ wellbeing (Hatton-Bowers et al., 2022). We aim to replicate and extend these findings in an independent sample and use moderation analyses to answer our research questions.

Conclusion:
This study will contribute to our understanding of mindfulness intervention research by allowing us to identify EC teachers who might benefit the most from this intervention.
P-300: Infancy to 8: How Early Maternal Mental Health, Reminiscing and Language Shape Children’s Mental Health

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INTRODUCTION
The relationship between maternal mental health and child mental health is well established. What modifiable mechanisms might mediate the association between early maternal depression symptoms and later child mental health outcomes? Parents and children talk about past events dozens of times every day from a young age. This practice, known as reminiscing, has been linked with child emotion, language, memory, and mental health outcomes.

AIMS
The aim of this study was to investigate whether an association between maternal depression symptoms in infancy and later child mental health at age eight was mediated through mother-child reminiscing and children’s language development.

MATERIALS AND METHODS
Data was drawn from a large longitudinal cohort study ‘Growing Up in New Zealand’ (www.growingup.co.nz). Participants were 1234 children and their mothers. Reminiscing conversations were recorded in the home and coded for maternal elaboration quality, maternal emotion resolution quality and child emotion resolution quality. Maternal depression symptoms were reported in child infancy at 9 months post-partum, and child self-reported depression, anxiety, and mother reported internalising and externalising symptoms were measured at age 8. We conducted multiple regression models to clarify related covarying demographic variables. A series of serial mediation models supported the mediating effects of reminiscing and child language development on the relationship between maternal depression symptoms at 9 months, and child mental health outcomes at age 8.

CONCLUSIONS
Our findings demonstrate an indirect pathway of maternal depression to child depression and anxiety, and externalising symptoms through maternal elaboration, and child language ability. Not only do these findings provide novel information regarding the mechanism of transmission of mental health, but it provides an opportunity for the prevention of transmission through the modification of parent-child reminiscing.
P-088: An Exploration of Gender Differences in Parent Socialization Goals and Values

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Introduction: Studies have shown that parenting values predict parenting behavior and styles (Pearson & Rao, 2003). Importantly, parenting styles and behavior contribute meaningfully to variation in child socioemotional and behavioral outcomes (Dooley & Stewart, 2006). While some studies have investigated cultural variation in parenting values by race and ethnicity (e.g., Richman & Mandara, 2013), fewer studies have examined how parenting values vary by parent or child gender.

Aim of the Study: The aim of the present study is to investigate whether socialization values and goals vary meaningfully as a function of parent or child gender.

Materials and Methods: Data from 269 parents (71.4% female) of children ages 2-5 (inclusive, 44.2% female) in the US and UK were collected via online survey. The majority of parents (68.0%) identified as non-Latino/a White. Parents ranked 12 socialization goals/values in terms of their relative importance.

Conclusions: Socialization goal/value ranking did not vary significantly by child gender. However, significant differences emerged in rankings based on parent gender. Male parents rated “honoring family” and “obeying parents and elders” significantly higher than female parents (p values < .01), while female parents rated “helping others, being kind” and “maintaining close family relations” significantly higher than male parents (p = .01 and p < .05, respectively). Given associations between parenting values and behavior, parenting interventions should be mindful of these variations in meeting parents where they are.

References
P-242: Parent perspectives on virtual early intervention services provided during the pandemic

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In-person early intervention services were dramatically disrupted by the COVID-19 pandemic. Virtual Home Visits (VHV) have been used successfully to provide Early Intervention (EI) for many years, but adoption before the pandemic was slow (Kelso, Fiechtl, Olsen, & Rule, 2009). The aim of the current study was to understand the experience of parents receiving early intervention services virtually during pandemic shutdowns.

Online surveys were emailed to parents from all early intervention programs across a largely rural state located in the USA. Responses (N=750) were completed in Spanish (5%) and English. Child age at time of services ranged from 0-36 months. Likert scale and open-ended questions asked about services received, satisfaction, and preferences. Some families received virtual services for two years providing sufficient interaction with VHV to evaluate whether delivery of services match family preferences.

Results indicate that while families prefer face-to-face visits, they felt comfortable using the strategies learned during VHV. In addition, many saw value in virtual visits and were willing to continue certain services virtually. However, t-test analyses highlight that lower income families face technological disparities when trying to access virtual services. Follow up focus group data has been collected and is currently being analyzed for themes related to child and family outcomes related to services received. Additional survey information is also currently being collected from programs and will be used to further probe whether family satisfaction and service availability was related to the program’s available to quickly pivot to virtual services.

Implications will provide insights and strategies for programs to support family engagement in virtual services and practical tips for programs considering adding, or maintaining, virtual offerings. Results will help EI programs create a menu of service delivery options to match diverse family preferences and better serve families.
P-334: The premature baby’s life as they become a subject (Kangaroo Experience)

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Introduction:

Parents of premature newborns experience scenarios to which they were not prepared for and feelings of fear and anxiety arise. The Word Cloud is a method that exposes, in an intuitive way, the words and expressions that emerged in a given scenario experienced by parents. By identifying the words most frequently found in hospital settings, it is possible to identify the most prevalent emotions and optimize therapeutic resources aimed at recovering the health and well-being of that family.

Aim of the study:

To create, through Word Clouds a synthesis of the feelings expressed by the parents of PTNBs, both at the admission of the newborn and at discharge, and to analyze the effectiveness and importance of the UCINCa in the process of reducing sequelae, emotional ones, related to prematurity and also to evaluate which feeling rests on the minds of the parents after a certain time of the experience.

Material and Methods:

A retrospective, cross-sectional study, which evaluated the medical records of newborns admitted to the UCINCa from April 2019 to October 2019 in which 26 medical records were evaluated, from which words were collected by asking parents what they were feeling upon arrival at the UCINCa and upon discharge from the Unit, the information was used to create Word Clouds. In March 2022, the parents of this research were asked to send a short audio answering to a script sent to them to assess the feelings they had regarding the experience they went through after much time passed.

Conclusion:

The words that prevailed the most in the memories, years later are hope and gratitude, directed to the support network. It is of fundamental importance that policies in perinatal health and in the childhood area bear in mind a care strategy and through planning of actions while creating the aforementioned networks.
P-117: Empowering Parents, Empowering Communities: A pilot trials of peer-led parenting program in Japan

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Introduction
Empowering Parents, Empowering Communities (EPEC) Being a Parent (BAP) is a peer-led, community-based, group-format parenting program for parents of children aged 2–11 years, delivered via eight 2-h sessions to small groups.

Aims of the study
This pilot trial was designed to explore the feasibility and acceptability of the EPEC BAP program in the Japanese context and to examine the preliminary effects of this program.

Materials and Methods
This study adopted a quasi-experimental mix-method design without a control group. Six parents were invited to the program. Parental self-report questionnaires were administered before the first session (T1), after the final session (T2), and 1 month after the final session (T3). The outcome measures were (1) program acceptability and satisfaction, (2) concerns about child and parenting goals, (3) parenting style, (4) parental mental health, and (5) child’s social-emotional and behavioral problems. Furthermore, a semi structured interview was conducted at T3. This study was approved by the Ethics Committee of the researchers’ institution, and written consent was obtained from all enrolled parents.

Results
The participants were all mothers, and the mean age of their children was 5.7 years (range: 2–7 years). All participants completed the program (completion rate = 100%), and the participants reported high levels of overall satisfaction with the program (mean score: 3.7 of 4.0). After the intervention, parenting stress about role restriction and isolation significantly decreased (p < .05). The parents reported that they felt relieved in their peer relationships, could reflect on their selves as parents, and understood positive parenting through the program.

Conclusions
According to the findings of this study, the EPEC BAP program is a feasible and acceptable intervention for Japanese parents, which could enhance positive parenting and parental mental wellbeing. However, a larger-scale trial that considers more deeply the cultural adaptability of the program must be conducted.
P-050: Parenting and Family Reunification Experiences of Pregnant and Postpartum Women with OUD during COVID-19

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Introduction: COVID-19 has put pregnant and postpartum women with opioid use disorders (OUD) and their young children in extremely vulnerable situations globally. However, no studies have explored the difficulties of this population regarding daily life, parenting, and child welfare experiences. Therefore, this qualitative study intends to fill the gap by exploring perceived life challenges through analyzing qualitative interview data from participants enrolled in an RCT of a therapeutic parenting intervention in the U.S.

Methods: Thirty-five participants were interviewed between April 2020 and March 2021. Semi-structured interviews were conducted remotely, recorded, and transcribed. They included questions about overall personal experiences during the pandemic and interactions with child welfare. After reading through the first fifteen transcripts and consultation with the PI, an initial codebook was developed. Subsequently, two coders conducted line-by-line and consensus coding using NVivo 12. Initial codes were grouped into larger themes and subthemes.

Results: Four main themes were identified. First, nearly all participants described mixed experiences with receiving remote health care and treatment such as prenatal care and addiction recovery services. While most participants enjoyed its flexibility and convenience, many shared feelings of lacking real human connection. Second, many participants reported struggling family life/parenting experiences, especially concerns over COVID-19’s impact on children’s safety and long-term development. Third, many participants shared negative experiences with child welfare such as lack of communication and non-physical visitation with young children in state custody. Finally, despite ongoing difficulties, many participants expressed positive attitudes amidst uncertainty.

Conclusions: This qualitative study provides valuable perspectives of unique parenting and childrearing experiences during COVID-19 from pregnant and postpartum women with OUD. Future research should continue investigating the long-term impact of limited interactions and separations between mothers and young children due to COVID-19, and advocate for improved practice and policy for this population within health and child welfare systems.
P-320: Predicting perinatal social support: A systematic review and meta-analysis of preconception antecedents

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INTRODUCTION: Social support is undeniably beneficial during the perinatal period for parents and their children. Unfortunately, many parents globally continue to report insufficient access to social support. The factors that contribute to the availability and perceptions of support are likely to exist before parenthood. Identifying these factors may help in the preparation and strengthening of social support for expecting parents. AIM: We take a lifecourse approach to examining factors before conception that predict parents’ later perceptions of social support during pregnancy and the first 18 months postpartum. METHOD: We searched the electronic databases PsycINFO, MEDLINE Complete, CINAHL, Embase, PsycExtra and Open Dissertations for quantitative peer-reviewed and grey literature that reported an association between perinatal social support and any preconception factor (including retrospective measures). From 9,850 articles, we identified 143 unique studies for inclusion, from 35 countries ranging from low to high income. CONCLUSIONS: Preconception factors commonly associated with perinatal social support include pregnancy intention, parity, use of assisted reproductive technology, history of miscarriage, parents’ adverse childhood experiences, parents’ migration history, and parents’ substance use histories. However, most studies relied on retrospective measures and a majority of studies did not include fathers. Furthermore, few studies explicitly aimed to examine the relationship between preconception experiences and perinatal social support. More high-quality prospective evidence is required to inform targets for timely interventions which seek to promote parents’ meaningful experience of social support. Meta-analytic evidence will be presented.
P-228: Evaluating the impact of Watch, Wait and Wonder (WWW®) on the parent-infant relationship.

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INTRODUCTION:

We are a small IMH team (3FTE shared between 5 clinicians) in a busy, metropolitan New Zealand ICAMHS. We have collaborative relationships with primary referrers: maternal mental health, child development and home visiting services. Team members have completed or are completing training in Watch, Wait and Wonder (WWW®); a child-led dyadic psychotherapeutic approach which is a core component of treatments offered. Dr Denise Guy provides general IMH supervision and specific training and supervision with WWW®.

AIM:

The aim of this study was to look at the impact of the WWW® intervention on the quality of the parent-infant relationship - as measured by Axis II from DC:0-3R and Axis II DC: 0-5.

METHOD:

Our team took a random selection of cases treated with WWW® between 2012-2018. One team member (not the therapist) and our supervisor independently reviewed assessment information and a section of baseline film of the parent-infant interaction. This information was then used to classify the relationship using the DC:0-3R Relationship Problems Checklist (RPCL) and Parent-Infant Relationship Global Assessment Scale (PIR-GAS) and DC: 0-5 Axis II coding systems. The ratings were compared and, if the categories differed, a discussion took place to decide on an agreed classification. This process was then repeated with a section of film from the end of treatment.

RESULTS:

All of the parent-infant dyads received pre-treatment ratings classifications that fell between 20-55 on the PIR-GAS (Severely Disordered to Distressed categories). After intervention, all dyads improved at least two classification codes and the entire group now had ratings above 50 (between Distressed and Adapted classifications).

CONCLUSION:

This study, although involving a small number of cases, has demonstrated that the WWW® Intervention was effective in improving the parent-infant relationship and this change could be measured using the RPCL and PIR-GAS rating scales.
P-338: Multilevel Impacts of the COVID-19 Pandemic: A Bioecological Systems Perspective of Parent and Child Experiences

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Introduction: The coronavirus (COVID-19) pandemic and associated public health restrictions created unprecedented challenges for parents and their young dependent children. While psycho-social impacts of natural disasters on families are well studied, a typology of parent specific concerns in the COVID-19 context was yet to be articulated.

Aims of the study: Using a bioecological systems framework, we adopted a mixed-methods research design to i) examine parents’ core concerns about the impacts of the pandemic on themselves and their children and ii) test significant differences in the reporting of concern by mothers compared with fathers.

Methods: Data were drawn from the Australian Temperament Project Generation 3 (ATPG3) study, a prospective study of children born to a 39-year population-based cohort. During enforced COVID-19 lockdown restrictions between May to September 2020, ATPG3 parents (n=516) were surveyed about their own and their child/ren’s functioning in the context of the pandemic. Parents’ free-text responses about their concerns for themselves and their child/ren were the subject of qualitative content analysis (n=192).

Conclusions: Parents reported far-reaching impacts for themselves and their children across multiple bioecological systems. Core concerns were for emotional rather than physical health, specifically, for parents this was represented by increased levels of anxiety and stress, and for children, these impacts were notable from a developmental perspective. Parenting related stress was gendered, with significantly greater concerns expressed by mothers in comparison to fathers. We comment on the nature of parent-reported family stress, with reference to modifiable risk factors and consideration of future public health intervention efforts.
P-012: Community-based behavioural infant sleep interventions: a systematic review of theoretical underpinnings and behaviour change techniques

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Introduction: Reviews have indicated that community-based interventions targeting infant sleep can be effective. However, the literature is less clear as to the theoretical underpinnings and active components of infant sleep interventions, whether these are related to parental measures, such as acceptability, adherence, satisfaction and mood, and whether certain characteristics of interventions are associated with greater effectiveness on sleep measures.

Aim: This review broadly aimed to characterise behavioural infant sleep interventions delivered in a community setting in terms of theoretical underpinnings and behaviour change techniques. Where applicable, this review also aimed to explore associations between meaningful groupings of theory type (e.g., operant conditioning and extinction; attachment theory) and behaviour change techniques and secondary outcomes including parent and infant sleep, parent satisfaction and intervention adherence.

Method: Online databases were searched from inception to October 2022 to identify Randomised Controlled and cluster Randomised Controlled Trials of behavioural interventions delivered in community settings that targeted the prevention or treatment of sleep problems in infants (0-3 years). Using the PRISMA guidelines, records were independently screened by two reviewers and eligible interventions were coded for the presence and type of theoretical underpinnings used. Active components were also coded using a taxonomy for behaviour change techniques. The role of secondary outcomes, such as intervention feasibility and parent satisfaction, were also explored.

Conclusions: This systematic review elucidates the specific components used by behavioural infant sleep interventions and the theories that are drawn upon to inform intervention development. This study concludes with a discussion of how obtained results may aid in the development of community-based infant sleep support, such as the consideration around which behaviour change components to utilise when addressing particular outcomes. Implications for selection of theoretical underpinnings in intervention development on parent outcomes are also explored.
P-027: Antenatal mental health and child outcomes in Singaporean low income mothers

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Introduction:
Antenatal maternal depression contributes significantly to child cognitive and behavioural outcomes. These issues are manifested more acutely in women with low social economic status (SES).

Aim: We aim to evaluate the effect of intensive antenatal intervention on depression and anxiety levels in the mothers, and neurocognitive development in their infants at 12 months.

Material and Methods: Women attending obstetric clinics at the National University Hospital, Singapore between 2018 and 2021 were screened for possible depression using the EPDS. Those scoring 13 or more, low income and less than 28 weeks’ pregnant were invited to participate in an intervention programme which comprised intensive case management, CBT and OT-informed interventions, and home visits, prior to delivery. Outcome measures for the women included the EPDS, MADRS, STAI and GAF. The children were assessed using the Bayley scales for Infant-Toddler Social Emotional Development and the Child Behaviour Checklist.

Conclusions: 62 women were recruited, of whom 11 children completed measures at 12 months. The mothers' measures of mental health all improved after the intervention. Children of these women showed significantly better cognitive skills and fewer internalising behaviours at age 1. Although these children had more externalising behaviours, the improvements in attention, aggression, anxiety and depression were marked, in the average ranges, and were comparable to the general Singaporean population.
P-278: Early identification of adverse childhood experiences in a clinically referred paediatric population

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Introduction: Experiences shape the developing brain in early childhood with early exposure to adverse childhood experiences (ACEs) having a more significant impact on long term health than ACEs experienced later in life. A lower cut-off point for toxic stress risk in young children of two or more ACEs has thus been suggested due to the increased risk of further ACE exposure across a young child’s lifespan.

Aim of the study: The study aim was to determine the ACE burden in clinically referred young children and to investigate whether children with two or more ACEs have greater socioemotional difficulties than those with less than two ACEs.

Material and Methods: 56 children between 0-5 years and their caregivers were recruited at the Zero to Four Child and Youth Mental Health Service (0-4 CYMHS), Children’s Health Queensland over a 12-month period to October 2022. Caregivers responded to a 15-minute survey on their child’s ACEs experiences and measures of theirs and their child’s socioemotional wellbeing.

Results: Caregiver mental health conditions (53%), caregiver loss or separation (36%) and domestic violence (31%) were the most commonly experienced ACEs. Almost half of the population (47%) had experienced more than two ACEs with 24% of children accumulating four or more ACEs. Poorer levels of child global health (M=9.50, SD=1.79, t(52)=2.19, p=.033), and positive affect (M=14.76, SD=2.37, U=245.50, p=.033), measured by the PROMIS Early Childhood, were identified in the high ACEs group.

Conclusions: ACEs experienced by young children that impact the caregiver-child attachment relationship can be particularly damaging for a child’s long-term health, as it diminishes the buffering nature of this relationship. Early identification of ACEs is critical to limit the development of toxic stress in young children and prevent further accumulation across their lifespan. Increased efforts to screen and support families who have experienced multiple adversities are required.
P-219: Bridging the gap: Holding the baby in mind in perinatal mental health services

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INTRODUCTION Perinatal mental health (PMH) difficulties are those that occur during pregnancy or in the first year following the birth of a child. Specialist PMH services provide care and treatment for women with complex mental health needs and, increasingly, support the developing relationship between parents and babies. CNWL PMH Service provides treatments across five large London boroughs, and includes a national 10-bedded mother and baby unit. Local teams work with multiple agencies, including social services, adult mental health, and maternity teams.

PURPOSE New staff joining CNWL PMH often have a background in adult mental health in which infant development is not included as part of any core training. To address this gap and to promote awareness of infant well being and of the long-term impact of poor infant mental health, as well to enhance inter-agency working, we developed a training programme to help educate the perinatal taskforce and the wider system.

DESCRIPTION We piloted a Masterclass teaching programme series on Perinatal and Infant Mental Health for local children’s social services practitioners across the borough. The programme includes sessions delivered by internal and guest speakers’ specialist in their field, sessions are held weekly, virtually, recorded and available to CNWL perinatal service and the wider trust staff. Over 150 staff have attended these sessions to date, many joining sessions each week. We have also delivered targeted specialist training to health visitors, midwives and social workers as well as consultation spaces to help facilitate inter-disciplinary learning, psychoeducation and skills in infant mental health and related interventions.

CONCLUSIONS PMH offer a unique and crucial opportunity to bridge the gap between adult and infant mental health. Training and consultation facilitates inter-disciplinary team working and enhances the workforce’s ability to safeguard infants and hold the baby in mind.
P-116: Adverse Childhood Experiences and the Motherhood Constellation in Mothers with Newborns.

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Introduction
The transition to motherhood is a major life event for most mothers. Daniel Stern (1995) described the maternal transition phase as “motherhood constellation”, a unique mindset held by the mother prior to the infant’s arrival and sustained after birth. This unique mindset places the mother’s main focus on her new identity as a mother. The constellation consists of four main themes that preoccupy the mother’s thoughts. Although all mothers experience this constellation to some extent, we expect the presence of these themes to be related to mother’s adverse childhood experiences. Mothers might adapt less easily to the challenges of motherhood when they had adverse experiences in their own childhood.

Aim of the study
The main objective of this study is to explore the association between adverse experiences and the four motherhood constellation themes.

Material and Methods
Participants were 997 mothers (mean age 30.2) of newborns (mean age 11 weeks) that participated in the ‘Baby 2020 Cohort Study’ that was set up in June 2020 in the Netherlands and included mothers of infants born during the first peak and lockdown of the COVID-19 pandemic. Mothers filled in an online survey including several questionnaires about adverse childhood experiences and to which a mother deals with the ‘motherhood constellation’ themes (Van Bakel & Rexwinkel, 2020).

Conclusions
Correlational analyses indicated significant positive correlations between adverse experiences during childhood and the four themes of motherhood constellation. This study is among the first to assess Stern’s (1995) motherhood constellation themes in mothers of newborns in a community based sample. Motherhood constellation is found to be related to maternal ACES, even after controlling for confounding factors. Implications for further research and to prevention and psychological intervention in relation to new motherhood will be presented.
P-118: Can fathers' parenting experience affect paternal readiness and infant emotional recognition in Japan?

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The father's role is fundamental in assisting the child to acquire a sense of identity in the first years of life (Greenacre, 1957; Loewald, 1951; Mahler & Gosliner, 1955). Thus, the importance of paternity in parenting has been discussed in previous studies. However, it remains unclear whether the fathers' parenting participation changes their mental processes. The purpose of the present study was to examine whether Japanese fathers' parenting experiences affect their paternal readiness and infant emotional recognition. We investigated two groups of Japanese adult males with children (fathers) and adult males without children (not fathers). The length of time spent and details of parenting were recorded as parenting experiences. Paternal readiness was measured from replies to questionnaires on the Readiness of Parenthood Scale in Japanese (Sasaki, 2007). We scored the results of the Readiness of Parenthood Scale using two sub-scales: affection toward infants and parenting drive. In addition, a Japanese version of the Infant Facial Expression of Emotions from Looking at Pictures (JIFP; Inoue et al., 1990) was used to investigate infant emotional recognition by fathers. The response words obtained from JIFP must show the bilateral relationship in the caregiver-child interaction scene (Nagaya, 2009). The response words were classified into seven categories based on the bilateral relationship: Deviated Responses, Object Seeking, Satisfaction/Frustration of Needs, Basic Emotions, Physiological State, Attentive/Concentrated States, and Simple Description of the Picture (Nagaya, 2009). The study was an exploratory analysis of the psychological changes in fathers through a comparison between the two groups of participants. We also studied the relationship between their psychological changes and the length of time spent or the details of parenting. In particular, we examined whether the fathers' paternal readiness and a variety of infant emotional recognition were enhanced by parenting.
P-075: Infant-Directed Speech to preterm infants: the influence of severe prematurity and maternal depressive symptoms.

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Introduction. Severe preterm birth represents a risk factor for maternal perinatal depression and the quality of early dyadic interactions in the first year postpartum (Agostini et al., 2014; Neri et al., 2015). However, only few studies explored the effect of preterm condition on interactive exchanges, including maternal verbal input (Herrera et al., 2004; Suttora & Salerni, 2011), and no one considered the role played by severity of prematurity. Aim of the study. The study aimed to explore the influence of prematurity and maternal depression on functional and morpho-syntactic features of maternal Infant-Directed Speech, comparing dyads of Extremely Low Birth Weight (ELBW; <1000 gr.), Very Low Birth Weight (VLBW; 1000-1500 gr) and Full-Term (FT) babies. Material and Methods. Sixty mother-infant dyads (15 ELBW, 15 VLBW, 30 FT) were recruited and participated in a 5 min free interaction session at both 3 and 9 months postpartum. Lexical, syntactic, and functional features of maternal input during the interaction were analyzed using the CHILDES software. All mothers completed Edinburgh Postnatal Depression Scale (Cox et al., 1987) to assess depressive symptoms. At 3 months, maternal IDS in high-risk condition (ELBW preterm condition and depression) was characterized by a lower frequency of affect-salient speech and a higher proportion of information-salient speech and questions. At 9 months, IDS of depressed mothers was characterized by a lower verbosity and a higher frequency of attention-getter utterances. Conclusions. Despite preliminary, these findings highlight that maternal IDS might be influenced by both the presence of depressive symptoms and severe prematurity. Moreover, IDS features seemed to change during the first year postpartum, suggesting the need to monitor the influence of severity of preterm birth and its interaction with postnatal depression on the features of maternal input directed to the infant.
P-002: Infant and preschool childhood screen time and psychopathology or parental concerns in a Portuguese Sample

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Introduction
Studies have been linking early exposure to digital media to increased externalizing behaviors, attention problems, worse cognitive performance and language development.

Aim of the study
Clarify and characterize the habits of screen time exposure in a sample of infants and preschoolers. Assess the proportion of early childhood screen excessive exposure. determine if there is a relationship between the presence of psychopathology, parental concerns (behavior, sleep, food habits, obesity) and screen time exposure habits.

Material and Methods
A cross-sectional cohort study of 38 infants and preschoolers in a Child and Adolescent Psychiatric outpatient unit and children followed exclusively in Primary Health Care in the same geographic area was carried out. The information was collected from a self-report questionnaire filled by the caregiver between October 1st, 2018, and June 30th, 2019. Screen time was analyzed and organized in two groups: the H group (screen time higher than recommended) and R group (within the recommended), according to American Academy of Pediatrics screen time recommendations.

Results and Conclusions
Only 45% of the total fulfilled the recommendations regarding screen exposure. The need for a Child and Adolescent Psychiatry follow-up consultation and behavior concerns during early childhood are significantly associated with screen time, with a greater proportion within the group with higher daily exposure than recommended (the H group) (p=0,006 and p=0,032 respectively). There’s still a tendency to have a higher percentage of overweight/obesity, sleep and food-related concerns in the H group.

Overexposure to digital media is an increasingly present reality, making it important to set limits early. It is crucial to promote community literacy in this area so that screen use is informed, balanced and that there is discussion and communication about the possible associated risk.
P-068: Socio-emotional development among infants at risk of CP: The mediating role of postnatal depressive symptoms

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INTRODUCTION: Cerebral Palsy (CP) is the most common physical disability in childhood and affect motor and other developmental aspects. Recently, there has been a focus on early identification of CP identifying infants at high risk before six month corrected age. Little is known about the socio-emotional development of infants at high risk of CP. Early socio-emotional development may be directly affected by adverse perinatal events and indirectly by parental distress. Socio-emotional difficulties can lead to impairments in later social and psychological functioning and pose a risk for psychopathology.

AIM of the STUDY: The present ongoing study examines the prevalence of early socio-emotional difficulties among infants at high risk of CP and the possible mediating role of parental postnatal depressive symptoms.

MATERIAL and METHODS: Participants are infants at high risk of CP and their parents that are part of a longitudinal study. High risk of CP is defined as suspected brain lesion based on medical assessment and/or absence of fidgety movements at 9–17 weeks corrected age (CA). Infants at high risk are compared to a control group of infants with low neurological risk.

Social-emotional behavior is measured with the Ages and Stages: Social-Emotional-2 questionnaire (ASQ:SE-2), a parent-completed 26-items questionnaire assessing infant socio-emotional behaviors. Parents fill out the questionnaire at 15 weeks infant CA.

Parental postnatal depressive symptoms are measured with Edinburgh Postnatal Depression Scale (EPDS), a 10-item questionnaire assessing postnatal depressive symptoms during the past two weeks. Both parents fill out the questionnaire at 15 weeks infant CA.

CONCLUSIONS: Prevalence of adverse social-emotional behavioral difficulties among 30 high-risk infants will be compared to the control group of 30 low-risk infants. A regression model investigating the association between CP risk and socio-emotional development with paternal and maternal postnatal depressive symptoms as possible mediators will be presented.
P-096: Mentalizing relationships: Associations between attachment, parental reflective functioning, and sensitivity in parents of preschoolers

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Introduction:
Parents with high levels of parental reflective functioning (PRF) are able to reflect upon their child’s mental experiences and give meaning to their behaviour. Previous studies found PRF to be affected by parents’ attachment representations and in turn to affect parenting behaviour. Still, most studies in the field are limited to mother-child dyads and/or parents of infants.

Aim: We investigated the triangular association between parental attachment, PRF and parental sensitivity in parents of preschoolers combining narrative and observational methods. These methodological advantages also make it possible to further validate the Parental Reflective Functioning Questionnaire (PRFQ, Luyten et al., 2017) as an economic measure of PRF.

Methods: 115 parents (59 mothers) were administered the Adult Attachment Interview (George et al., 1985) to assess parental attachment representations. PRF was assessed via the PRFQ (Luyten et al., 2007). We further observed parents and their preschool-aged children during a semi-structured interaction and coded parental sensitivity using the NICHD scales.

Results: We found significant relations between attachment representation, PRF and sensitivity. More precisely, parents classified as dismissing reported less interest and curiosity in their child’s mental state and showed sensitive behaviour during interaction than those classified as secure (and preoccupied). As predicted, PRF was also associated with parental sensitivity. Interestingly, as dismissing attachment status appeared to be crucial for PRF as well as parental sensitivity in our sample, we tested a mediational model and found parents’ interest and curiosity to partially mediate the relationship between dismissing attachment status and parental sensitivity (i.e., supportive presence).

Conclusion: These findings enlarge our understanding about intergenerational effects of parenting and specifically highlight the role of dismissing attachment in PRF as well as parental sensitivity. They further suggest that promoting parents’ interest and curiosity in child’s mental state could be of special importance to parenting interventions.
P-097: From good providers to sensitive interaction partners: How paternal stress and involvement affect fathers' sensitivity

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Introduction: The paternal role appears to be subject to an ongoing evolution. Today, most modern societies agree that fathers' involvement in childrearing is important to family functioning and it is widely recognized that the quality of the father-child relationship impacts children’s socio-emotional development. However, less is known about specific factors on the father's side, i.e. father involvement and parenting stress, that may affect his capability of being a sensitive interaction partner to his child.

Aim: The aim of the present study was to examine father involvement, parenting stress as determinants of paternal sensitivity.

Methods: Current data are part of two studies examining sensitivity in fathers. Samples consisted of 40 fathers and their 0-2 aged children (study 1) and 60 fathers and their 5-6 year old children (study 2). Paternal sensitivity was assessed in a semi-structured videotaped observation and rated using a set of scales. Parenting stress and different aspects of father involvement (fathers’ roles and responsibilities in parenting, fathers’ time investments, etc.) were assessed using questionnaires. Data collection is completed while analyses are still in progress.

Results: Preliminary findings indicate that fathers reporting higher stress levels show less positive affect towards their infants during interaction. In the preschool sample, self-reported parenting stress was not associated with paternal sensitivity, however, fathers’ attitudes regarding their parental role was associated with increased sensitivity during the father-child interaction. Further analyses will investigate these associations in more detail and additionally focus on possible effects of child gender.

Conclusion: These findings enlarge our understanding regarding determinants of sensitive fathering. Implications for adequate support will be derived.
P-327: Preschool teachers’ beliefs, emotions, practices, and perceived intervention needs toward anxious withdrawal during early childhood

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Introduction: Anxious withdrawal place preschoolers at increased risk of experiencing not only anxiety and depression, but also peer and academic difficulties (Rubin & Chronis-Tuscano, 2021). Research has shown that positive teacher-child relationships play a protective role against these negative socioemotional outcomes (Kalutskaya et al., 2015).

Aim of the study: Due to existing gaps in literature, this study aimed to understand in-depth preschool teachers’ beliefs, emotions, practices, and perceived intervention needs toward anxious withdrawal in the classroom.

Material and methods: Thirty Portuguese preschool teachers of children aged 3 to 5 years were interviewed based on a semi-structured interview guide.

Conclusions: The thematic analysis revealed that most preschool teachers recognized that anxious withdrawal may have negative social consequences and may be attributed to internal and unintentional factors, which may be modified through collaborative actions between key socialization agents (i.e., parents and preschool teachers). However, participants reported mixed reactions (e.g., worry, guilt, frustration, tranquility, empathy) toward this type of social behavior in the classroom. Most preschool teachers highlighted the importance of establishing a positive teacher-child relationship and inclusive classroom climate for anxious-withdrawn children. However, preschool teachers’ practices toward this type of social behaviors were quite heterogeneous, ranging from passive approaches (e.g., giving time or waiting for child’s social approach) to indirect (e.g., modelling, organizational support) or active (e.g., strecht and scaffold, emotion coaching) interventions. Participants acknowledged the need of evidence-based professional development interventions to enhance knowledge toward anxious withdrawal, provide opportunities for guided practice, and promote self-awareness.

References
P-133: The use of videos in analytical parent-infant-therapy

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analytical parent-infant therapy, video, defense, neurotic conflict

Video-based observations of parent-child interactions are increasingly used in clinical practice across a wide range of applications of diagnosis, intervention and evaluation. A large number of studies indicate that the use of video is both helpful and useful. However, how video might be incorporated in the analytic setting remains sparsely discussed. From a psychoanalytic perspective, the use of video is often opposed because it may limit the therapist's perception, fantasies, and emotional space. In this poster, besides the risks, the possibilities that family video could offer to analytic parent-infant therapy will be highlighted. A study in which the use of video recordings were used in an attempt to identify and analyze the central neurotic conflict theme that is unconsciously reenacted in the current interaction between parent and child will be discussed in more detail. An attempt was also made to hypothesize about the consequences and impact of the psychodynamic conflicts on the baby and the development of specific defense strategies. Instruments from the DC:0-5, OPD-2, and the CARE -Index were used to evaluate this video-based study of parent-child interaction.

Video analysis could provide detailed information in terms of the "binocular view" regarding the specific dyadic dynamics that take place in parent-infant therapy. Moreover, video use could be considered as "the third party" with a triangulating function in parent-infant therapy. Thus, the use of videos could provide specific information for diagnosis, planning, and follow-up in parent-infant therapy.
P-328: Preschool teachers’ beliefs, emotions, and tolerance toward social withdrawal and aggression: Direct and indirect associations

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Introduction: Preschool teachers function as both caregivers and educators, providing nurturance and learning that may impact children’s socioemotional outcomes (Coplan et al., 2015). The behavioral responses of preschool teachers may be directly and indirectly (through emotional reactions) influenced by their beliefs toward children’s social behaviors (Coplan et al., 2011).

Aim of the study: This study aimed to examine the direct and indirect (through negative emotions, like worry and anger) associations between preschool teachers’ beliefs (anticipated consequences and attributions) and tolerance toward socially withdrawn and aggression.

Material and methods: One hundred and seven Portuguese preschool teachers completed the Child Behaviors Vignettes (Coplan et al., 2011).

Conclusions: Lower perceived intentionality was indirectly (b = -0.21, SE = 0.07 [-0.36; -0.07]) associated with lower tolerance toward shy-withdrawn behaviors, through increased worry (F2,104 = 4.55*, R2 = .08). Higher perceived negative peer (b = -0.15, SE = 0.05 [-0.25; -0.06]) and academic (b = 0.14, SE = 0.06 [0.05; 0.27]) consequences were indirectly associated with lower tolerance toward unsociable-withdrawn behaviors through increased worry (F2,104 = 14.93***, R2 = .22, and F2,104 = 16.53***, R2 = .24). Higher perceived negative peer consequences were both directly and indirectly (through increased worry (b = -0.05, SE = 0.03 [-0.11; -0.01], and b = -0.03, SE = 0.02 [-0.09; -0.01]) associated with lower tolerance toward physically (F2,104 = 9.95***, R2 = .16) and relationally aggressive (F2,104 = 6.58***, R2 = .11) behaviors.

References:
P-073: Preterm infant negative affectivity: the relation with severity of prematurity, parental depression and dyadic adjustment

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Introduction: Preterm birth, especially if severe, could negatively influence parents’ perception of their baby. Indeed, parents often report a difficult temperament, with high level of negative affectivity (NA). When parental perception of infant NA was investigated, most studies focused on mothers, and possible influences of their affective states. Conversely, paternal perceptions are less considered as far as the role of fathers’ or family variables.

Aim of the study: to explore the parental perceptions of preterm infant NA in a family perspective, considering the possible contributing factor of birth weight (Extremely Low Birth Weight infants-ELBW, < 1000 gr.; Very Low Birth Weight-VLBW, 1000-1500 gr.), parental role (mothers; fathers), depressive symptoms, and couple satisfaction.

Material and Methods: The sample included 42 preterm infants (16 ELBW, 26 VLBW) and their parents (42 mothers, 42 fathers). At 12 months (corrected age), parents completed the Infant Behavior Questionnaire-Revised (IBQ-R): specifically, we considered NA factor, including Sadness, Distress to limitations, Fear, Falling reactivity subscales. The Edinburgh Postnatal Depression Scale (EPDS) and Dyadic Adjustment Scale (DAS) were also administered to investigate parental depressive symptoms and quality of parental relationship, respectively.

Results: Analyses showed higher levels of NA in VLBW infants compared to ELBW ones (p<.001); conversely, no differences between mothers and fathers emerged. Hierarchical regression showed that infant NA was predicted: in step 1 by VLBW condition (β =.36; p <.001); in step 2 by own EPDS scores and their partners’ ones (β =.21, p <.05; β =.36, p <.005), even controlling for birth weight; in step 3 DAS scores did not show any effect, and only partner’s EPDS effect remained significant (β =.34, p <.005).

Conclusions: Findings showed that, in the context of prematurity, both individual and relational-level risk factors predicted infants’ affective regulation difficulties, suggesting the need for intervention at individual, dyadic, and family level.
P-063: Social support in South-African mothers with hospitalised infants and its role in perinatal mental disorders

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Introduction
Mothers with hospitalised infants represent a group of mothers whose infants face adverse health outcomes. These postnatal mothers living in low- and middle-income countries like South Africa face high levels of socio-economic adversity and violence and are at greater risk of poorer mental health. Social support may have positive effects on mental health and wellbeing of the dyad and may play an integral role in resource-limited settings in Africa.

Aims
To determine association between social support and common perinatal mental disorders (CPMDs) within this cohort of high-risk mothers; and to describe social support needs to inform development of support services.

Materials and Methods
A cross-sectional observational study of hospital-based cohort of mothers with admitted infants under the age of 12 months. A total of 105 participants were enrolled from a public referral hospital in Cape Town serving lower socio-economic communities. The Edinburgh Postnatal Depression Scale and the Generalised Anxiety Disorder 7-item scale were used to determine presence of CPMDs. The Medical Outcome Study Social Support Survey were used to measure social support characteristics. Maternal and infant demographic, psychosocial and clinical information were collected.

Conclusion
Our sample had a prevalence of CPMD of 46.67%. Significant associations (p<0.05) with CPMD were employment status, household income, level of education, current domestic violence, history of maternal childhood abuse, and low social support. Adjusted analyses showed that low social support (p=0.037), current domestic violence (p=0.002), and previous childhood abuse (p=0.005) remained significantly associated. The type of social support most needed was emotional support, followed by affectionate support, then tangible support, and positive (general) social interaction. These results indicate the need for screening and support services for mothers with hospitalised infants. Trauma-informed infant mental health interventions looking at family contexts may have bidirectional effects on mother-infant pair and should form part of social support services.
P-192: A communication skills training for home visitors in a children's program. Case study in Chile

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Introduction: Using home visits to promote child development and caregiving skills in early childhood has not always achieved effective results, due to the complexity involved in working with families living in highly vulnerable settings. Staff training may support home visiting effectiveness. A recently developed toolkit to improve home visitor’s ability to engage in responsive partnerships with caregivers (Home Visiting Applied Research Collaborative, 2020/2022) focuses on specific communication techniques shown to relate to family engagement. The toolkit was developed in English but it is unclear how its use would translate to other languages and cultures.

Aim of the study: Evaluate home visitor use of communication strategies from a toolkit adapted and translated after online training and compare them with an untrained group of home visitors.

Material and Methods: Eight home visitors from a Chilean infant parenting program received virtual training in communication strategies using the toolkit during 10 online weekly sessions during fall 2020. Home visitors conducted virtual visits with families on a weekly basis, practicing the communication techniques reviewed during the training sessions. Virtual visits were filmed and analyzed by the instructor team and used during the training to provide feedback to the home visitors. Videos were collected again six months after training from this group and from a similar group of home visitors who did not participate in the training.

Conclusions: The use of communication strategies increased through training time in all categories. However, 6 months later, use decreased significantly to the level of the comparison group. Home visitors reported that the toolkit helped them focus on their relationship with the caregiver and emphasize the caregiver’s role in supporting their child’s development. This communication toolkit is suitable to use in a Spanish-speaking context, but likely requires ongoing supervision for longer-term implementation.
Introduction: Early childhood anxiety has been a focus of interest in recent years (Whalen et al., 2017). The efficacy of treatment in this age needs empirical investigation (Ghandour et al., 2019). The earlier treatment is initiated the more effective it is, and with longer beneficial consequences (Luby, 2013). Aims: Overarching aim of the study is evaluating effects of short-term play therapy (I-WOTCH) treating anxiety disorders in preschoolers. Specifically, we aim to compare effects of I-WOTCH and Dyadic therapy (Liberman et al., 2006) on children with anxiety. Material and Methods: 80 consecutive referrals to the preschool anxiety clinic at Reichman University. Psychiatric diagnosis made by integration of the childhood version of the schedule for schizophrenia and affective disorders (K-SADS-PL) (Kaufman et al., 2020) and the Preschool Age Psychiatric Assessment (PAPA) (Wichstrøm, 2012). Diagnosis will be made according to the DSM-5 and DC 0-5. Interactions filmed and coded: each five minutes of parent-child, triadic interactions with pre-selected toys: free play, challenging task and parental conflict. Interactions are coded using the Coding Interactive Behavior manual (Feldman, 1998). Narrative descriptions obtained from parents derived from three questions: 1. Describe your child; 2. child’s problems; 3. How therapy helps these problems. Assessment will be made at baseline and then bi-monthly for six months. The study will comprise of three groups: 1. novel short-term symbolization-based play therapy. 2. Dyadic therapy 3. Control (no therapy). Assessment made at baseline, bi-monthly for six months. Outcome measured: symptom reduction, clinical global impression (CGI) (Berk et al., 2008), and parent-child interaction as measured by CIB. Conclusions: Early childhood anxiety is a common and serious problem. There is a significance gap in our knowledge about early treatment and research protocols should give an impetus for minimizing it.
P-135: Associations between maternal wellbeing, child development, smartphone use, and mother-infant interactions: A cross-sectional survey.

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- Introduction: Smartphone use is increasingly prevalent, and emerging evidence suggests that it may have adverse effects on mother-infant relationships in the first 3 years of life. While research suggests that mother-infant responsiveness is reduced in the presence of a smartphone, the mechanisms that influence mothers to use their smartphone have been under-researched.

- Aim: The present study aimed to conduct a cross-sectional survey design exploring some of the mediating factors of smartphone use impacting on mother-infant responsiveness.

- Material and Methods: This cross-sectional survey recruited 414 mothers with infants aged 3–9 months, in the UK. We used a number of well-validated and reliable scales to measure predictor variables of i) infant social and emotional development; ii) maternal mental health; iii) maternal wellbeing; iv) perceived social support; v) maternal smartphone use and an outcome variable of mother-infant responsiveness (Maternal Infant Responsiveness Instrument; MIRI).

- Conclusions: Linear multiple regression analysis provided a significant model (R² = .307) containing three significant predictor variables for mother-infant responsiveness: infant social emotional development, perceived social support (appraisal), and smartphone use interfering with parenting. Mediation modelling found a significant indirect effect of infant social emotional development on mother-infant responsiveness through smartphone use interfering with parenting, and a significant indirect effect of perceived social support (appraisal), on mother-infant responsiveness through smartphone use interfering with parenting. These results suggest that suboptimal infant social emotional development and a lack of perceived social support for mothers are risk factors for smartphone use interfering with parenting, which in turn may impact on the mother-infant relationship. This has strong implications for the early support and intervention that mothers may need in the first months of their infant’s life.
P-092: Satisfaction with early motherhood: associations with maternal and infant characteristics in the postpartum period

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Introduction: The postpartum period goes along with substantial changes in a parent’s life, and adjustment to motherhood is not always easy. Feelings of frustration, loneliness, or resentment are common maternal experiences. Nonetheless, these feelings are rarely addressed. Lower satisfaction with the maternal role has been associated with shame, guilt, depressive symptoms, caregiving behavior, and the perception of child behavior as difficult. However, still more research is needed to fully understand postpartum dissatisfaction with the maternal role and parenting and its influencing factors.

Aim: We investigated the relevance of the experiences of motherhood and other child and maternal characteristics in the first weeks after birth for the satisfaction with motherhood at seven months postpartum.

Material and Methods: Data of this analysis stems from two longitudinal studies (total n=192). In both studies, mothers answered comparable self-report questionnaires about their perception of motherhood from an adult perspective and in relation to their child, their depressive symptoms and perception of child irritability at three weeks, as well as their parenting satisfaction and depressive symptoms at seven months postpartum.

Results: Multiple regression analysis revealed that a dissatisfying experience related to the maternal role and to their child at three weeks predicted satisfaction with parenting at seven months postpartum, even beyond the effects of depressive symptoms at three weeks and seven months postpartum. The included variables explained 30% of the variance in parenting satisfaction at seven months.

Conclusion: The influence of an early dissatisfying maternal experience on later parenting satisfaction and the associations with depressive symptoms highlight the relevance of paying attention to these experiences early on. Addressing frustrating aspects of motherhood is not only important for direct emotional support for mothers struggling with their new role and everyday life postpartum, but also helps normalize these experiences and by this reducing negative self-evaluation and negative emotions.
P-189: Measuring Connectedness to Support Parent-Child Interactions with Preschool Children with Autism

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Introduction
Strengthening parent-child interaction is often a goal for young children with autism. Interventions often focus on joint engagement or interactive synchrony. The construct of connectedness goes beyond engagement states to encompass a full range of coordinated dynamic social behaviors resulting in shared and embodied affect states between parent and child. Researchers have studied interaction using detailed micro-analysis of video (Beebe et al., 2010) and global assessments like the CIB (Feldman, 1998). These assessments have been useful for research but are beyond the scope of most clinicians.

Aim of the study
I will report on the validity of a simple clinical tool, the Connection Coder (SymPlay, 2018), to capture connectedness in preschool mother-child dyads.

Materials and Methods
The Connection Coder is a smart device app that allows users to video record and score connectedness over a 5-minute observation. Correlations between the Connection Coder and the CIB, Parenting Stress Index (PSI4-SF; Abidin,2012), and CARS2-ST (Schopler et al., 2010) were good, suggesting the Connection Coder is a valid clinical measure for young children with autism.

Conclusions
I will discuss this study’s outcomes and clinical implications for early autism intervention and the importance of parent-mediated interventions.

References
P-190: CONSTRUCTION OF INVENTORY OF TOYS AND GAMES FOR CHILDREN AGED 18 TO 47 MONTHS

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Introduction: Playing is a tool for exploration and representation of the world, which provides typical child development, improving basic neuro psychomotor functions and stimulating the adequate production of neurotransmitters.

Aim of the study: To construct an inventory and to observe its reliability for children aged 18 to 47 months old.

Material and Methods: Inventory construction by reviewing national and international literature articles and books. The Inventory of Toys and Games is composed of closed questions (22 possibilities of toys and games); which investigates the playing in 4 stages: 1) Whether the child plays with the proposed game; 2) The interaction during the playing in four levels of increasing symbolic complexity (pre-symbolic; symbolic; symbolic combinations and combined sequences), 3) Partners per game; and 4) Time available to play. To test internal consistency, this inventory was applied to 42 parents and typical children of both sexes, followed in a Pediatrics service, after signing the informed consent form voluntarily. The tests were analyzed using descriptive percentages and Cronbach’s alpha coefficient (>0.6).

Conclusions: From the 22 games presented, all of them had Cronbach’s alpha >0.6 and 8 items had strong coefficients: dolls, pans, toy food, doll’s house, drawing and coloring, mirror, play dough, and wheel toys with values α>0.8. When investigating how the child plays at the symbolic level, all items in the inventory showed Cronbach’s alpha (>0.8). Playing with blocks, dolls, balls, pans, food, house, drawing and coloring, play dough, wheel toys, and rule games obtained α = 0.890. Although the number of participants was small, the results suggest that the inventory has a high level of reliability for the population studied, showing that it is an instrument that can be efficient in the investigation of children playing between the age of 18 and 47 months.
P-256: THE RELATION BETWEEN SCREEN USE, THE NEUROPSYCHOMOTOR AND NEURODEVELOPMENTAL CHARACTERISTICS FROM 18 TO 47-MONTH-OLD CHILDREN

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Introduction: As technology advances, screen use is increasingly evident in children's lives and if not monitored, in terms of time and content, it may influence neurodevelopment.

Aim of the study: To investigate the relation between screen use, neuropsychomotor, and neurodevelopmental skills in Brazilian preschool children

Material and Methods: This is a prospective cross-sectional study of the relationship between screen use, neuropsychomotor, and neurodevelopmental skills in preschool children. It included 42 parents whose children are typical and aged 18 to 47-months-old followed by a Pediatrics Service. As materials, a questionnaire with closed questions about screen use (what the child watches most, time of use, frequency per week) developed by the research team was used in association with the Neuropsychomotor Development Checklist and the Modified Checklist for Autism in Toddlers both composed by dichotomous questions. The tests were analyzed and related through descriptive percentages and Chi-Square statistical tests (p<0.05).

Conclusions: All participants used screens; the most accessed content was cartoons. The predominant frequency was 5 days a week or more and the predominant time was 30 minutes. Although there were no relevant statistical results, the relation between the number of children who did not point at parts of their own bodies by 12 months old was close to those who used screens for a longer time than recommended. The number of children, who did not make phrases with two to three words by 24 months old, was close to the number of those with screen use longer than recommended. According to the data, it seemed that screen use may influence neurodevelopment. It is suggested to increase the sample size to better map this influence.
P-227: Developmental Outcomes of Infants from an Area of Socio-Economic Disadvantage: A Comparison with National Norms

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Research has shown that social inequalities influence long term outcomes such as education (McNamara et al., 2021) and mental well-being (Healthy Ireland, 2015). The primary aim of the project was to explore whether infants from an area of socio-economic disadvantage differ in terms of certain early developmental outcomes and infant mental health as compared to national norms. The sample for the present study was derived from a universal-targeted home visiting programme delivered in Dublin’s inner city, aiming to improve well-being and developmental outcomes for infants. A questionnaire modelled on that of the Growing Up in Ireland (GUI) national longitudinal study of children and youth in Ireland 9-month-old cohort questionnaire (Thornton et al., 2013) was developed to allow for direct comparisons. The questionnaire was distributed to parents participating in the programme at baseline and post-intervention. Parents were asked to provide information about family demographic characteristics, supports, infant health and development, baby’s sleep habits, playing and learning. Eighty-seven parents completed baseline questionnaires and 40 parents also completed the post-intervention questionnaire. Baseline and post-intervention data will be compared with GUI study data. Differences and similarities between the GUI infants and the present study infants will be reported. Implications and future work will be discussed.


P-031: Parental history of childhood maltreatment and child behavior problems: Parental cumulative psychopathology as a mediator

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INTRODUCTION: Previous research findings indicate that parental history of childhood maltreatment (CM) is associated with child behavior problems (e.g., Stepleton et al., 2018). However, mechanisms underlying the effect of parental history of CM on child adaptation are not fully understood. Given that adult psychopathology is related, on the one hand, to CM (e.g., Russotti et al., 2021) and, on the other hand, to child behavior problems, (e.g., Goodman et al., 2011 for a meta-analysis), it seems important to investigate parental psychopathology as a potential mechanism explaining this intergenerational effect.

AIM of the study: The present ongoing study aims at investigating whether parental cumulative psychopathology mediates the link between the severity of parental history of CM and child behavior problems in parent-child dyads followed by child welfare services.

MATERIAL and METHOD: Twenty-seven parents (2 fathers) of 1 to 5-year-old children (n = 35, 14 girls) completed the Childhood Trauma Questionnaire (CTQ), the Mini International Neuropsychiatric Interview (MINI), and the Child Behavior Checklist (CBCL). Cumulative psychopathology scores were obtained by summing the number of disorders identified by the MINI for each parent.

RESULTS and CONCLUSIONS: Results of a two-level regression analysis revealed a significant mediation model (B=0.17), indicating that higher levels of parental CM were associated with higher levels of parental cumulative psychopathology and, in turn, with more child externalizing behavior (R² = 0.30). Findings suggest the importance of targeting parental mental health to reduce maladaptive behavior in children of CM survivors.
P-180: A Novel Observational Measure of Parental Reflective Functioning and Sensitivity: Validity and Initial Findings

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Introduction:
The Parent Rearing Coding System (PRCS) is a novel observational measure of parental behavior within caregiver-child dyadic contexts across five distinct domains: Reflective Functioning, Emotional Attunement, Affect Regulation, Reticence, and Nurturance. The rearing framework was initially designed to capture the key components of therapeutic action within the Group Attachment-Based Intervention (GABI), an attachment and trauma-informed group intervention for families facing adversity. The framework has presently been adapted to focus solely on parental behavior.

Aim of the Study:
The current study aims to outline preliminary internal consistency/interrater reliability and convergent validity results and introduce initial findings of the between group differences (control vs. GABI intervention) at the end of treatment.

Materials and Methods:
Reliability. 3 trained coders were assigned N = 20 videos of parent-child dyads (enrolled in GABI RCT) interacting in a free play setting. Instructions were to code the first five minutes from each video using the full range of codes. Validity. To assess convergent validity, N = 14 videos of parent-child dyads were coded using PRCS and the Coding Interactive Behavior (CIB) global rating scale by two independent coding groups. Between Group Differences. N = 19 (N = 9 intervention (GABI) and N = 8 control (Systematic Training for Effective Parenting (STEP)) 5 minute videos of parent-child dyads at end of treatment were blindly coded using the full range of PRCS codes.

Conclusions:
Initial findings show significant moderate-high reliability within each construct and on the full scale. Convergent validity testing shows significant strong correlations between related constructs of the PRCS and CIB, providing the basis for study with a larger sample. Comparisons between GABI and STEP show equal to or higher median values for GABI parents compared to STEP parents in all sensitivity codes and less variability amongst all PCRS scores in GABI as compared to STEP.
P-185: Assessing infant’s mental health – consider child characteristics, parent-infant interaction and family risks

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Introduction
Infant development is embedded in parent-child interaction (PCI). When assessing infant and young child’s psychosocial well-being and mental health, child characteristics, quality of PCI as well as family risks compromising PCI and possibly affecting child symptoms should be considered.

Aim of the Study was to examine associations between child functioning (CF), symptoms of emotional and behavioural (SEB) problems, PCI, and family risk-factors (FRFs), and to assess whether FRFs have a cumulative effect on CF, SEB problems and PCI.

Material and Methods
680 children aged 0-3 years were assessed with Infant mental health assessment form (I-MHA), completed by health care professionals working in primary health care or child psychiatric specialised care. I-MHA is a screening tool assessing child’s psychosocial well-being and mental health: child characteristics (including SEB problems and CF), PCI and FRFs (family functioning, mental health problems in the family, parental substance use, domestic violence). To analyse the associations between the sum variables CF, PCI, SEB and FRFs, Spearman correlation and Poisson regression were used.

Results
The quality of PCI was significantly correlated with CF (\( \rho = 0.68 \)), SEB problems and severity of FRFs (both \( \rho = 0.70 \)). FRFs were to somewhat lesser degree correlated with CF and SEB problems (both \( \rho = 0.48 \)). When regressing, one at a time, CF, SEB problems and PCI on either the severity or number of FRFs and gender, a dose-response effect was seen: the larger the number or the more severe the nature of FRFs, the more serious the problems in CF, SEB and PCI; male gender mildly increased the risks.

Conclusion
CF, SEB problems, PCI and the number and severity of FRFs were significantly correlated. Both the larger number and the stronger severity of FRFs predicted more difficulties in CF, SEB problems and PCI.
Introduction. Depression during pregnancy is associated with unfavorable outcomes for offspring including low birth weight, preterm birth, and adverse neurodevelopment. It is of great interest to understand potentially modifiable associates of depression during pregnancy. Vitamin D is a steroid hormone with a multifaceted function, including direct effects on brain development and function. An association between low 25(OH)D levels and depression among pregnant women have been suggested, but there are critical knowledge gaps in the current literature.

Aim of the study. We tested if higher levels of 25(OH)D during pregnancy were associated with lower levels of depressive symptoms during pregnancy. In addition, we tested if a history of depression diagnoses before pregnancy was modulating the association.

Material and Methods. The participants (n=1079) came from the Prediction and prevention of preeclampsia and intrauterine growth restriction (PREDO) study. Our analytic sample comprised 307 women who reported depressive symptoms concurrently to three blood samplings at the median (interquartile range) 13.0(12.6-13.4), 19.3(19.0-19.7), and 27.0(26.6-27.6) gestational weeks. Depressive symptoms were measured using the Center for Epidemiologic Studies Depression Scale (CES-D). CES-D was completed biweekly up to 14 times. Covariates in the current study were seasons, maternal age, smoking, BMI, hypertensive disorders, diabetes, alcohol use, and education level.

Conclusions. In conclusion, our study suggests no association between 25(OH)D and depressive symptoms throughout pregnancy. However, our study suggests that among those with a history of depression diagnoses, increasing 25(OH)D levels across pregnancy may associate with decreasing levels of depressive symptoms. The results call for replication but suggest that attention should be directed to monitoring the 25(OH)D levels of pregnant women with a history of depression diagnoses.
P-058: TECH-TOYS: Very early detection of neurodevelopmental alterations through sensorized toys and multimodal continuous data acquisition

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Introduction
Neurodevelopmental conditions are frequent sensori-motor, cognitive, communication, learning, and behavioral alterations with multifactorial etiology, early onset, and life-long consequences (Francés et al., 2022; Bosch et al., 2021). Diagnosis and start of intervention are still often late and not quantitative-based (Uddin et al., 2019). Research stresses the importance of starting intervention early, to avoid the accumulation of developmental delays hard to recover (Towle et al., 2020). Very early diagnosis based on objective quantitative data in the pre-symptomatic window is indeed fundamental (McDuffie et al., 2022).

Aim
The European project TECH-TOYS aims to timely detect neurodevelopmental conditions with a multidisciplinary perspective. It targets the play-based completely non-invasive continuous acquisition of multimodal behavioral digital data to study social interaction features and body movements of infants at increased likelihood of neurodevelopmental alterations in naturalistic contexts.

Material and Methods
This project starts from the multimodal analysis of data collected during a longitudinal protocol of home-base early intervention for preterm infants (Sgandurra et al., 2017), and involves different European centers.
It includes a set of sensorized toys and a technological play setup equipped that continuously record multimodal behavioral data in naturalistic environments during object manipulation, infant-parent social play, and interaction.
Leveraging AI-based methods, precision models will be employed to detect atypical features. A prospective sample of preterm infants will be monitored during 3 years and compared with children with brain lesions, and typical development. Features analysis will be based on the most recent evidence of early sensori-motor and socio-communicative alterations (Moffitt et al., 2022; Ouss et al., 2020; Marchi et al., 2019)

Conclusions
Characterizing behavioral and outcomes phenotypes could provide clinicians valuable information to detect and intervene very early during the onset of neurodevelopmental conditions, bridging research and clinical practice and enabling highly scalable, non-invasive, quantitative-based and automated screening tools exploitable in everyday contexts.
P-254: The FACAM study: RCT of an interdisciplinary intervention to support pregnant women in vulnerable positions

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Introduction: Inequality in health can have profound short- and long-term effects on a child’s life. Infants develop in a responsive environment, but mental health issues may challenge a mother’s ability to bond with the fetus or newborn child. Families with complex problems need interdisciplinary interventions starting in early pregnancy to prepare for motherhood and ensure a healthy child development.

Aim: To examine the effects of an early and coordinated intervention (the Family Clinic and Municipality (FACAM) intervention) offered to vulnerable pregnant women during pregnancy and the child’s first year of life on the mother-child relationship, maternal social functioning, mental health, reflective functioning, well-being, parental stress, and the development and well-being of the child.

Methods: This study is a prospective randomized controlled trial including 332 pregnant women enrolled to receive antenatal care at the family clinic at Odense University Hospital. Participants were randomized to either the FACAM intervention or usual care. The FACAM intervention consists of extra support by a health nurse or family therapist during pregnancy and until the child starts school. The intervention also includes either group or individual attachment-based support during the pregnancy. The intervention is most intensive in the first 12 months. The participants were assessed at baseline and when the infant was 3 and 12 months old. The primary outcome is maternal sensitivity measured by the Coding Interactive Behavior (CIB) instrument. Secondary outcomes include prenatal parental reflective functioning, mental well-being, depressive symptoms, breastfeeding duration, maternal satisfaction, child development (including Bayley III), parent competence, parental stress, and activities with the child.

Conclusions: In this presentation, we will present the preliminary results of the data analyses of children aged 3 and 12 months.
Prenatal predictors of parental reflective functioning

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Parental reflective functioning (PRF) is central to parental functioning, child development, and the parent-child relationship. Given the recent evidence suggesting that the determinants and correlates of psychopathology and reflective functioning would not be the same in trauma-exposed adults than in adults who did not face such adverse life events, the present study aimed to evaluate whether the prenatal predictors of postnatal PRF where distinct among trauma-exposed mothers and mothers who have not experienced childhood trauma.

A sample of 253 pregnant women (Mage = 28.54, SD = 3.53) was recruited at pregnancy-related medical appointments and on social media and followed-up between 3 and 15 months postpartum. Participants completed questionnaires assessing anxiodepressive and post-traumatic symptoms (Kessler Psychological Distress Scale; PTSD Checklist for DSM-V), personality dysfunctions (Self and Interpersonal Functioning Scale), and reflective functioning (RFQ; Reflective Functioning Questionnaire) during the 2nd trimester of pregnancy. PRF was assessed using the Curiosity subscale of the Parental Reflective Functioning Questionnaire (PRFQ) at the longitudinal follow-up.

Stepwise multiple regressions revealed that higher scores on the certainty scale of the RFQ predicted higher scores on the Curiosity scale of the PRFQ in women reporting no trauma (n = 164), b = .27, p = .003, R² = 0.05, whilst personality dysfunctions (b = -0.60, p < .001) and hypomentalization (b = 0.59 p = .005) were associated with Curiosity about mental states in women with childhood trauma (n = 89), R² = 0.17. In both groups, prenatal psychological symptoms did not contribute to PRF.

Prenatal predictors of PRF in women having been exposed to trauma differed from those of women reporting no trauma. Our findings call for further studies investigating the distinct developmental mechanisms of reflective functions in trauma-exposed and non-exposed individuals and suggest that both subgroups may have different needs and respond to different interventions.
P-333: Photographic Experiences (Kangaroo Mother Care): The impact of Image in the psych birth of prematures

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- Introduction:  
The experience of the babies in the NICU leaves marks in the psychism and affects future life as disruptions in the relationships and in the neurodevelopment. The KMC becomes an ally in the protection and promotion of the psychosomatic development of the baby, fostering a humanizing care. The photos taken by a pediatrician, registers moments of the everyday hospital experience of premature babies focusing on the psychic interaction mother-baby.

- Aim of the Study:  
The present work consists in the psychoanalytic understanding based on the observation of photographs of parents and babies experiencing the kangaroo methodology and how it affects the psychic formation of babies.

- Material and Methods:  
The image is a mediating instrument in the reconstruction of emotional ties. The biological care alone cannot be enough to guarantee the survival of the baby without future consequences. Taking this into consideration, it became convenient to include the psychoanalytic view of the photos to reflect the importance of the KMC in the somatopsychological development of babies and families. The photo becomes an instrument, not a product. It is a means to sensitize the Family and it shows the staff what they generate through humanized work.

- Conclusions:  
The photos not only help as a point of observation for the analysis, but also represent a tool in the KMC. Whenever the mother sees her photos with the baby, it helps her translate her emotions and it represents care. The images highlight the reencounter with the pleasure through touch, providing communication between parents and the baby. The pleasure sensation generated from touch develops synaptic networks that boost the development of SNC of babies and the psych body. The baby, whose endless search for the reenactment of pleasure will in his own way transform these messages into a movement towards life itself.
P-172: AI-based non-invasive analysis of child-clinician acoustic interaction features with preschool children in unconstrained clinical contexts

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Introduction
Unconstrained clinical contexts challenge the automation and the objective quantification of behavior and interaction patterns to bridge research and clinical practice, especially relevant for intervention in neurodevelopmental alterations (Moffitt et al., 2022). Non-invasive systems leveraging Artificial Intelligence (AI) may significantly help to fill this gap.

Aim
To validate a Deep Learning (DL) system for automatically classifying audio signals from video-recorded clinical sessions of assessment and intervention with preschool children. Specifically:
(1) identify the presence of human voice;
(2) perform child-therapist diarization;
for the analysis of the child-clinician interaction dynamics in unconstrained, noisy clinical contexts, non-invasively and in presence of data scarcity and imbalance.

Materials and Methods
For audio analysis, we trained a Siamese Deep Learning architecture over a set of Mel-Frequency Cepstral Coefficients extracted from 1-sec audio and performed similarity-based classification. The train set comprised N=10249 segments. Classification was evaluated through accuracy, F1-score, sensitivity, specificity, Positive Predictive Value, and Matthews Correlation Coefficient, robust to data imbalance. The model was evaluated on: (1) a test set of N=762 segments not in the train set sessions; (2) an external robust test set of N=430 segments involving previously unseen children, clinicians, recorded elsewhere by different devices, to evaluate generalization. We compared our architecture with Machine Learning and state-of-the-art DL models by means of Area Under the Curve and DeLong test.

Conclusion
The feasibility of an accurate AI-based acoustic analysis in real-world settings is relevant for a translation for clinical contexts, possibly enabling AI-assisted “Precision Psychology”.
Current research aims at applying the DL model on longitudinal clinical data and videos in order to integrate acoustic features with dyadic interaction features in the predictive analysis of treatment outcome and clinical diagnosis.
AI may represent a valuable resource to provide clinicians precious information for diagnosis, treatment monitoring, and optimization in naturalistic clinical contexts.
P-332: Do maternal multiple insecure attachment models impair quality of the mother-infant relationship via depression?

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INTRODUCTION: Previous studies suggest that insecurity to the romantic partner impairs the quality of the mother-infant relationship via depression (Vanwalleghem et al., 2022): the poorer the quality of attachment to the partner, the higher the risk of perinatal depression for the mother and, in turn, the more likely the infant is to be at risk of bonding problems with her. It is unclear however whether mothers’ attachment with parents also plays a role, and how the attachment network including the partner explains depression and bonding with the infant.

AIM of the study: To test whether mothers’ insecure attachment models of the relationship with their own mothers and fathers and/or insecurity with the partner are associated with lower relationship quality with their infants via depression.

MATERIAL and METHODS: The Attachment Multiple Model Interview (measure of attachment along four dimensions: security, deactivation, hyperactivation, and disorganization for each relationship, i.e., mother, father, partner), the Edinburgh Postnatal Depression Scale (measure of the intensity of depression), and the Postpartum Bonding Questionnaire (measure of the quality of the mother-infant relationship) were administered to 90 mothers of infants under 6 months, 32 of whom exhibited postpartum depression.

CONCLUSIONS: Partial Least Squares-Path Modeling analysis (PLS-PM) showed that maternal depression mediates the link between attachment to the partner and mother-infant bonding, whereas attachment to, respectively, the mother and the father is not linked to mother-infant bonding. They highlight the specific importance of attachment to the partner for mother-infant bonding disorder in the context of perinatal depression.
P-074: Measuring Mother-Infant Interaction Patterns Across Time in the Neonatal Intensive Care Unit

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INTRODUCTION: The NICU is a high-risk context for mother-infant relationship development, yet few studies have examined mother-preterm infant interaction patterns during the NICU hospitalization. AIM: This study aimed to identify the variations in frequency and duration of mother-infant communication patterns in the NICU. METHODS: This study used a within-subjects repeated time series design to observe changes in frequency and duration of interaction patterns in 12 mother-preterm infant dyads hospitalized in the NICU. Beginning when infants were 32-weeks gestational age, dyads were video recorded across three time points in three social situations (27 total minutes/dyad). Using Observer XT software, maternal and infant behaviors were coded using frame-by-frame microanalysis. Codes included maternal communicative behaviors (task touch, nurturing touch, vocal, gaze, and vestibular stimulation) and infant communicative behaviors (touch, gaze/eyes open, vocalization, and movement). One-way repeated measures ANOVA with pairwise comparisons were performed for each coded behavior to identify differences in interaction patterns across the three time points. For mothers, results across time showed a significant increase in their duration of task touch behaviors, F (2,22) = 5.48, p = .012. We also detected a decreased trend in duration of nurturing touch behaviors over time. No changes in other maternal behaviors were found. For the preterm infants, results showed a significant increase in duration of non-distressed vocalizations, F (2,22) = 12.84, p < .001, and a significant decrease in touch behaviors, F (2,22) = 3.60, p < .05, over time. The decrease in touch may be explained by increased bottle feedings and increased swaddling observed during later time points. We also observed a trend upward for duration of time infants’ eyes remained open. CONCLUSION: This study furthers our understanding of early relational communication patterns between mothers and preterm infants in the NICU and the importance of enhancing these dyadic interactions for positive developmental outcomes.
P-382: Family Needs Assessment Survey: Impact of the Opioid Crisis on Young Child & Families

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Introduction: The number of infants born with neonatal abstinence syndrome increased four-fold in the last 10 years. To address this need, the team surveyed families to seek to improve the quality of care for children aged five and younger who have a mother or primary caregiver who is affected by the opioid crisis.

Aim of the work: The specific aims of this study was to identify the needs of family impacted by the opioid crisis, to assess the use of resources and services available to meet these needs, and to ascertain any gaps in resources and services underpinning unmet needs.

Description of the work: Trained community outreach workers administered a needs assessment survey either virtually via a video teleconference or in person at substance use disorder programs. The survey asked the participant about their housing and community safety, stressful life events, adverse childhood experiences and trauma, stigma with opioid use, perceived needs, and use of available services. A sample of 58 females who are dealing with opioid use and who have a child age 5 years-old or younger were recruited from substance use disorder program located in West Baltimore and other areas of Maryland.

Conclusions: Maryland requires that all illicit substance and prescribed medication use by pregnant women, which results in: (a) a positive toxicology screen for the mother and/or infant, or (b) evidence of neonatal withdrawal symptoms after birth, be reported to Child Protective Services for an assessment and Safe Plan of Care. This change in policy, in combination with increased opioid use, has resulted in a significantly larger number of infants and toddlers and their families interfacing with child welfare. Understanding their needs and mapping available resources is essential to family recovery and child safety and well-being.
P-246: Evaluating Online Mellow Bumps in Turkey: A pilot study of an online antenatal parenting intervention.

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Introduction:
With the continuous rise of mothers experiencing poor mental health, maternal mental health remains a critical focus around the world. In addition to the typical stressors of pregnancy, the COVID-19 pandemic resulted in increased exposure to stressful life events and isolation. In an effort to continue supporting expectant mothers throughout lockdown, Mellow Parenting adapted its established prenatal group programme 'Mellow Bumps' for delivery online, becoming 'Online Mellow Bumps'.

Aim:
The objective of this study was to evaluate the effectiveness of the intervention in improving mental health symptoms and mental well-being in pregnant women in Turkey.

Material and Methods:
The study used a pragmatic trial design to investigate routine evaluation data collected pre- and post-intervention. Outcomes measured were symptoms of poor mental health (using DASS-21), maternal subjective well-being (using WHO-5), mother’s perceived quality of relationship with baby (using a rating scale), maternal confidence and maternal social connectivity (both using follow-up questionnaires). 128 mums-to-be took part in the intervention between January 2021 and May 2021 from a total of 21 different cities in Turkey.

Using paired-sample t-tests, significant improvements were found for maternal stress levels and maternal subjective well-being and self-reported closeness to baby following participation in the programme. Improvements were also found for maternal confidence and maternal social connectivity.

Conclusions:
Despite a number of limitations, this study provides reason for optimism that Online Mellow Bumps has the potential to improve several outcomes for pregnant women who attend. Future research involving larger sample sizes, control groups, diverse populations and assessment of longer-term effects is required to establish stronger evidence for this programme.
P-283: Parental Depression and Infant Attachment Predict Infant Developmental Outcomes

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Introduction. Parental depression increases the risk of children's insecure attachment (Barnes & Theule, 2019) and predicts developmental delays in early preschool. Insecure attachment is related to lower language and self-regulation scores in preschoolers though it is unclear what role parental depression plays in the effect of infant attachment on infant functioning. Aim. We explored associations between parental depression, infant attachment, and observations of social-emotional communicative skills in 12-month-old infants. Method. Forty-two couples and their first-born children were observed in triadic interactions during structured (e.g., games, reading books) and unstructured (e.g., free play, eating snacks) tasks. Parents' depressive symptoms were assessed with the CES-D and infants' communication, gross- and fine motor, problem-solving, and personal-social outcomes via the ASQ. An observer-based Attachment Q-Sort measured infants’ attachment security, dependency, smooth interactions, and physical contact with mothers. We also conducted a standardized assessment of infants' social-emotional functioning (ESCQ). Conclusions. Maternal depression was negatively correlated with infants’ personal-social functioning while paternal depression negatively correlated with communication scores. Attachment security, proximity-seeking with the mother, and smooth interactions with the mother and other adults were positively correlated with infants’ problem-solving. Infants higher in attachment security and social interactions with mothers were observed to be more socially responsive to the experimenter. Furthermore, infants who demonstrated smooth interactions with mothers were better at behavioral regulation during interactions with the examiner. In this non-clinical sample, attachment-related variables were better predictors of infant outcomes than parental depression. Correlations between depression and attachment security were not significant although correlated in the expected direction. Present results indicate that these variables make different and unique contributions to infants’ development.

References:
P-171: The association between child-therapist interaction and response trajectories during Autism intervention

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Introduction

Studying interaction is becoming increasingly important in the context of intervention in neurodevelopmental conditions like Autism. Research highlighted the need to understand predictors and process variables to explain the high interindividual variability observed in treatment response (Frost et al., 2020; Wetherby et al., 2018). Further, Naturalistic Developmental Behavioral Intervention (NDBI) models foster the quality of child-therapist relationship and exchanges, as well as exploiting child motivation, shared pleasure and interpersonal synchrony (Vivanti et al., 2020). However, interaction features are still under-investigated, mainly due to the lack of objective, quantitative and scalable instruments. This translational effort could be important to bridge research and clinical practice (Dawson and Sapiro, 2019).

Aim

This study aimed at investigating longitudinal predictive relationships between interaction features and treatment response in Autism early NDBI.

Material and Methods

N=25 preschool children (mean age=38.36 months; sd=10.36) with ASD were monitored from diagnosis and after one year of NDBI intervention. GMDS-ER and ADOS-2 were administered before and after. Developmental Learning Rates (LR, Klintwall et al., 2015) were used to measure the response trajectories over time. A quantitative observational coding system was employed to annotate 20-min segments of video-recorded sessions of intervention at four time points. A set of interaction descriptors was automatically extracted and a pipeline for model selection and evaluation was employed to predict the LR at one year using interaction features in combination with known baseline predictors.

Conclusions

The efficacy in engaging the child, respecting the timing after behavioral synchronization, and modulating the interplay to prevent withdrawal may be important factors for response-to-treatment. Further, the early phase of the intervention may be predictive of the overall outcome and may represent a critical window for treatment monitoring. Clinical implications are discussed, stressing the importance of promoting emotional self-regulation.
P-313: Confidence Building in Infancy: An Analytical Study of Infant Emotional Behavior Patterns

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Introduction: One aspect of social-emotional behavior is the level of confidence demonstrated by the infant. This study examined whether ethnicity, gender, temperament, and parental nurturing skills are related to infant confident behavior during situations of play and attachment/separation transitions. Aim: The study served as the beginning test phases of reliability and validity for the 10-item FIOT™ (Fisher Infant Observational Tool), an observational assessment instrument created for use by parents and practitioners working with infants between the ages of 6–12 months. The FIOT is intended to measure confident behavior and is designed to be sensitive to infants and parents from bicultural contexts as well as from the dominant culture.

Material and Methods: The sample included 77 infants and 77 parents from three cultural groups: African American, Caucasian American, and Latino/Hispanic American. Infants between 6–7 months and 11–12 months were observed within 3 different temperament groups.

Results: The FIOT demonstrated internal consistency reliability of .79 using Cronbach’s alpha. Interrater reliability of the FIOT was measured by percent agreement (items ranged from 87.5% to 100%) and Cohen’s Kappa (items ranged from .63 to 1.0). The utility and content validity of the FIOT was examined through conducting a focus group with parents. The analyses showed a relationship between the infant’s FIOT score and two variables, ethnicity and temperament. Infants from the dominant culture and those with easy temperaments showed higher levels of confident behavior. No significant relationship emerged between the FIOT and gender or parental nurturing skills.

Conclusion: The objective of the current investigation was to identify infant emotional behavior patterns and provide adults with a unique tool that would help assess early behavior and perhaps redirect the onset of negative patterns during infancy. Continued research on the FIOT is recommended.
P-314: FIOT: A new screening tool to measure infant confidence levels from dominant and bicultural groups

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Introduction: FIOT® (Fisher Infant Observational Tool) was developed to measure confident behavior and is designed to be sensitive to infants and parents from bicultural and dominant groups. It is a paper tool designed to measure one aspect of social-emotional behavior and focus on the level of confidence demonstrated by the infant during situations of exploration and play. Aim: The study served as the beginning test phases of reliability and validity for the 10-item FIOT® (Fisher Infant Observational Tool), an observational assessment instrument created for use by parents and practitioners working with infants between the ages of 6–12 months.

Material and Methods: The sample included 154 infants and parents from three cultural groups: African American, Caucasian American, and Latino/Hispanic American. Infants between 6–7 months and 11–12 months were observed within 3 different temperament groups.

Results: The FIOT demonstrated internal consistency reliability of .79 using Cronbach’s alpha. Interrater reliability of the FIOT® was measured by percent agreement (items ranged from 87.5% to 100%) and Cohen’s Kappa (items ranged from .63 to 1.0). The utility and content validity of the FIOT® was examined through conducting a focus group with parents. The analyses showed a relationship between the infant’s FIOT® score and two variables, ethnicity and temperament. Infants from the dominant culture and those with easy temperaments showed higher levels of confident behavior. No significant relationship emerged between the FIOT® and gender or parental nurturing skills.

Conclusion: The objective of the investigation was to identify infant behavior patterns and provide adults with a unique tool to help assess early behavior and redirect the onset of negative patterns during infancy. Continued research on the FIOT® is currently underway.
P-164: Assessment of interaction: action research on children with language impairment and their parents

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Teaching parents how to communicate with their children is necessary, as the quality of the parental linguistic input plays an important role in the speech development of children with developmental language disorder (DLD). So far, there is no assessment tool in Estonia to assess the parental linguistic input. The objective of this study was to construct an assessment tool for a structured measurement of the parent-child interaction. The assessment tool was used during pre- and posttreatment assessment to assess maternal linguistic input and maternal behavior and how these change as a result of therapy. This action research was conducted with two children with DLD and their mothers. Children’s speech development was assessed by a standardized speech test. Building on the relevant literature, an assessment tool was developed to assess the parent-child interaction on the basis of video recordings pre- and posttreatment. Between pre- and posttreatment assessments on parent-child interaction, parents were provided counselling sessions based on the level of the children’s speech development and the assessment of parent-child interaction. The outcomes of a posttreatment assessment showed positive changes in both parents’ interaction in terms of speech and behavior. Based on the results of the study, it can be concluded that it is possible to assess the parent-child interaction on the basis of the developed tool. The practical result of this work is an initial evaluation tool for Estonian speech therapists that allows them to assess the quality of the child-parent communication based on video recordings and to set goals for parent counselling.
P-091: The experience of receiving warm care and the attentional bias toward infant faces in adults

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Introduction: Early experiences with their own caregivers guide the development of a relationship model in children, which regulates interactions with significant others. The quality of early experiences of care proved to influence adults’ automatic attention to infant cues, that is one of the antecedents of caregiving behaviors. However, no studies investigated how attentional bias toward infant faces is shaped by the perceived quality of care in the theoretical framework of the PARTheory.

Aim of the study: We examined the attention bias to infant and adult faces in a sample of parents (N=97; 51 females; 46 males) and non-parents (N=91; 49 females; 42 males), and whether the attention bias varied in relation to both parental status and sex of participants. Furthermore, we examined whether past experiences of parental acceptance-rejection modulated the attention bias to infant faces.

Material and Methods: A modified Go/no-Go task was used to compare the effect of emotional faces in retaining attention. Past experiences of maternal and paternal care were collected using the short-version of the Parental Acceptance-Rejection scale. Overall, infants recruited more attention compared to adult faces, eliciting slower response times (p <.01). Parents, as compared to non-parents, were more engaged by faces (p <.01), and they allocated more attention to infant versus adult faces (p <.05). The effect of age was controlled for in the models. The attentional prioritization of infant faces varied in relation to early experience of maternal care, that is, those who remembered an experience of maternal acceptance were more engaged with infant faces (p <.01).

Conclusion: This study suggests that the experience of receiving care from one’s own mother during childhood may regulate adults’ attention bias to infant cues. Overall, mental representations constructed from significance experiences of care may shape implicit responsiveness to infant cues in parents and non-parents.
P-226: Very early monitoring of children at risk of neurodevelopmental alterations: the NIDA project

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Introduction
Time is crucial for Autism Spectrum Conditions (ASC) (McDuffie et al., 2021; Towle et al., 2020). The NIDA project by the Italian Health Institute aims to promote evidence-based practices for very early detection and timely intervention of neurodevelopmental alterations through systematic monitoring (https://osservatorionazionaleautismo.iss.it/). The project also comprises educational initiatives to involve the widest number of professionals that may be key resources for red flags early detection.

Aim
This research aimed to: (1) characterize parent perspectives, developmental profiles, and clinical variables in the first months of life of siblings of autistic children, in families previously exposed to long-term integrated clinical intervention with parent involvement; (2) compare this group with children with Typical Development (TD).

Material and Methods
A retrospective sample (N=10) of children with TD was compared with the preliminary NIDA sample (N=6) of ODFLab, at 12 and 24 months of life. The Griffiths Mental Development Scales have been used to monitor developmental trajectories, the ADOS-2/AOSI was employed to evaluate ASC probability. The Parent Stress Index and the Child Behavior Checklist were used to monitor parent perspectives. Video-recorded child-clinician interactions during free play will be analyzed using quantitative observational methods.

Conclusion
At 24 months, the group of siblings seems to show slightly better developmental abilities than TD. Since those children are growing in a context that was actively integrated and involved in a clinical environment before, we formulate the explorative hypothesis that previous experiences may have positively impacted parent abilities to interact with their children. In turn, a more adaptive environmental exposition mediated by more adequate social interaction may have positively reflected on siblings' early competencies. Implications and potential challenges for early screening, clinical diagnosis, monitoring, and parent support are discussed, as well as the potential role of interaction variables in disclosing fine-grained features.
P-059: Understanding the parent-infant conversations and language development of preterm- and term-born infants in Ireland.

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Introduction: Caregiver-infant interactions provide an important social context for language development. When compared to term-born infants, preterm-born infants (< 37 weeks’ gestation) tend to exhibit language difficulties and reduced reciprocity in mother-infant interactions (often a highly responsive mother and less responsive child). Only one study has examined dyadic reciprocity among preterm-born infants over 12-months of age, and studies have not examined father-infant interactions.

Aim of study: (i) To examine the frequency, duration, and degree of reciprocity of vocal exchanges between mothers/fathers and their preterm-/term-born infants. (ii) To investigate the association of these conversational features with the infant’s linguistic and non-linguistic development.

Material and Methods: 22~30-month-old (chronological age) preterm-born (< 37 weeks’ gestation; n = 19) and term-born (≥ 37 weeks’ gestation; n = 20) English-speaking infants engaged in mother-infant and father-infant free-play sessions (5 minutes each) and completed the Bayley Scales of Infant and Toddler Development (3rd edition). Play session recordings are being transcribed (CHAT) and analysed (CLAN, GSEQ) to calculate the frequency (rate of occurrence) and duration (proportional to total interaction time) of vocal exchanges (sequences of utterances separated by pauses < 3 secs), and the responsiveness of the parent and infant (which jointly determine reciprocity). The effects of birth-status (preterm/term), parent (mother/father), and the birth-status*parent interaction on these three conversational features will be examined. The association between these conversational features and the infants’ Bayley scores will be investigated.

Conclusions: This study captures how birth status (preterm/term) may affect the frequency, duration, and reciprocity of parent-infant vocal exchanges, and how such features of the language learning environment are co-determined by the responsiveness of the parent and infant. Through examining the associations between these conversational features and language development, this study can provide guidance on how caregivers can support their preterm-/term-born infants’ language development through their day-to-day interactions.
P-110: Coparenting Conflict and Parental Responses to Negative Toddler Emotions: An Actor-Partner Interdependence (APIM) Model

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Introduction:
How parents respond to their children’s emotions is a direct form of emotion socialization. When parents are faced with stress from coparenting conflict, it can become more difficult to provide supportive responses to children’s emotions. Coparenting conflict contributes to spillover in which conflict impacts parent’s own and each other’s responses to children’s emotions. Hence, the coparenting relationship could be an important contributing factor to emotion socialization practices. The majority of research is focused on coparenting within divorced couples, leaving a gap in the literature relative to associations between coparenting and coupled parents’ emotion socialization practices.

Study Aim:
I will test a dyadic model of parents’ reports of coparenting conflict as a predictor of parents’ responses to toddlers’ negative emotions.

Materials and Methods:
Participants were 112 U.S. mothers and fathers (N=56; 12% Black, 74% White, 12% other) and their toddlers (N=81, 40 boys, 41 girls). The majority of parents have a Bachelor’s degree or higher (78.3%) and were employed full time (54.2%). Most mother-father dyads were married to each other at the time of this study (91.6%). Participants were recruited from a childcare center in the U.S. through flyers sent home with their child. Families came to a laboratory setting to complete the study. The Coping with Toddlers’ Negative Emotion Scale was used to assess parents’ responses to their toddler’s negative emotions (anger, fear, sadness). The Coparenting Questionnaire was used to assess spouses’ perceptions of one another as coparents.

Results:
An Actor-Partner Interdependence Model will be used to test the hypotheses. Mplus will be used to test for model fit. Results are expected to be completed in January of 2023.

Conclusions:
It is expected that an increase in parents’ own and their partners’ unsupportive responses when faced with children’s anger, sadness, and fear.
P-126: Evaluation of a Personalised, Psychology-Informed, Home-Based Intervention to support Parent-Infant Relationships and Interactions

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This study described and evaluated the effectiveness of a personalised, psychology-informed, parenting intervention, delivered in the home, for parents and children aged 0-4 years old. The intervention aims, in the short-term, is to improve parent-child interactions and relationships, child behaviour and parental satisfaction, to support child development and wellbeing in the longer term. Anonymised data were collected from an opportunistic sample of five hundred and fifty-two parents, who had completed the intervention, between the period of April 2018 and April 2022. Parents completed outcome measures of parenting satisfaction once at the initial assessment (pre-intervention) and twice at the end of the intervention (post-intervention and retrospective pre-test). Parenting satisfaction scores were significantly higher after the intervention than before the intervention and parents’ retrospective accounts of parenting satisfaction were significantly lower than their initial pre-intervention scores. The implications of these findings, along with areas of future development of the model is discussed.
P-155: The effects of perinatal attachment and childhood traumatic events on mother-child affective synchrony

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INTRODUCTION AND AIM OF THE STUDY: Positive mother-child dyadic synchrony is a type of interaction, characterized by coordination and mutual regulation of affect. Through this kind of interaction, children develop efficient emotion regulation strategies to deal with stressful events. The quality of dyadic synchrony can be influenced by several maternal factors, such as sensitivity, mental health, attachment, and traumatic life events. However, how perinatal attachment and maternal childhood traumatic events affect the quality of dyadic synchrony has not been investigated previously. The aim of this study is to explore the effects of perinatal attachment and childhood related maternal trauma on mother-child synchrony during infancy.

MATERIAL AND METHODS: 40 mother-child dyads were recruited from hospital’s pre-natal courses. At 36 weeks of gestation, mothers were asked to complete two questionnaires: the PAI - Prenatal Attachment Inventory to measure perinatal attachment, and the ACE (Adverse Childhood Experience) to investigate experiences of physical and emotional abuse in the first 18 years of life. At the infant age of 3 months, mothers and infants participated at the Still Face paradigm. Mother’s and infants’ affective behaviour were coded with Tronick’s Infant and Caregiver Engagement Phases (ICEP) coding system. The relative duration of affective matches was calculated to assess dyadic affective synchrony.

CONCLUSIONS: Preliminary results showed that less maternal trauma and a secure perinatal attachment were associated with high levels of positive affect mother-child synchrony. On the other hand, high maternal trauma was associated with high negative affect synchrony. The results of our study add to the literature on perinatal factors that may influence the quality of dyadic synchrony. In addition, the importance of preventive intervention programs to promote the development of secure attachment during gestation emerged.
P-288: Children's emotional problems during the SARS-CoV-2 pandemic and child's attachment

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Introduction
The SARS-CoV-2-pandemic went with many restrictions for families with young children, affecting the mental health of children worldwide. Previous studies have already identified secure attachment as an important protective factor for child development.

Aim of the study
The aim of this study was to investigate the influence of the pandemic and child attachment on children's emotional problems. It is hypothesized that insecurely attached children generally have more emotional problems, emotional problems of all children worsen over the pandemic, and insecurely attached children suffer more from the pandemic in terms of their emotional problems.

Material and Methods
N = 129 mothers and their children were included in the analysis. Children's emotional problems were measured in an online survey at three different measuring points before and during the pandemic, using the Strengths and Difficulties Questionnaire (SDQ). Child attachments was measured with the Strange Situations Test (SST), when the child was approximately 12 months old. The calculation of a mixed ANCOVA showed, that securely attached children had fewer emotional problems than insecurely attached children (F(1, 118) = 13.93, p < .001) and that the emotional problems of all children increased significantly over the pandemic (F(1.79, 210.87) = 5.92, p = .004). The interaction effect between time and child attachment was not significant (F(1.79, 210.87) = 0.09, p = .897).

Conclusions
Our study shows that there is an association between attachment security and emotional problems and the impact of the SARS-CoV-2-pandemic on the mental health of preschool children in Germany, but insecurely attached children did not suffer more from the pandemic in terms of their emotional problems. The result indicate the need of preventive services (for children and parents) to promote and maintain stress coping skills in order to maintain children's mental health in times of crisis.
P-089: Mothers’ and Fathers’ Feelings of Judgment in the Parental Role, Parenting Perfectionism, and Parental Burnout

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INTRODUCTION
Parents’ emotions and cognitions contribute to parenting processes, and discussions of parental roles and identities highlight the connection between society’s value on parenting and judgements of parenting competence (e.g., Schoppe-Sullivan & Altenburger, 2019). Although parents may report feeling judged in the parental role, little research has explored psychosocial correlates of parents’ feelings of judgment during the infant’s first year, a time of heightened stress.

AIMS
Three research questions were addressed:
1) Do parents of infants feel judged and if so, by whom?
2) Do mothers and fathers report similar feelings of judgment?
3) How do feelings of judgment relate to multiple indices of parental well-being?

MATERIALS AND METHODS
Parents (67 mothers; 61 fathers) of 3-12-month-olds within the USA completed an online survey. Respondents were predominantly white, non-Latino; 91% worked full-time and 88% were married. Parents reported on feelings of judgment in the parental role, parenting perfectionism, mental health symptoms, and parental burnout.

CONCLUSIONS
Almost all parents reported feeling judged; only 3% never felt judged. Over half the sample reported that they judged themselves. They also felt judged by their own mothers (44.5%), fathers (33.6%), and in-laws (21.9%). Parents felt most judged for their level of involvement, followed by their feeding and sleep practices with their infants. Mothers and fathers differed somewhat in the domains they felt judged on and in perceptions of who was judging them. Parents’ feelings of judgment were significantly associated with greater parenting perfectionism (r(126) = .42, p < .000) and parental burnout (r(128) = .38, p < .001), but not with parental depression or anxiety.

Findings suggest that parents may benefit from additional support to explore how feelings of judgment may contribute to the parenting experience.

P-004: Evaluation of an Initiative to Foster Trauma-Informed Organizational Change in Early Care and Education

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Introduction: Children with histories of trauma exposure are at increased risk for a range of developmental, social, emotional, and behavioral symptoms. The effects of traumatic life experiences can impact children’s ability to learn and function within early care and education (ECE) and school environments. Trauma-informed (TI) ECE programs/schools seek to create environments in which children with experiences of trauma can build resilience and be successful, and must be available as early as possible in children’s educational experience.

Study Aim: This session focuses on the implementation and evaluation of a TI change initiative called Fostering Informed and Responsive Systems for Trauma: Early Care and Education (FIRST:ECE). FIRST:ECE is a two-year initiative focused on implementing TI organizational change, and this study focused on implementation in two school district pre-kindergarten (pre-k) systems in the United States. The goals of the study were to explore changes in staff awareness about childhood trauma and teacher use of classroom practices designed to build resiliency skills in children. We also explored staff engagement in the process of creating broader organizational changes.

Materials and Methods: Site 1 (urban) had 7 pre-k locations with 31 classrooms, while site 2 (micropolitan) had 5 locations with 12 classrooms (43 classrooms total). To address evaluation questions, we conducted teacher surveys in years one and two of the project and explored change over time in 91 teacher using t-tests and descriptive statistics.

Conclusions: In surveys across two years, participating teachers reported gains in trauma-related knowledge and implementation of TI teaching strategies. Surveys of a subset of staff who were involved in school district-level teams focused on implementation of broader TI organizational changes (e.g. adapting policies and procedures) revealed that most agreed the process was inclusive, they made progress towards goals and they developed a sustainable way to facilitate change.
P-056: Joint attention episodes between preterm toddlers and their mothers and fathers during free play

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Introduction
Joint attention (JA) refers to a shared attentional state between social partners toward the same event/object. JA requires infants to maintain attention and is important for creating opportunities to learn through social interaction and hence contributes to child development. As preterm birth is a risk factor for attentional difficulties due to higher medical risks and low gestational age, preterm infants’ JA skills have been investigated. However, findings have been inconsistent, with some studies showing poorer JA skills among preterm infants and others showing no differences between preterm and term-born infants. A recent meta-analysis indicated that degree of prematurity might be uniquely associated with different domains of JA (Mateus et al., 2019). Further, these studies have been confined to early infancy and mainly measured JA skills via standardized scales rather than exploring interactions with parents.

Aim of the study
The present study examines the quantity (duration, frequency) and quality (type of JA, who-initiated, who-terminated, who-missed) of JA episodes during preterm toddlers’ interaction with their mothers and fathers. This study further investigates whether degree of prematurity is associated with JA characteristics during the interaction.

Material and methods
Two- to four-year-old preterm children (<37 weeks of gestation, N = 50) participated in the study with their mothers and fathers. JA episodes were observed in a semi-naturalistic lab environment during 5-minute dyadic free play sessions and are being coded second-by-second using Mangold’s INTERACT software.

Conclusions
Correlation and regression analyses will be computed to explore associations between gestational age, child age, and JA characteristics. Findings will help to fill a gap in the literature by focusing on beyond the infancy period and including interactions with both parents.

References
Early childhood development is a strong predictor of long-term health outcomes, and adverse childhood experiences can lead to maladaptive changes which could alter health throughout life. These changes may be occurring via the epigenome, the collection of mitotically heritable chemical marks that can impact gene expression without changing the genome. We sought to understand how adverse childhood experiences, punitive parenting, and a psychotherapeutic intervention designed to mitigate these risks can impact DNA methylation, the most commonly studied epigenetic mark. A cohort of families at greater risk for disruptions to the parent-child relationship was randomly divided to receive either Infant Mental Health Home Visiting (IMH-HV) or control (treatment as usual). Saliva samples were collected from infants (n=46-55) at baseline and after 12 months. Salivary DNA methylation was measured using pyrosequencing at four genes and genetic elements of interest to brain function and development (NR3C1, SLC6A4, BDNF, and LINE1). In children, methylation in SLC6A4 and LINE1 was sensitive to parenting; decreased SLC6A4 methylation observed with increasing parental responsivity and decreased LINE1 methylation observed with increasing levels of endorsement of corporal punishment and child-role reversal. BDNF methylation was not associated with adverse, early-life experiences but did display an overall decrease in response to treatment over 12 months. This relationship was most robust in younger children (<12 months at treatment initiation), when the epigenome is most plastic. Overall, these results suggest that the epigenome is sensitive to both early life experiences and mitigative psychotherapy, revealing potential targeted molecular pathways for early life therapeutic interventions.
INTRODUCTION: The richness of early childhood makes it imperative that indicators used to measure early development are holistic, inclusive, comparable and feasible. In view of a lack of such measures, combined with the urgency of Sustainable Development Goals (SDG) which require monitoring children under 5 years who are developmentally “on track”, the World Health Organization (WHO) developed the Global Scales for Early Development (GSED) to measure children’s early development (ages 0-3 years). The GSED includes three measures: 1) short form (SF) for population-evaluation (caregiver-report), 2) complementary long form (LF) for programmatic-evaluation (direct assessment), and 3) psychosocial form (PF) for psychosocial development evaluation (caregiver-report). GSED build on advances made by analyses of existing global datasets, and new data collection that demonstrated the cross-cultural applicability of items that measure young children’s development.

AIM: In this presentation, we will describe 1) the process of development of GSED caregiver-reported and direct assessments as it reflects the attention to capturing cultural neutrality and methodological rigour, and 2) preliminary data from 3 countries.

METHODS: To achieve the goal of addressing child development globally, the item bank for the new measures was constructed based on existing cross-sectional and longitudinal datasets from 51 cohorts in low- and middle-income countries using 18 established early child development instruments (with 2221 different developmental items) representing over 66,000 anonymised children with 100,153 assessments. Combining expert judgment and statistical modelling, the prototype measures were constructed and validated in a study conducted in Tanzania, Bangladesh, and Pakistan.

RESULTS/CONCLUSIONS: Preliminary data indicate that GSED SF and LF measures have high reliability and validity with other developmental assessments, while the psychosocial form requires further development. This suggests that caregiver report and direct assessment by trained assessors are valuable complementary sources of information necessary to monitor young children’s physical, mental and developmental health.
P-329: Educator assessment of children’s learning experiences with the Observe Reflect Improve Children’s Learning (ORICL) tool

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INTRODUCTION

It is widely accepted that the first two years of life are critical to positive life trajectories, yet there is much room for improvement in the provision of education and care (EC) services for infants and toddlers. To provide a high-quality EC program requires specialist knowledge and skills to observe, reflect on and interpret very young children’s behaviour and communication; effective planning to consolidate and extend learning; facilitation of children’s engagement with the social and physical environment; and accurate documentation to track and communicate learning progress. High-quality EC is supported by well qualified staff, but in Australia educators only require a Certificate-level qualification.

AIM

The Observe, Reflect, Improve Children’s Learning (ORICL) digital tool was co-designed to enhance the capacity of infant-toddler educators to notice, record, and interpret the day-to-day interactions, relationships, and learning experiences of very young children in EC settings.

MATERIAL and METHODS

The ORICL digital tool includes 118 stimulus items to prompt assessment of children’s behaviour and interactions across six domains that are aligned with the Early Years Learning Framework for Australia: 1 Identity, Belonging, Sense of Self, Family and Culture; 2 Connectedness with Others; 3A Emotional Wellbeing; 3B Physical Wellbeing; 4 Constructing Knowledge and Understandings; 5 Communication. Its use in EC settings is being facilitated by 11 Partner Organisations and funding from the Australian Research Council. Educator provided child data records and interviews about the effectiveness of ORICL to support program planning will be presented.

CONCLUSIONS

The evaluation of educators’ use of the ORICL in a recurring cyclical process of observation and planning for individual children will provide the groundwork to trigger significant and sustained improvement in pedagogy and practice for infant-toddler education and care.
P-093: Quality Time in Quarantine: The Buffering Effects of Family Time on Outcomes Associated with COVID-19

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Introduction

COVID-19 negatively impacted families across a variety of areas, including economic hardship, social disruption, and family well-being. Previous research has illustrated the importance of family relationships in ameliorating the consequences of prolonged adversity (Hamby et al., 2020).

Aim of the Study

Considering the notable importance of family factors in previous research, the current study focuses on understanding the impact of increased quality time spent with close family members and children in modifying the relationship between various negative home and social life consequences of the current pandemic and various social and health outcomes.

Material and Methods

Caregivers of young children across five states (N=67) were identified through clinics, social media, previous studies, or substance use disorder programs. A series of surveys and semi-structured interview guides were designed to understand experiences of low- and at-risk families during COVID-19. Interviews were conducted by phone with trained qualitative interviewers with data being analyzed using NVivo12 and SPSS software.

Conclusions

Results from three hierarchical multiple regressions indicated that associations between negative home and social life consequences of the pandemic (e.g., increased parent-child conflict; being separated from family and friends) and subsequent negative outcomes (e.g., increases in child behavior problems; increased verbal partner conflict; increased sleep problems) were modified by increased levels of quality time spent with family/children. Model results and interaction plots for each analysis indicate the presence of buffering effects, as adverse outcomes decreased across increasing levels of the moderator variables. These findings suggest that increased quality time spent with close family and children modifies the relationship between negative home and social life consequences of COVID-19 and subsequent social and health outcomes.

References

Introduction and aim of the study:

Infant Directed Speech (IDS), is a specific vocal register used by adults when addressing children, characterized by simple, concrete, and redundant vocabulary, short sentences, and prosodic emphasis, aimed at affective communication and facilitation of language acquisition. This specific vocal register could be influenced by various maternal factors. While previous studies have investigated the relationship between maternal depression and maternal involvement on the quality of IDS during the child's first year of life, studies on the possible influence of perinatal attachment and perinatal depression on maternal IDS are lacking. The present study aimed to investigate the possible influence of perinatal attachment and perinatal maternal depression measured during pregnancy on maternal IDS during the interaction with their 3-month-old infants.

Material and Methods:

40 mother-child dyads were recruited from the pre-natal course at the hospital. At the 36th week of gestation, mothers filled two questionnaires: the PAI - Prenatal Attachment Inventory (Italian version), to measure perinatal attachment, and the EPDS (Edinburgh Postnatal Depression Scale) to measure maternal depression during pregnancy. At infants’ age of 3 months mother-infant face-to-face interaction (3 minutes) was video-recorded. Maternal speech was transcribed using CHILDES software and prosodic analysis of the IDS was performed using PRAAT software. Preliminary results showed an influence between perinatal attachment and maternal IDS and between perinatal depression and maternal IDS at 3 months. Low attachment and high depressive symptoms were associated with low verbal complexity and low prosodic variations in maternal IDS.

Conclusions:

These findings add to the literature on prenatal factors influencing IDS. The study highlights the importance of the effectiveness of designing intervention programs to promote the development of secure attachment at the perinatal level and to act early on maternal depression to safeguard the child's language outcomes.
Introduction: All the upheavals induced by the perinatal period on the psychological level are so important that they must necessarily influence the attachment strategies of woman who is expecting her first child. However, it is accepted by researchers that attachment relationships in childhood find a concordance in the bonds established as adults (Hazan and Shaver, 1987) and that the style of attachment is transmitted from generation to generation (Airi Hautamäki, 2010; Benoît, 1994).

Aim of the study: To show the results of a research on the modifications of attachment in ante and post natal, in a population of primiparous women.

Material and methods: Research is proposed to 30 women from an all comers population going to the CHU Center Hospitalier Universitaire. The subjects are met during 4 different times at their home from the start of pregnancy until the baby is three months old.

The Relationship Scale Questionnaire (R.S.Q.) tool measuring attachment style strategies (secure, fearful, preoccupied, detached) (Griffin and Bartholomew, 1991, French version N. Guédeney, 2010) is proposed.

Conclusions  Attachment strategies, which are usually considered immutable in adulthood, vary significantly in women during the perinatal period: 53.84 percent of them have an attachment that will remain stable throughout pregnancy and postpartum. On the contrary, 46.15 percent of them present strategies of attachment which fluctuate and modify during the various times of their maternity. These attachment strategies have an impact on the occurrence of postpartum psychiatric pathologies and are undeniably highlighted in the scientific literature. Its study can constitute a certain means of prevention.
P-044: Transitioning to motherhood in the context of bipolar disorder: a constructivist grounded theory approach

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Introduction
Despite the growing evidence that women with bipolar disorder diagnoses are at a particularly increased risk for perinatal mental and physical health complications, our understanding of their experiences from pre-conception to early postnatal years is at a nascent stage.

Aim of the Study
To gain a better understanding of the experiences and support needs of women with bipolar disorders during their transition to motherhood.

Material And Methods
A qualitative study was carried out using a constructivist grounded theory approach. In-depth, semi-structured online interviews were conducted with ten mothers across the globe (i.e., living across five continents) with a pre-existing diagnosis of bipolar disorder and a first child under five years of age to enquire into their experiences from pre-conception through to pregnancy and early postnatal years. A conceptual framework of ‘vulnerability and adaptability: creating a space somewhere in between’ was generated from the data, consisting of three main processes: 1) Thinking family, 2) Expecting the (un)expected, and 3) Navigating the (un)known.

Conclusions
Women’s experiences transitioning into motherhood in the context of bipolar disorder highlighted the complexity of this journey nested within broader challenges, emphasising the importance of proactive, person-centred and rights-based support across formal and informal support structures from individual and interpersonal to sociocultural and structural.
P-299: Minding parents’ ups and downs: exploring the effects of mood instability on infants’ socio-emotional development

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Introduction

While the continuum for perinatal depression has been extensively researched in relation to its impact on parents’ interpersonal functioning and children’s mental health over time, research into mania has concentrated on the end of the spectrum (i.e., postpartum psychosis). Investigation of milder manic or mixed states in the perinatal period is still limited, with the effect of parental hypomanic traits on young children’s socio-emotional development currently unknown.

Aim

To model the direct and indirect effects of parental low and hypomanic mood profiles on infants’ socio-emotional development while exploring the mediating roles of parental reflective functioning and emotion regulation strategies (cognitive reappraisal and expressive suppression).

Material And Methods

An international online survey was completed by 1788 parents with a child under two years of age during the first wave of the Covid-19 pandemic (March-August 2020). Parents completed a set of questionnaires measuring their 1) depressive symptoms, 2) hypomanic traits, 3) reflective functioning, 4) emotion regulation strategies, and 5) socio-emotional development of their babies. Structural equation modelling techniques were employed.

Results

After controlling for contextual factors, the model revealed a negative association between parental mood instability and infants’ socio-emotional development. Although the effects from the two parental mood profiles were of the same magnitude, different intergenerational risk pathways were identified. The impact of parental hypomanic mood traits on infants’ socio-emotional difficulties was fully mediated by parental low reflective functioning. Contrastingly, the effect of parents’ depressive symptoms was mainly attributable to its direct negative association with infants’ socio-emotional development and only partially mediated by parents’ less frequent use of cognitive reappraisal.

Conclusions

Study findings highlight the need of ‘minding’ the full spectrum of parental mood instability during the perinatal period and supports the incorporation of parental reflective functioning into prevention and early intervention strategies, promoting parental and infant mental health.
P-007: Reach and Acceptability of a Perinatal Support Program Delivered by Non-Specialists

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Introduction
Perinatal mood and anxiety disorders are associated with several adverse outcomes, including preeclampsia, gestational diabetes, spontaneous preterm birth, low birth weight, impaired mother-infant bonding, and infant development. Further, mood and anxiety disorders are associated with a range of health-compromising behaviors, such as smoking, alcohol use, improper diet, and inactivity, which have additional adverse outcomes for perinatal women and their offspring. Few women receive support for perinatal mental health due to barriers, including lack of specialists, stigma, time, and travel.

Aim
We address these barriers to care through a remote peer support program delivered via text message, phone call, and video chat. Based on feedback from key stakeholders, we modified an existing intervention to be delivered remotely by peer volunteers. The existing intervention, based on empathic listening and collaborative problem-solving, has significant empirical support for the treatment of perinatal depression by non-specialists. The objective of the current study is to assess the feasibility of our peer support program.

Methods
We trained 20 community volunteers to deliver the intervention, and we will implement the program in January 2023. Along with substantial advertising support from the community, we will collaborate with trusted messengers from a diverse range of racial, ethnic, and socioeconomic backgrounds as well as those fluent in different languages. Trusted messengers are engaged to disseminate program information and increase access for underserved communities.

Conclusions
We will collect quantitative and qualitative data pertaining to typical feasibility issues, including any regulatory challenges, rates of participant recruitment and retention, and participant perceptions of and reactions to the intervention (e.g., satisfaction, intent to use, perceived appropriateness). Project findings have significant implications for future research on service-provision by non-mental health professionals using non-traditional treatment delivery methods.
P-008: Healthcare Guideline Adherence in the Experiences of Pregnancy and Isolation during COVID-19 (the EPIC study)

Ms Lydia Henderson¹, Dr. Jennifer McCabe¹
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Introduction
Prenatal maternal stress (PNMS) is associated with adverse outcomes for offspring. Theoretical models propose four primary mechanisms of risk from stress to adverse health outcomes, including the effects of stress on physiology, health behaviors, psychosocial resources, and healthcare utilization. Most studies focus on physiology as the mechanism of risk, with little focus on the other pathways.

Aim
We address these limitations and build upon previous research by studying PNMS and offspring development in the context of the COVID-19 pandemic.

Methods
Women in their third trimester of pregnancy were recruited from April – August 2021. Consented subjects completed online surveys during pregnancy (T1), at 6-weeks postpartum (T2), and 16 months postpartum (T3). At T1, online surveys included questions about COVID-related stress, healthcare utilization, and adherence to prenatal care guidelines. At T2, surveys added questions about birth experiences and guidance from healthcare providers. At T3, surveys contained questions for postnatal healthcare and stress, and infant healthcare and development.

Analysis of T1 data (n=83) indicates the sample is predominately Caucasian (72%) with 12% identifying as Hispanic/Latino. Thirty-four percent of subjects reported they were eligible for the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) during pregnancy. Complete data will be collected and ready for analysis in January 2023.

Conclusions
This study will offer a unique perspective regarding experiences in pregnancy, postnatal, and infant healthcare during the COVID-19 pandemic. Furthermore, these data will allow us to examine disparities in perinatal health among women of racial/ethnic minority groups and low socioeconomic status. Finally, findings from this study will inform future research pertaining to mechanisms of risk from PNMS to offspring development.
P-363: Restrictions of visitors in maternity, mothers' emotional experience and construction of the first mother-newborn bonds

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Introduction: At the time of COVID-19, visit restrictions were implemented in maternity hospitals. Some research has revealed the negative impact of these restrictions on mothers when they affect the partner’s presence and an emotional ambivalence when they concern other visitors. However, few qualitative studies have explored mothers’ emotional experiences and their impact on the development of the first mother-newborn bonds.

Aim: This qualitative study aimed to explore the emotional experience of mothers confronted with visitor restrictions in the maternity ward, and the potential effects of this experience on the construction of the first bonds with the newborn.

Material and methods: Individual, semi-directive interviews were conducted between 9 December 2021 and 15 August 2022 with 16 mothers who had given birth in the maternity hospital during the pandemic. They were transcribed and then subjected to thematic analysis.

Results: In the absence of their partner, it was found that mothers had mostly negative emotional experiences during their stay in the maternity ward. However, some mentioned a special time of meeting and caring for their newborn. The absence of siblings was also associated with a predominantly negative experience, but without any apparent repercussion in the construction of the first mother-newborn bonds. Finally, the participants reported a relatively positive experience, but sometimes a negative one when visits were banned for the extended family. Nonetheless, most of them spoke of the tranquillity necessary for an intimate encounter with their newborn, which was favourable to the latter’s well-being.

Conclusions: These results encourage a rethink of the regulation of post-COVID maternity visits in the subjective interest of mothers and their newborns. However, it would be relevant to complete this study with quantitative research to solidify these findings.
P-109: Examining links between maternal history of childhood sexual abuse, parental reflective functioning, and parenting stress

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Introduction: Extant literature suggests that survivors of childhood sexual abuse (CSA) may be particularly at risk of experiencing high levels of parenting stress when taking care of their own children (Hugill et al., 2017). Research also points to the importance of examining indirect pathways from CSA to subsequent parenting stress (Hugill et al., 2017). In particular, parental reflective functioning (PRF), i.e., the ability to reflect upon one’s own and one’s child’s internal experience (Slade, 2005), could contribute to explaining how CSA leads to increased parenting stress: Maternal history of CSA has been shown to be negatively associated with the mother’s ability to conceive of her child’s inner world (Koren-Karie & Getzler-Yosef, 2019) and poorer PRF is related to increased parenting stress (Nijsens et al., 2018).

Aim of the study: This ongoing study aims at examining (1) whether severity of maternal CSA is related to parenting stress and (2) whether this link is mediated by PRF.

Material and methods: Thirty-two mothers of children (12 girls; 1 to 7 years old, M = 3.4) followed by child welfare services completed the Childhood Trauma Questionnaire, the Parental Reflective Functioning Questionnaire, and the Parenting Stress Index.

Conclusions: Results of Partial Least Squares Path Modeling failed to provide evidence for an association between maternal history of CSA and parenting stress ($\beta = 0.20$, [bootstrap 95% CI: -0.29, 0.30]). However, less optimal PRF was associated with more parenting stress ($\beta = 0.73$, [bootstrap 95% CI: 0.57, 0.88]). The model explained 55% of the variance in parenting stress. These findings highlight the importance of interventions aimed at enhancing PRF in high risk contexts.
P-196: The Potential for In-Service Training Programs Incorporating Infant Mental Health Knowledge in Japan

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This study examines the position and development potential of training programs that incorporate the findings of infant mental health, based on a systematic survey of in-service training programs for childcare professionals in Japan. Infant mental health focuses on the relationship between infants and caregivers, and aims for healthy infant development by observing and understanding psychosocial interactions through behaviors, sounds, words, and other interactions between infants and caregivers, and by carefully examining the interactions, including caregivers’ self reflection. Although there are great variety of in-service training programs for childcare providers in Japan, this knowledge of infant mental health has not yet been introduced. We conducted a survey of the actual situation of in-service training for child caregivers in Japan in 2022, which is a part of our research "Development of a Draft In-service Training Program for Child Caregivers Utilizing Infant Mental Health" (JSPS No. 21K02374). It was found that child caregivers feel in their daily work that relationships with caregivers and parents are important for children, and that themes such as attachment and basic trust are included in the lecture topics in the in-service training program. We are currently surveying the framework for in-service training for child caregivers, by collecting and analyzing data published by local governments and childcare-related organizations. The results are expected to show that while items necessary for childcare (understanding young children, practical skills, etc.) are covered, the underlying philosophy is often not described.
P-202: Infant Mental Health training in Dutch hospitals: reflection and evaluation

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INTRODUCTION

Infants with medical vulnerabilities are at risk for developmental and psychosocial difficulties. The hospital environment can easily induce stress in parents as well as infants and can compromise the parent-infant relationship. The principles of Infant Mental Health can enable hospital staff to facilitate parent infant bonding and prevent medical distress. Training hospital staff in the principles of Infant Mental Health (IMH) may help generating more optimal conditions in caring for vulnerable infants and their parents.

AIMS

The present pilot study aims to evaluate the training of pediatric and obstetric hospital staff in the basic principles of IMH in a general hospital in the Netherlands.

MATERIAL AND METHODS

IMH training was developed for hospital staff by a national working committee of trained psychologists and pediatricians and was offered in-company in 5 hospitals. The present preliminary results concern the Deventer Hospital. The course consisted of 2 days of theoretical and practical training and 1 day of reflective intervention. Principles of IMH that were trained: IMH-attitude, reflection on parent-child relationship, awareness of intergenerational transmission, impact of traumatic stress, dealing with parent and child vulnerabilities, stress within the relationship between professional and parent, child or team. A multidisciplinary team (n=16) was trained. Before the training interviews were conducted with a selection of participants. Before and after the training, participants completed a questionnaire.

CONCLUSIONS

The training was evaluated positively. Participants rated the training an 8 out of 10. Preliminary analyses show that after the training, participants reported being more reflective and reported communicative skills concerning the parent, child and parent-child relationship more often compared to before training. Theoretical concepts of IMH were reported being more familiar and applied more frequently by participants after training, compared to before. Data analysis concerning the other hospitals is in progress. Further qualitative research is needed.
P-230: Little ACF: a parental support program for parents with children 1-2 years old

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Introduction

Child health and development can be promoted by strengthening and supporting parents. The universal parenting program ACF (All Children in Focus) is a parental support program for parents of children 3-12 years that has shown to have positive effects on parental self-efficacy, parenting strategies and children's wellbeing. We have now adapted this program to suit parents of 1-2 year olds, Little ACF, with a focus on emotional regulation and secure relations. The program consists of four group meetings with four different themes and exercises to try at home between the sessions.

Aim

To gain knowledge about the effects on parents and children in Little ACF and in the longer run to develop an evidence-based universal parental support program during infancy.

Material and methods

The study is a randomised controlled trial conducted in collaboration with several Child Health Care Services in the region of Stockholm, Sweden. 15 group leading pairs (CHC nurse + social worker/preschool teacher) have been recruited from various SES strata of the region. Group leaders get four days of training and regular coaching. Parents of a total of 600 infants are needed in the study.

Participating parents fill out baseline questionnaires before randomization. Follow-up questionnaires are completed post intervention and after 6, 12 and 24 months. The primary outcome is parenting strategies measured by parental self-efficacy, parental stress, parent emotional regulation, parental strategies and the coparenting relationship. The secondary outcome is children's social and emotional development. The results will be analysed according to the intention-to-treat principle and per protocol.

Conclusions

Some preliminary results can be presented but purpose of this presentation is a description of the program, Little ACF.
P-100: Does the link between parent-child mutuality and child executive function depend upon household order?

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INTRODUCTION: Warm and sensitive parenting facilitates children’s executive function (EF) (e.g., Fay-Stambach et al., 2014), but this effect may be constrained by aspects of the home environment. For example, positive associations between maternal sensitivity and child theory of mind are only observed at low levels of household clutter and crowding (McCormick et al., 2022).

AIM: Using a behavioural measure of early parent–child mutuality, we aim to examine whether associations with toddlers’ later EF are attenuated in the context of household chaos (e.g, Marsh et al., 2020).

MATERIALS AND METHODS: A socially diverse sample of 145 British families with toddlers were seen at ages 2 and 3; toddlers completed four EF tasks at each timepoint. At age 2, mother-child mutuality (indexed by responsiveness, reciprocity, and cooperation) was assessed in 20-minutes of structured and unstructured lab-based play, coded using Deater-Deckard et al.’s (1997) Parent-Child Interaction System. In addition, both maternal report (Coldwell et al., 2006) and researchers’ home-visit ratings (Gregory et al., 2012) were used to index household chaos. Hierarchical regression was used to examine whether household chaos undermines the beneficial effects of mother–child mutuality.

CONCLUSIONS: After controlling for the effects of EF at age 2, mutuality positively predicted child EF at age 3 (β = .208, SE = .252, p < .05). No other main or interactive effects were observed. The overall model explained 15% of the variance in child EF at age 3. The results suggest that early mutually responsive parent–child interactions are important for child’s later EF regardless of the state of the home environment.

Citations & References available on demand.
P-199: Summary of family demographics and interventions during care proceedings in an infant and family team

Dr Alanna Gallagher¹,², Ms Megan Barnett²,³, Dr Michaela Archer¹,²

Introduction

The Infant & Family Team (IFT) is an innovative service, based on the New Orleans Intervention Model, that targets the mental health needs of infants age 0-5 years old who are in foster care, and provides evidence-based assessment and interventions for infants, their parents, and foster/kinship carers within the framework of the Family Court in England. The service is part of a randomised controlled trial (RCT) that completed recruitment in August 2021, with expectations that the research paper will not be published until 2024. Families were recruited from multiple boroughs.

Aims

This poster aims to establish the numbers and characteristics of cases assessed by IFT, numbers of cases who were offered intervention, and the types of interventions offered. It is useful to consider who is seen by the service and who is offered intervention.

Materials and methods

This poster describes the demographic information of children and adults who were referred into IFT for assessment after random allocation to the service during care proceedings between 1st November 2015 and 1st January 2021. This resulted in a total of 52 cases included in data analysis.

Demographic and outcome information included: gender, age, and ethnicity, what proportion of these groups were offered intervention and which interventions were offered (Circle of Security, Video Interactive Guidance, and Child-Parent Psychotherapy).

The poster suggests possible explanations and further discussion of these figures.

Conclusion

The poster shows a higher number of boys undergoing assessment and a subsequent higher proportion of boys being offered intervention. A higher number of mothers were assessed than fathers, although similar proportions were offered intervention. The majority of children at assessment and intervention with IFT were recorded as having White British ethnicity.

Suggested changes or areas of learning for the service are also explored.
P-102: Paternal peripartum distress and loneliness: the roles of perceived stress and social support

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Introduction: The peripartum period is a time of increased stress for fathers (Philpott et al., 2017). Paternal peripartum stress is associated with postnatal anxiety, depression, and loneliness (Wee et al., 2015). According to the stress buffering model of social support, social support protects individuals from the adverse effects of stress (Cohen & Wills, 1985).

Aim: To explore fathers’ mental health during the peripartum period, how stress contributes to psychological distress and loneliness and the ways in which social support moderates these outcomes.

Material and methods: For the quantitative element of the research, a questionnaire was administered to participants during the third trimester of the prepartum period and again at three and six months postpartum. The questionnaire consisted of demographic questions, The Cohen Perceived Stress Scale, The Edinburgh Postnatal Depression Scale, The DeJong Gierveld Loneliness Scale and The Multidimensional Scale of Perceived Social Support. One-to-one semi-structured interviews were also conducted to explore fathers’ experiences with loneliness and social support during the postpartum period.

Conclusions: Obtained findings from the qualitative and quantitative elements of this research will be presented. Clinical implications and future directions for research will be discussed.
P-066: Cultivating Trauma-Informed Care in the NICU: A Qualitative Look at Barriers and Facilitators to Implementation

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Introduction:
Trauma-informed care (TIC) is not widely implemented in the neonatal intensive care unit (NICU), despite the evidenced adverse consequences of NICU hospitalization (Coughlin, 2021). Neonatal stress and trauma can negatively alter long-term brain development and unfavorably impact the life-course of infants and families (Weber & Harrison, 2019; Wolke et al., 2019). These adverse childhood experiences have garnered the attention of clinicians, researchers, and policymakers in support of transformative change; however, inadequate research exists regarding the uptake and adoption of TIC within NICU environments (Forkey et al., 2021).

Aim of the Study:
This study’s aim was to explore neonatal professionals’ attitudes and practices of TIC in the NICU and extrapolate perceived facilitatory and encumbering determinants of implementation into neonatal practice.

Material and Methods:
This qualitative study involves semi-structured, video-based interviews with thirteen multidisciplinary NICU practitioners who completed a Trauma-Informed Professional Certificate Program. Data was transcribed, coded, and summarized using thematic analysis.

Conclusions:
A dynamic framework depicting trauma-informed care implementation determinants was generated from thematic findings. Results indicate that TIC fundamentals are not commonly practiced in the NICU and that several personal and systemic factors exist as facilitators or barriers to implementation. Improved TIC integration in the NICU requires trauma-responsive practice guidelines, education, and improved parental empowerment. TIC initiatives serve to buffer early adversity and scaffold future infant mental health for high-risk dyads.

References:


P-251: Identifying the critical ingredients of effective interventions for early mental health: A common elements review

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Introduction
Growing evidence shows that early prevention and intervention can have lasting impacts for children’s wellbeing. Despite this few programmes have scaled effectively in real world settings. Identifying the ingredients that are common to effective interventions could help to unlock the potential of early intervention for population-level impact by 1) guiding efforts to optimise effective programmes to widen access and maintain effectiveness at scale and 2) diffusing key principles of effective practice into surrounding systems.

Aim of the study
This study aims to identify the common practice, delivery, and implementation elements of effective programmes that are associated with the strongest effects for early mental health (0-4 years).

Material and methods
We are undertaking a systematic review to identify programmes that are effective in promoting children’s early mental health and/or related parent level outcomes. We will then employ a common elements analysis by systematically coding the shared elements of effective programmes in terms of practice (e.g., praise), delivery (e.g., role play) and implementation (e.g., clinical supervision) factors. We will report the elements that most frequently feature across effective programmes.

Conclusion
Preliminary results will be presented and discussed. We will present the common practice, delivery and implementation elements of effective interventions and a set of intervention principles that could be infused into surrounding systems, through e.g., workforce training and development. Identifying these golden threads of effective practice will help us to better realise the potential of early mental health promotion at scale.
P-223: Emotional competence in pre-school children: preliminary evidence of a psycho-educational intervention

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INTRODUCTION
Emotional competence (EC) plays a crucial role in childhood and is fundamental to children’s ability to interact and form relationships with others. Although current literature shows a growing interest towards affective education, it is rather difficult to identify valid operationalizations and effective training programs in pre-schoolers.

AIM of the study
The aim of this study is to test a psycho-educational intervention fostering the development of EC (expression, understanding and regulation of emotions) in pre-school children.

MATERIAL and METHODS
A number of 82 Italian children (42 female) aged between 3 and 5 years participated to the training programme. The training consisted of 10 weekly small group sessions that took place in kindergartens for a period of three months. Sessions had specific aims, such as encouraging cooperative play, developing social competence and emotion recognition ability, and were characterized by: active workshop methodologies, hands-on activities and dynamic participation. Before the beginning of the programme and at the end of it, the Test of Emotion Comprehension (TEC) was administrated individually to each child. The TEC assesses the understanding of emotions in children through a series of cartoon scenarios and the child is requested to choose among four possible emotional outcomes depicted by facial expressions.

CONCLUSIONS
Results of repeated measure ANOVA show an improvement of TEC scores from baseline to 3 months (p < .001), with no differences between boys and girls (p = n.s.). The present study suggests that early psycho-educational programs, based on storytelling and drama, may have the potential to exert a positive influence on kindergarten children’s EC.
P-263: Feeding interaction and psychopathological risk: a mother-child study

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INTRODUCTION
Consolidated research has shown that maternal psychopathology can be significantly associated with children's internalizing and externalizing symptoms. This association has been explained by several underpinning mechanisms. However, the bulk of research examining the connections between psychopathological risk from mothers to children have used clinical samples from women who have been diagnosed, leaving normative and sub-threshold populations relatively unstudied. Moreover...

AIM of the study
The present study aims to assess maternal and children’s psychopathological risks at 8 years in a non-clinical sample as a function of feeding interaction quality at three years of the child.

MATERIAL and METHODS
150 mother-child dyads (female children n = 84; mothers’ mean age = 31.73, SD = 2.49) took part to the study. Data on interaction quality were collected at children’s three years of age, while self-report measures were administrated when children were eight years old. Mother-child interaction quality was operationalized through the global score of the Feeding Scale. This observational measure allows the assessment of the child’s and the parent’s dysfunctional behaviors during the meal, with higher scores indicating less adaptive dyadic interactive patterns. Maternal psychopathological symptoms were assessed by means of the subscales and the Global Severity Index (GSI) of the Symptoms Checklist-90-R (SCL-90-R), while children’s symptoms were measured through the Cognitive Behavioral Checklist (CBCL). A number of three-way Loglinear analyses was performed to explore the differences in symptoms distribution as a function of mother-child interaction (i.e., adaptive vs. maladaptive) at three years of the child.

CONCLUSIONS
Results attested that dyads who presented maladaptive interaction patterns at three years of the child were more likely composed by mothers with higher psychopathological risk and children with symptoms above the clinical range, compared to dyads who had adaptive interaction patterns.
P-237: How Does Self-Compassion and Psychological Distress Relate to Workplace Wellbeing among Family Child Care Educators?

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Introduction: Early childhood (EC) educator well-being is supported with positive work environments (Kwon et al., 2021). An important part of EC work environments are job demands and resources (Demerouti et al. 2001). Job demands may deplete educator energy and job resources may provide support to meet the demands. Self-compassion may be an important personal resource for fostering workplace well-being and dealing effectively with job demands. However, research examining the self-compassion among EC educators; particularly family child care (FCC) educators, is limited.

Aim: The current study examined how self-compassion and psychological distress were uniquely associated with job satisfaction and job demands among FCC educators. We hypothesized that self-compassion and psychological distress would be related to FCC educators’ perceived job satisfaction and job demands.

Method: 102 FCC educators completed a national anonymous online survey in the United States in 2022. Selected surveys were used for this study.

Results: Preliminary results with multiple linear regression suggest that the overall regression was significant for job satisfaction (R² = .61), F (4, 93) = 13.46, p < .001) and job demands (R² = .43), F (4, 64) = 3.64, p = .01. Self-compassion was positively associated with job satisfaction (β = 2.98, p = .01) whereas psychological distress was negatively associated (β = -.45, p < .001). For job demands, self-compassion was negatively associated (β = -7.23, p = .03) whereas psychological distress was not a significant predictor (β = .42, p = .26).

Conclusion: FCC educators’ self-compassion may serve as an important personal resource in supporting workplace well-being.

References
P-224: Parental personality traits and changes in parenting stress after a parent-child psychodynamic intervention

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**INTRODUCTION**

The Focal Play Therapy with Children and Parents (FPT-CP) is a psychodynamic treatment originally developed for eating and evacuation disorders and then adapted to a wide range of parent–child relationship problems during preschool years. It is based on both the active engagement of parents in the diagnostic-therapeutic process and the use of play as a narrative dimension of the family history.

**AIM OF THE STUDY**

The present study wants to investigate the relationship between parental personality traits and changes in parenting stress after the first seven sessions of FPT-CP.

**MATERIAL and METHODS**

Parents accessed the Psychological Consultation Centre for Children and Parents (Department of Psychology, University of Bologna, Italy) for their child’s (0-5 years) behavioral, eating, or evacuation problems. Sixty Italian parents (30 mothers; M = 39.9, SD = 4.9, and M = 42.1, SD = 5.1, for mothers and fathers respectively) participated to the study. The FPT-CP is structured into weekly alternate play sessions with children and parents together and sessions with parents only. At the end of the first session parents were asked to fill in a demographic questionnaire and two self-reports on parenting stress and the Big Five personality traits, while at the end of the seventh session only the questionnaire on parenting stress was completed.

**CONCLUSIONS**

Results show an association between variation in parenting stress from the first to the seventh FPT session and personality traits. Different patterns were detected in mothers compared to fathers. For example, neuroticism was involved in both mothers and fathers parental stress levels but for fathers had a significant positive association only with post-intervention stress levels. Personality traits should be taken into consideration when treating child-related problems.
P-046: Psychosocial-Perinatal-Risk-Situations (PPRS) related to social and familial factors: study of specific factors and recategorization

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**INTRODUCTION**

Early detection of risk situations in the perinatal period allows the implementation of more effective and specific interventions in maternal-Infant mental health. Since 2011 we carry out in Argentina a research project that aims to identify Psychosocial-Perinatal-Risk-Situations (PPRS) at birth. In the last years, we found that the most frequently observed PPRS were related to social and familial risk factors. In this article we present the analysis and in-depth examinations of this particular category of PPRS: “Socio-familial risk situations.”

**AIM of study**

The objective of the study is to analyze Psychosocial-Perinatal-Risk-Situations specifically related to socio-familial factors, aiming to develop a better comprehension of risk factors at birth related to social and family situations, as well as improving the validity and reliability of this particular category.

**MATERIAL/METHODs**

The sample is composed of 283 mother-baby dyads of the hospital “Mi pueblo” in F.Varela, Buenos Aires, Argentina, who were interviewed administrating the Perinatal Psychological Interview (PPI) between May 2011 and January 2022, and which were categorized as Psychosocial-Perinatal-Risk-Situations type “Socio-familial Risk”. The 283 interviews were examined in detailed and evaluated by a group of experts: 5 perinatal psychologists with extensive experience in the field.

**RESULTS/CONCLUSIONS**

The findings indicate that the “social-familial risk situations”, encompassed 3 main and specific situations, and therefore identifying 3 more specific categories: Risk situations related to Absence of support provided by their partner (n=133, 47%); Risk situations related to conflicts in their extended family (n=46, 16.3%); and Risk situation related to social factors (n=104, 36.7%). The identification of factors that detect more specific risk situations, allows to implement more efficient interventions that aim to assist dyads facing challenging situations with potential negative impact on their mental health. Furthermore, the study permitted a recategorization and development of more specific definitions of their indicators, improving their reliability and validity.
INTRODUCTION VID-KIDS Virtual, a nurse-guided video-feedback intervention, focuses on sensitive and responsive parenting to promote infant development in the context of maternal postpartum depression (PPD). Initially conceived as a home-visiting program, the pandemic halted the in-person VID-KIDS trial. Pivoting to online delivery directly responded to consumer needs (e.g., increased parenting stress, reduced service access) and agency partners’ requests for accessible and cost-effective parenting support. Through user-engaged software design approaches, we collaborated with mothers and VID-KIDS’ nurse-interventionists to co-develop a virtual platform. We are now pilot-testing the VID-KIDS Virtual beta prototype.

AIM of the study: Study goals include 1) investigating VID-KIDS Virtual’s impacts on maternal-infant interaction quality, maternal depression, and infant developmental outcomes; 2) examining whether the online program yields the same findings as the home-based intervention, and 3) assessing users’ satisfaction.

MATERIAL and METHODS: VID-KIDS comprises three brief (45 - 60 minutes) video-feedback sessions conducted weekly at 3-week intervals. VID-KIDS Virtual impacts are being assessed via quasi-experimental design, with outcomes collected at baseline and two months post-intervention. Measures include the Parent-Child Interaction Teaching Scale (primary outcome), Edinburgh Postnatal Depression Scale), Ages and Stages Questionnaire, infant salivary cortisol, and DNA from buccal (cheek) cells for epigenetics. We are also comparing the effectiveness of VID-KIDS Virtual (n=20) to the home-visiting program (n=146). A brief user-experience survey will assess mothers’ satisfaction with the virtual platform. Refinements will be made to the prototype based on users’ feedback, resulting in a final VID-KIDS Virtual interface.

CONCLUSIONS: Mental health problems were (and remain) severe secondary effects of the pandemic, with mothers at heightened risk due to PPD. However, a practical effect of the pandemic was the unprecedented level of digital health innovation. VID-KIDS Virtual program addresses the increasing demand for online mental health solutions and early interventions that ameliorate the impact of PPD on infants.
P-094: Maternal Childhood Experiences Relate to Depression in New Mothers

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Introduction

Maternal depression is a well-documented risk factor for young children and infants. Adverse childhood experiences (ACEs) have been found to account for many negative life trajectories, including a risk of mental illness in adulthood. Previous research shows that positive experiences in childhood may protect against hostile parenting attitudes in the presence of high ACEs (Morris et al., 2021). Similarly, positive childhood experiences may protect against later mental illness.

Aims

This investigation aimed to uncover the relationship between maternal early life experiences and depression postpartum, with a focus on the mother’s new infant experiences.

Materials and Methods

113 mothers of newborn children (Mage=4.6 months, SD=1.9) were asked to complete measures of maternal depression and their own adverse and protective childhood experiences. Childhood adversity was measured through the ACEs questionnaire to retrospectively assess negative experiences before the age of 18. Protective experiences were measured through the Protective and Compensatory Experiences (PACEs) to assess protective factors before the age of 18.

Conclusions

As expected, ACEs correlated positively with depression (r=-.47, p<.001) and negatively with PACEs (r=-.39, p<.001). PACEs were also negatively associated with depression (r=-.19, p=.040). Mothers with a history of PACEs may be better protected against the negative effects of depression, postpartum. In turn, this may provide an intergenerational link between maternal factors and infant experiences. Investigating maternal PACEs is a new link in the intergenerational transmission of newborn development.

References

P-241: Working to Support Families Experiencing Adversity: Best Practices in Introducing the Lemonade for Life Program

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Introduction

Caregiver’s ACEs is associated with poorer physical and mental health concerns during pregnancy and after the baby arrives (Scorza & Monk, 2019). Thus, pregnancy is a critical period to potentially interrupt the intergenerational transmission of trauma and mitigate negative health outcomes for caregivers and baby. Lemonade for Life (L4L) is a trauma-informed prevention-intervention to support professional’s use of ACEs as a tool to foster hope with caregivers (Counts et al., 2017).

Aim of the Study

The current study used a qualitative approach to understand best practices in introducing the L4L program from the provider perspective.

Materials and Methods

The study included providers (N=17) of three home-based parenting programs. Semi-structured interviews were used to assess best practices in implementing L4L. Interviews lasted approximately one hour and were conducted by trained qualitative research assistants. All data was analyzed using NVivo 11 software in groups of two (>85% inter-rater reliability).

Conclusions

Best practices for introducing L4L included (1) assessing caregivers’ stage of change, (2) assessing current knowledge of parenting behaviors, (3) explaining the benefits of L4L, and (4) using a conversational approach. Due to the importance of supporting families and reducing future adversity, continuing to learn best practices in introducing and implementing programs is vital. Further, for programs like L4L to be successful, robust training is needed to support providers in understanding best practices in the recruitment and engagement of participants.

References


P-095: Positive Experiences in Childhood Promote Flourishing, Even Amid Adversity

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Introduction: Early life positive and adverse experiences shape us. Positive childhood experiences (PCEs) are associated with flourishing in childhood and adulthood. Our species’ evolved developmental niche (EDN) provides positive experiences, matching the maturational needs of a child, promoting optimal development and including positive touch, a welcoming social climate and responsive care from multiple nurturers, and self-directed play. PCEs can be intentionally created and interrupt the traumatic impact of adverse childhood experiences (ACEs).

Aim: This workshop presents three research programs that address the promotion of flourishing in children. Participants will learn implementation strategies and measurement possibilities for their work.

Dr. Bethell presents published population-based studies examining the impact of parent-child connection on child flourishing and school engagement for children across levels of ACEs exposure. She presents validation of a PCEs measure and protective impacts of PCEs on adult mental and social well-being, even amid high levels of ACEs. Implications for public health policy, practice and culture are discussed. Dr. Narvaez presents published measures and studies demonstrating associations of childhood evolved developmental niche experience on child and adult well-being (e.g., the Evolved Developmental Niche Provision Report associates with positive social development in young children; Narvaez et al., 2019). Dr. Jump Norman discusses the impact on parenting and child/adult well-being of an intervention focused on increasing positive childhood experiences.

Conclusions: Positive relational experiences and nurturance are essential to promote early and lifelong health of children and can be promoted even amid adversity by building the caring capacity of families and communities.

REFERENCES
Bethell et al. (2019). Positive Childhood Experiences and Adult Mental and Relational Health in a Statewide Sample: Associations Across Adverse Childhood Experiences Levels. JAMA Pediatrics, 173(11), e193007.
https://doi.org/10.1177/2158244019840123
P-269: Relations between sleep and behavior problems in Black toddlers

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Introduction. Associations between child sleep and behavior problems are well-documented, but less is known about the bidirectionality of these relations and distinct aspects of sleep and behaviors across development. Moreover, few studies have focused on these relations in Black toddlers. Yet, findings may inform the development of culturally-relevant interventions.

Aim of Study. Our aim was to examine reciprocal relations between sleep and internalizing/externalizing behaviors in Black toddlers at 24 and 36 months.

Material and Methods. We used data from the National Institute of Child Health and Human Development Study of Early Child Care and Youth Development. The sample included 98 Black mothers and infants in the United States. Maternal age ranged from 18 to 39 (m=25.15, sd=5.23) and the average years of education was 13.33 (sd=1.70). Mothers rated toddler sleep and internalizing and externalizing behavior using the Child Behavior Checklist (Achenbach, 1991).

We used cross-lagged analyses to examine reciprocal relations. Results demonstrated unidirectional, rather than reciprocal, relations between sleep and externalizing behavior among Black toddlers. Externalizing behavior at 24 months predicted bedtime refusal at 36 months (b = .30, p = .007), but bedtime refusal at 24 months did not predict externalizing behaviors at 36 months (b = -.04, p = ns). Interestingly, frequent night waking at 24 months predicted low externalizing behavior at 36 months (-.18, p < .01), but externalizing behavior at 24 months did not predict frequent night waking at 36 months (.04, p = ns) among Black toddlers. No associations were found for sleep and internalizing behavior or trouble sleeping and internalizing and externalizing behaviors.

Conclusions. Findings underscore the importance of examining the directionality of distinct sleep and behavior patterns within the context of race and ethnicity. Investigations of bidirectional relations with parental values, preferences, and practices such as co-sleeping are needed and may inform culturally-relevant intervention.
P-360: Young Children with Special Health Care Needs: Exploring Primary Caregiver Perceptions of Attachment

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Introduction: The literature in infant mental health (IMH) and early childhood development repeatedly emphasizes the critical importance of healthy and secure attachment relationships between primary caregivers (PCGs) and young children with special health care needs (CSHCN) in order to optimize developmental outcomes. Professionals providing therapeutic supports to young CSHCN and their families are encouraged by leaders in the field to incorporate tenets of IMH into their practice. However, despite the depth of respect in the field for the dynamic and dyadic nature of the attachment relationship, there is little evidence documenting the lived experience and perceptions of PCGs in regard to attachment relationship with their young CSHCN.

Aim of the Study: The purpose of this phenomenological study was to explore the lived experience of attachment relationship in PCGs of young CSHCN. The research questions guiding that purpose were: 1) What are the perceptions and lived experiences of PCGs of young CSHCN regarding their attachment relationship? 2) How do familial resources (ie., social, economic, environmental, and developmental affordances) tend to inform the perceptions and lived experiences of PCGs of young CSHCN regarding their attachment relationship? and 3) How do Early Intervention programs tend to inform the perceptions and lived experiences of PCGs of young CSHCN regarding their attachment relationship?

Materials and Methods: A convenience sample of PCGs of children enrolled in Early Intervention programs were recruited to participate. Guided by a Dynamic Systems Model, data collection included: 1) qualitative data from one-on-one video-recorded semi-structured interviews with PCGs and 2) demographic information reflecting the multiplicity of contexts impacting the attachment relationship.

Conclusions: Data is currently under analysis employing both traditional manual qualitative methods and Computer Assisted Qualitative Data Analysis Software (CAQDAS) with an iterative inductive approach aimed at capturing themes and essences of PCGs’ lived experience of attachment with their young CSHCN.
P-057: Language and Memory Outcomes in children born extremely or very preterm

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Children born extremely preterm (EPT) or very preterm (VPT) are at risk of neurodevelopmental impairment, increasing the burden and economic costs for families and compromising children well-being and quality of life. The aim of this study is to analyse and compare the language, memory and learning outcomes of 5-year-old children born EPT (<28 weeks’ gestational age) and VPT (28–31+6 weeks’ gestational age), and to determine the risk of having poor outcomes attending to perinatal and maternal characteristics. Data came from a population-based birth cohort and is composed of 377 (284 VPT and 93 EPT) children born in 2011 and 2012 in Portugal. Maternal, neonatal, and clinical information was obtained at birth, and maternal education was obtained at five years using a parental questionnaire. The developmental NEuroPSYchological assessment second edition (NEPSY-II®) tests were used to assess language, memory and learning domains at five years. Following the NEPSY-II® manual instructions, scaled scores ≥ 8 or percentile ranks ≥ 26 were considered as indicating performance at or above the expected level, and lower scaled scores (≤ 7) or percentile ranks (≤25) were considered as indicating performance below the expected level for the child’s age. Logistic regression models were conducted to assess the association of biological and social risk factors with performance below the expected level for the child’s age in language, memory, and learning subtests. Lower maternal age and education increased the odds of having language performance below the expected level for the child’s age, while lower maternal educational level and gestational age increased the likelihood of having memory performance below the expected level. Neonatal and social factors are associated with different primary abilities related to memory and language in children born EPT or VPT. To implement intervention programs in disadvantaged contexts and targeting specific cognitive domains should be a public health focus.
P-261: The PUF-program: Addressing infants’ mental health vulnerabilities in the community health care.

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Introduction: Population-based strategies addressing infants’ mental health are fundamental to prevent the development of childhood psychopathology and validated and feasible measures covering the range of mental health vulnerabilities in municipality settings are urgently needed.

Aim: To describe the development, validation and implementation of a pragmatic service-setting based program of early identification and guidelines for actions addressing mental health vulnerabilities in infants aged 9-12 months delivered by community health nurses (CHN).

Methods: The PUF-program was developed in close collaboration with CHNs from twenty Danish municipalities, building on research evidence on developmental psychopathology, potentials of early intervention in the settings of the CHNs; and the PUF-measure to the standardized assessment of mental health at ages 9-10 months. The PUF-program includes a manualized program for the CHNs’ training, assessments and intervention within the existing municipality settings.

Qualitative and quantitative methods were applied to explore validity and feasibility of implementation.

Results: The PUF program was implemented in 2018-2020. The fidelity of the program differed across municipalities, and supplementary booster sessions were added to optimize the adherence to the guidelines of the program. The preliminary results show that 11% of children from the general population were identified with complex problems of development and regulation of eating, sleep, and emotional and cognitive functions. Face validity of the program was reported high by CHNs, and CHNs experienced that parents appreciated the standardized approach and the associated communication about the child’s development and needs.

Detailed results from analyses of participants and assessments of CNHs experiences will be presented at the congress.

Conclusions: The PUF-program is feasible for use in the existing municipality settings, and the initial validity is high. The PUF-program has strong potentials as a basic approach in municipality settings addressing mental health and development among infants at ages 9-12 months.
P-153: Sensitive parenting and the relation between observed and reported parental feeding behavior among vulnerable infants

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Introduction: Parental feeding practices highly influence child eating behaviors and related health outcomes. Sensitive parenting takes a key position in parental feeding practices, in particular among infants at risk of mental health problems and unhealthy weight development. Research linking parents’ reports of feeding practices with independent observations and ratings is limited.

Aim: In this sub-study of the Infant Health Study, exploring a new intervention to promote sensitive parenting to infants with regulatory and developmental vulnerabilities at ages 9-10 months, we are focusing on parental feeding measured through parent-reported questionnaires and video recordings of feeding behaviors at family mealtimes.

Method: The Infant Health study uses a cluster randomized controlled trial design conducted within the home visiting program delivered by community health nurses to all infant families in Denmark. Sixteen municipalities are randomized to start intervention at three different timepoints, and a standardized program, the PUF-program (In Danish: “Psykisk Udvikling og Funktion”) is used to identify infants with major problems of regulation and development. The intervention builds on the Video-Feedback Intervention to Promote Positive Parenting (VIPP), adapted to the PUF-context and named the VIPP-PUF. Follow-up at age 24 months includes measurements of height and weight, parental questionnaires regarding feeding and eating and a sub-study using video recordings of play-and mealtime. Primary outcome is sensitive parenting during mealtime, analyzed using the Coding Interactive Behavior (CIB). Secondary outcomes are child behavior, parent behavior and dyadic codes using the CIB as well as parent-reported questionnaires on feeding behavior.

Conclusion: The results of this ongoing study, available in 2024-2025, are considered to extend the existing knowledge on developmental vulnerabilities regarding problematic eating behaviors and unhealthy weight in early childhood. Specifically, the study has the potential to identify possibilities of prevention within the municipality child healthcare using approaches to promote parental sensitivity during child feeding.
P-262: Sensitive parenting to vulnerable infants - Development and testing a service-setting based intervention, the VIPP-PUF.

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Introduction: Mounting evidence underscores the developmental impact of mental health problems in early childhood. The settings of community health nurses (CHNs) and the standardized PUF-program offer potentials of indicated prevention, and the Video-feedback Intervention to Promote Positive Parenting (VIPP) has shown effectiveness across a range of early child and parental vulnerabilities.

Aims: The study is part of the Infant Health Study and aims to develop and test the VIPP-PUF intervention to promote sensitive parenting of vulnerable infants identified at ages 9-10 months, and to explore feasibility, fidelity, and effectiveness of the intervention.

Method: The intervention is created from the VIPP-Sensitive Discipline (VIPP-SD) and the PUF-program to be delivered between child ages 9 to 14 months. The VIPP-PUF includes a specified and elaborated manual and a program of training and supervision of CHNs who deliver the intervention. The VIPP-PUF includes six sessions of two hours completed over a 3-4 month's period, using video recordings of parent-child interactions, including feeding and play. VIPP-PUF is hypothesized to promote parents’ sensitivity to infants’ developmental and regulatory needs and improve their overall developmental outcomes, as has been demonstrated for VIPP.

Fidelity and feasibility of the VIPP-PUF intervention and study measures have been examined in pilot studies conducted (2021-2022) in four municipalities representative of the overall study population. The effectiveness of the VIPP-PUF is currently investigated in a step-wedge randomized controlled study conducted in sixteen municipalities, and includes a process evaluation using mixed methods approaches.

Results: The experiences from the first two years of the implementation of the VIPP-PUF intervention will be presented at the congress.

Conclusion: The study is the first to explore an intervention within municipality settings to target the earliest trajectories of mental health problems via promoting sensitive parenting of infants with developmental and regulatory vulnerabilities.
P-340: Parenting quality and emotional-behavioral wellbeing in offspring living in communities for maltreated children

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Introduction: Institutional care settings constitute a frequently adopted living arrangement for children raised in families characterized by histories of violence and maltreatment. Although they should represent a more suitable alternative, the literature extensively points out how institutions often tend to provide suboptimal caregiving environments, both due to organizational and relational aspects, putting children to a higher risk of experiencing an increase in emotional and behavioral problems later in development. Thus, next to the management of organizational characteristics that could promote quality of care, a consistent monitoring of professional educators’ parenting quality and of children’s emotional-behavioral problems should represent one of the main targets of facilities, in order to tailor and improve treatments and their outcomes.

Aim of the study: The study aimed to investigate longitudinally quality of professional educator-child interactions and emotional behavioral problems in children raised in a community that treats offspring with histories of severe maltreatment.

Material and methods: 14 children (7F, Mage=29.79 mths, SD=6.99) living in a community that treats offspring with histories of severe maltreatment were assessed with respect to relationship quality with their educators and emotional wellbeing, and matched to a group of low-risk pairs (7, F Mage=19.79, SD=5.81) recruited from the general population. Quality of parenting behaviors and of educator-child interactions was assessed during videotaped episodes of free-play (EAS; Biringen, 2008), whereas emotional-behavioral problems in children were assessed through self-report measures (CBCL; Achenbach & Rescorla, 2000). Measurements were carried out at entrance into the facility (T1) and after 6 months of treatment (T2).

Conclusions: The improvement of professional educators’ quality of parenting and the screening of emotional-behavioral problems in children should represent a particular important target for institutional care settings. The results of the study could orient and inform assessment and treatment. Clinical implications of the findings are addressed.
Introduction

Parents of infants admitted to the NICU are vulnerable to developing a range of mental health conditions, potentially leading to poorer parent-infant interactions. However, using trait measures of wellbeing and attachment, previous studies fail to account for the variability of emotions parents report following discharge and the dynamic nature of parent-infant interactions in day-to-day life. By accounting for daily mood and stress variability we can understand the characteristics of the relationship between mood, parent-infant interactions, and mental wellbeing including the identification of where and when parental mood might have an impact on interactions with their infant, and compromise their adaptation.

Aim

This study aims to deeper understand the effect of a NICU stay on parents’ day-to-day mental wellbeing using Ecological Momentary Assessment (EMA), which will gather a picture of daily parental wellbeing. Specifically: 1) how a stay in the NICU might affect day-to-day fluctuations in parental wellbeing, and 2) how such a stay might affect parents’ daily interactions with their infant, including whether this might be mediated by daily fluctuations in mood.

Method

Parents of infants who had a stay in the NICU, and a control group, completed questionnaires on their NICU length of stay and mental health symptoms. They also completed one week of EMA on their mood, feelings towards their infant, and the activity they were momentarily engaged in.

Conclusion

Using EMA with parents who experienced a NICU stay, compared to those who did not, we will gain an insight into the differences between these groups in daily mood fluctuations and how these might momentarily impact their feelings towards their child. We will also identify risk factors exacerbating the effects of a NICU stay on parental wellbeing and the parent-infant relationship, providing a crucial and novel contribution to the impact of NICU admission on parental daily functioning.
P-337: Social inequality in pandemic outcomes for families and children under three? A German representative study

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Introduction: A social gradient in the psychosocial impact of the COVID-19 pandemic has been demonstrated for the German residential population. Do parent self- and pediatrician reported family psychosocial and (mental) health outcomes related to the pandemic also differ by family socioeconomic status in young families and in children under three years of age?

Aim of the study: We compare families with lower and higher socioeconomic status with respect to pandemic outcomes for a) young families (e.g., perceived burden and worries, but also positive aspects) and b) their children aged zero to three (e.g. pediatrician and parent perceived age-appropriate development).

Material and Methods: Data originate from the nationwide representative study “Kinder in Deutschland – KiD 0-3 2022” (“Children in Germany”) conducted in the context of routine pediatric check-ups. The study is ongoing, data collection will end in early December 2022. Up to 6000 parents and their pediatricians will report on characteristics of the child (e.g., health and development), the parent (e.g., parenting stress), and the family (e.g., socioeconomic status), including experiences of and worries related to the pandemic.

Conclusions: Based on qualitative studies with small samples, we expect that families with lower socioeconomic status report higher stress during the COVID-19 pandemic. Analyses will provide evidence concerning the impact of the pandemic on long-term outcomes for a) young families and b) their young children with respect to psychosocial stress and (mental) health, from the perspective of the parent and each family’s pediatrician. Implications for families’ needs related to the mitigation of potential long-term impacts of the COVID-19 pandemic will be discussed.
P-071: What are the outcomes of early intervention for high risk infants at 3 months post-term-age?

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Introduction. Infants born preterm or unwell are at increased risk of alteration to their brain development and may experience significant consequences to their neurodevelopmental journey. Recent studies of brain development highlight a window of opportunity up to 3 months post-term age, where neuronal connections may be particularly receptive to positive sensory, motor, regulation and relationship experiences.

Aims. The literature review investigated the sensory, motor, attention, regulation and relationship outcomes of intervention up to 3 months post-term age for high-risk infants. It also also investigated of timing, frequency and location of intervention.

Materials and Methods: A systematic literature comprehensively identify the available evidence. The Cochrane Library; MEDLINE; PubMed; CINAHL; ScienceDirect and PsychoInfo databases were searched. Seven papers met the inclusion criteria, all were of high to moderate quality of evidence unit GRADE.

Discussion. The most commonly discussed themes and outcomes included motor intervention, sensory input, cognition, regulation and relationships. The greatest impact upon neurodevelopmental outcomes was using a combination approach rather than a single approach. The most discussed elements included infant-initiated movements; an enriched environment; active exploration; parent-infant interaction and relationships. The studies recommended intervention beginning on the neonatal unit and continuing at home immediately post-discharge. The home environment was the most recommended however, parents were seen as a protective environment. The timing and frequency of intervention were too varied across the studies however, targeting intervention at a critical time of brain development was seen to be more crucial than frequency of sessions.

Conclusion. Initiating intervention as early as possible; involving parent-infant interactions as a protective factor along with a triad of relationships including the infant, parent and professional interconnected and interdependent are needed to support the best outcomes of the infant, parents and families.
P-108: Jealousy of the Partner-Infant Relationship and Observed Conflictual Coparenting Dynamics

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INTRODUCTION: Conflictual coparenting, characterized by undermining and competition between parents, is a risk to young children’s social-emotional development (Teubert & Pinquart, 2010). Uncovering why some new coparents experience greater conflict than others is important to understanding the development of coparenting and to inform prevention and intervention efforts. AIM: The aim of this study was to examine relations between new mothers’ and fathers’ jealousy of the partner-infant relationship and observed conflictual coparenting dynamics.

MATERIAL and METHODS: Data were drawn from a longitudinal study of 182 dual-earner different-sex U.S. couples at the transition to parenthood. Parents were predominantly married (86%), white, non-Latino (85%), and of middle-to-high socioeconomic status. Parents reported their jealousy of the partner-infant relationship (adapted from Wilson et al., 2007) and conflictual coparenting (competition, displeasure; see Altenburger et al., 2014) was observed for 10 min at 3 and 9 months postpartum in both play and childcare contexts.

CONCLUSIONS: Correlation analyses indicate that when fathers experience greater jealousy of the partner-infant relationship they demonstrate greater displeasure in coparenting. When mothers experience greater jealousy of the partner-infant relationship, they not only show greater displeasure, but fathers also show greater displeasure, and coparents show greater competition. Thus, mothers’ jealousy may have broader implications for conflictual coparenting dynamics. Further analyses will examine longitudinal associations in an SEM framework.


Introduction
Under the enormous psychosocial impact of the COVID-19 pandemic, there is an urgent need to accelerate comprehensive community mental health care systems for vulnerable perinatal women. In Japan, three types of questionnaires covering maternal mood and anxiety (Edinburgh Postnatal Depression Scale; EPDS), mother to infant bonding scale (MIBS) and High Risk Questionnaire (self-made by the authors) have been widely used throughout the antenatal obstetric check-up system and community outreach by home visitation for new-born babies.

Aim of the Study
To develop clinicians' algorithms that help identifying psychosocial risks for maternal suicide and child maltreatment

Study 1
Material and Methods
A total of 554 pregnant women were followed from pregnancy to after childbirth. Three questionnaires that assess psychosocial characteristics were administered during pregnancy 32-36 gestational weeks. The women were assessed at 5 days, 1 month and 4 months after childbirth in terms of bonding disorder (by MIBS) and Maternal PMAD by EPDS. Two step cluster analysis was conducted to find out the subgroups with clinically significant pathological bonding problems.

Results
A 3-cluster structure appeared: "normal", "Prolonged lack of affection" and "Pathological anger with depressive symptoms". "Pathological anger with depression" group were significantly associated with insecure attachment style by RQ (Relationship Questionnaire) and negative relationship with partner.

Study 2
Materials and Methods
The MIBS, EPDS and High Risk Questionnaire were administered by health visitors in the multi-centre nation-wide cross survey. 3370 mothers were participated during 4 months postnatally.

Results
MIBS demonstrated two factor structures that include Anger/Rejection (AR) and 'Lack of Affection (LA) subscales. Risk of physical abuse was predicted directly by AR, whereas risk of neglect was predicted directly by LA.

Conclusion
Mother to infant bonding scale and EPDS can help to identify mothers at risk of abuse and to prevent child maltreatment.
P-053: Longitudinal development and predicting factors of emotional and behavior problems in adopted children

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Background. Most nationally and internationally adopted children are well-adjusted, but preadoptive adversity and parental factors can increase the risk of emotional and behavioral problems. Some problems may arise later in childhood and adolescence and may challenge adoptive parents. Data analysis from a German longitudinal study aimed to investigate the trajectory of children’s and adoptive parents’ well-being and analyze potential predictive factors.

Method. We conducted a prospective longitudinal study with 94 children and their adoptive parents. Wave 1 was conducted on average 33 months after placement of the child in the adoptive family, and Wave 2 took place on average 43 months after Wave 1. The parents provided information about sociodemographic characteristics and children’s preadoptive history. Information about emotional and behavioral problems was obtained from the parental version of the Strengths and Difficulties Questionnaire (SDQ). Parental well-being was obtained through a composite score of three standardized measures (Self-Efficacy Questionnaire, Perceived Stress Scale PSS-4, and Brief Symptom Inventory BSI) and parental stress was assessed by the parents scale of the Parenting Stress Index (PSI). Results. The results indicated that adoptive children’s emotional and behavioral problems increase over the first six years after placement. Adoptive parents’ stress and regulation capacities remain relatively stable over time. The stress regulation capacities of adoptive parents influence children’s psychosocial adjustment, but with regard to the longitudinal development, early clinical range problems were the best predictor for subsequent problems in children. On the other hand, parenting stress was best predicted by marital satisfaction and children’s emotional and behavioral problems. Conclusion. The results highlight the need for early identification of families at risk and the importance of ongoing flexible and easily accessible postadoptive support.
Children sleep problems have negative repercussions not only on family well-being but also on children's development. Few studies have investigated the impact of Covid-19 pandemic on parents' and children's sleep. The current study aimed to: 1) test for any perceived changes by parents in their own and children's insomnia symptoms with the advent of the pandemic 2) examine the existing relationships between children's temperamental negative emotionality, partner involvement in child management, family resilience, covid-19-related anxiety symptoms of parents and children's and parents' sleep.

264 Italian parents (89% mothers) with children aged 1-6 years took part in the study filling out the following self-report questionnaires: Brief Infant Sleep Questionnaire-R, Insomnia Severity Index, Rothbart's temperament questionnaires, Who Does What, Fear of Covid-19, The Walsh Family Resilience Questionnaire, from March to November 2021 during the new government-imposed restrictions on the domestic territory. A paired samples t-test was used to analyze possible parent-perceived changes in sleep-wake patterns over time. In addition, a model with Path analysis was tested to verify the associations between children's and parents' sleep and risk and protective factors under study.

While pediatric insomnia symptoms decreased from the March 2020 pre-lockdown to March 2021 (p=.000); the presence of sleep-related habits not in line with pediatric recommendations (p=.000) increased. Covid-19-related anxiety resulted associated with parental insomnia (R² = .16, p=.000) and the use of problematic bedtime practices (R² = .12, p=.002). Negative child emotionality to greater pediatric (R² = .12, p=.001) and parental insomnia symptoms and partner involvement in child management to reduced problematic falling asleep practices (b=-.176, p=.001). Family resilience was related to parent insomnia symptoms (b=-.139, p=.001).

Results showed that high levels of anxiety in parents and negative emotionality in children were risk factors for sleep quality, while high partner involvement and family resilience protective factors.
P-295: Socio-emotional difficulties in deaf children in Ireland

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1
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This presentation elaborates on findings from the first major study of socio-emotional outcomes of deaf and hard of hearing (DHH) children in the Republic of Ireland. Specifically, it sought:
1. to identify the prevalence of socio-emotional difficulties among a large sample of DHH children in Ireland (hereafter referred to as ‘the sample’);
2. to compare the prevalence identified among the sample with national and international findings.

This study used the Strengths and Difficulties Questionnaire (SDQ) as it has been used in international studies with cohorts of DHH children and has also been used on a large sample of the Irish child population in a large national longitudinal study of childhood in Ireland: the Growing Up in Ireland (GUI) study (Thornton et al., 2010), thus providing a basis for a comparison of results. Data was gathered from 113 families from 23 out of the 26 counties in the Republic of Ireland. One hundred and thirteen parents completed the SDQ in full for their child. The mean total difficulty score on the SDQ was 11.89 which, while within the normal range, is higher than the means obtained from any of the three waves of the GUI study. Within the DHH sample, 42% were found to have a TDS that is clinically significant (i.e. 14 or more), more than three times that of the GUI samples. Furthermore, 13% of the DHH sample had very high scores (i.e. 20 or more) compared to 2-3% across the GUI waves, meaning DHH children were at an almost five-fold risk of being in this high scoring category. Areas of most concern were peer problems. The presentation outlines implications for clinical practice.
P-355: Parental Reflective Functioning, Life Stressors, Depression and Anxiety Across the Perinatal Period

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INTRODUCTION
Sensitive caregiving is the cornerstone of secure infant attachment. Sensitivity is supported by parental reflective functioning (PRF), the ability to understand mental states in relation to behavior, and is undermined by maternal depression and anxiety. Life stressors such as food and housing insecurity may contribute to depression and anxiety, further compromising parental sensitivity. Associations between life stressors and PRF, and continuity in PRF across the transition to parenthood are unknown. Identifying stressors, PRF, maternal depression and anxiety prenatally may help providers to intervene early and prevent later problems with parent-child interactions.

AIMS
1. Test the continuity of PRF from the third trimester to two months postpartum.
2. Examine associations across maternal stressors, PRF, depression, and anxiety.

MATERIALS AND METHOD
Mothers (N = 21) participated in two points of data collection in this study; the first was during the last trimester of pregnancy and the second was two months postpartum. Mothers completed an online Qualtrics survey during the last trimester of pregnancy that included demographics, health information, life stressors, the Prenatal Parental Reflective Function Questionnaire (PRFQ, Pajulo et al., 2015), the Edinburgh Postnatal Depression Scale (EPDS, Cox et al., 1987), and the Perinatal Anxiety Screening Scale (PASS, Somerville et al., 2017).

ANALYTIC PLAN
I will conduct correlations and partial correlations, and regression across study variables (demographic data, prenatal PRF, depression, and anxiety) to address the research aims. The research aims are exploratory given mixed results in correlations across stressors, prenatal PRF, maternal depression and anxiety in the literature and thus, there are no directional hypotheses.

CONCLUSION
Results will contribute to understanding predictors of maternal PRF and inform early screening for potential infant-caregiver relationship difficulties.
P-318: The relations of maternal attachment style, socialization of emotions and children’s behavior.

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Introduction
Emotional regulation is associated with increased competence in interactions with peers (Wong, Diener, & Isabella, 2008), prosocial behavior (Eisenberg, Cumberland, & Spinrad, 1998; Eisenberg et al., 1999; Berlin & Cassidy, 2003), effortful control (i.e., top-down self-regulation; Spinrad et al., 2004, 2007), and low levels of externalizing problems (Eisenberg et al., 2005). There are a few studies of parents’ emotional socialization in Japan. There is a need to further understand emotional socialization in Japan and its’ relations with children's behaviors.

Aim of the study
1) To examine the difference of emotion socialization of 6 years children's mothers' (n=117) and fathers' (n=68)
2) To conduct cross-lagged analysis to see the influences of attachment style of mothers and fathers and emotion socialization and children's behavioral problem

Material and method
Send questionnaires, part of the longitudinal data yearly conducted from prenatal through ten years in Japanese population (789 mothers and 557 fathers at the prenatal period).

Conclusions
1) We conducted t-test and found mothers rated higher Emotion Focused Reaction than fathers (t=2.295, p<.05).
2) We found significant corelations between parents’ attachment styles and the emotion socialization and children's behavioral problem from one year to ten years old. We are exploring the cross-lagged model currently.
P-239: Depression in Mothers with Infants Admitted to Inpatient Pediatrics  

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Introduction: One of the most important factors in infant mental health is the mental health of the mother, especially in the infant’s first year of life.  
Aim of the study: To assess depression in mothers who have infants under one year old admitted to inpatient pediatrics, pre vs post covid and rate of referral to services for support  
Material and Methods: Edinburgh post partum depression screen administered to mothers who have infants under one year old admitted to inpatient pediatrics, comparing data from before covid to screenings done after covid, assessing for differences, and referring mothers for treatment.  
Conclusions: Data will be analyzed for differences in rate of post-partum depression among mothers pre and post covid, and also for referrals to services for treatment for this.
P-103: Subsequent Children trial - recruitment, retention reconnection and co creating a different future.

Miss Te Ana Nua

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Developmental approach we took to understanding the group of parents, their motivation, needs & aspirations in order to co-create a different future for them & their children, & their relationships they had with people in positions and processes that impacted their relationships, will be described. We undertook to ensure parents were able to build trust in our team & this project which included rebuilding relationships with their children in care. We were interested in strengthened core capabilities, eg self-regulation and executive functioning that are fundamental to parenting, & job training and employment, both goals the parents articulated...acknowledging that the key to achieving breakthrough outcomes for children facing significant adversity is to support the adults who care for them, to transform their own lives.

Hoki ki te Rito-Oranga Whānau/Mellow Parenting programme personal group & parenting workshops were the focus of group work, with extended supported goal setting & future planning over 20 weeks. Children develop in an environment of relationships & how the ability of parents to meet their own life goals is intertwined with the wellbeing of their children. We supported these parents reflect on their own life stories including their own experiences of being parented. They were encouraged to consider their own strengths & areas of need as they explored why, where & how change might happen.

We noticed parents, reduced anger towards child welfare as they shared & processed the trauma of their children’s removal, increasing engagement with services, as self-care became a priority, increased optimism that things can change for the better, building reflective capacity as they told their life stories, identified the losses they have endured & the impact on themselves, articulate a feeling of ‘belonging’ to this new ‘family’, relaxing and building friendships with one another, &beginning the process of positively re-engaging with their children
P-042: Diurnal cortisol patterns and parental sensitivity among pregnant women with and without opioid use disorder

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Sensitive and nurturing caregiving is essential for the optimal development of young children. Mothers with opioid use disorder experience unique challenges in providing sensitive and nurturing care to their infants. Dysregulation of the HPA axis may contribute to the challenges that make providing sensitive and nurturing care difficult, as mothers with opioid use disorder have been found to experience disruptions to their diurnal cortisol regulation. This is important because the mother’s ability to provide sensitive and nurturing care is crucial to infants’ neural and psychosocial development. However, the associations between mothers’ ability to provide sensitive and nurturing care and their diurnal cortisol regulation are not well understood. Although there’s a gap in the literature, steeper slopes across wake-to-bedtime are associated with healthy regulation. Therefore, this study sought to examine this gap among pregnant women with and without opioid use disorder.

We hypothesized that high levels of sensitive and nurturing caregiving would be associated with steeper diurnal cortisol slopes than low levels of sensitive and nurturing caregiving, with higher cortisol levels at wake than bedtime.

Sensitive and nurturing caregiving was coded based on appropriateness, latency, and proportion of distress cues responded to an infant simulator. Diurnal cortisol was sampled across three consecutive days at wake and bedtime. Hierarchical linear modeling with restricted maximum likelihood estimation was performed to fit the data. Predictors of interest included sensitive and nurturing caregiving, wake-to-bedtime, and their interaction term. Common covariates were included.

Findings supported our hypothesis. Specifically, high levels of sensitive and nurturing caregiving were associated with higher cortisol levels at wake than bedtime (t=-2.847, p<.005), whereas low levels of sensitive and nurturing caregiving were associated with blunted wake-to-bedtime slopes. These results suggest a potentially meaningful pathway through which mothers with opioid use disorder struggle to provide sensitive and nurturing care to their children.
P-387: Prenatal depressive symptoms: modifying child’s susceptibility to postnatal depressive symptoms?

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**Introduction and Aim of the study**

According to the developmental plasticity hypothesis (e.g. Pluess & Belsky, 2011), maternal depressive symptoms (MDS) prenatally may increase child’s sensitivity to both negative and positive environmental influences instead of being a vulnerability factor only. The aim of this study was to test this hypothesis in a longitudinal setting. Study hypotheses were

a) not exposed (NO) children show the lowest symptom levels and highest competence
b) pre- and postnatally exposed (PREPOST) children show the highest symptom levels and lowest competence
c) only prenatally exposed (PRE) children show symptom levels between NO and PREPOST groups and higher competence than only postnatally exposed children
d) only postnatally exposed (POST) children show symptom levels between NO and PREPOST groups and lower competence than PRE group.

**Material and Methods**

The population-based sample comprised first-time mothers who participated in a longitudinal study in Tampere, Finland, and their children. The mothers completed an MDS screening questionnaire (EPDS, cutoff 9/10) prenatally, at two months and at six months postnatally (n = 238). The frequencies of mothers in the MDS groups were 62% (NO), 8% (PRE), 13% (POST), and 16% (PREPOST).

Children with outcome reports (CBCL completed by mothers, mCBCL, n = 171, and fathers, fCBCL, n = 102) available at 8-9 years were included. Internalizing (INT) and externalizing (EXT) problems and total competence (TC) scores were used as outcome measures.

**Results**

The MDS group status was statistically significantly associated with child’s INT, EXT and TC scores in mCBCL and TC scores in fCBCL. The PRE group showed high EXT scores in mCBCL but, interestingly, also highest TC scores in both mCBCL and fCBCL.

**Conclusions**

Instead of being an unequivocal risk factor, prenatal exposure to MDS may enhance child’s susceptibility to postnatal environment both in positive and negative ways.
P-386: Evaluating the impact of a responsive parenting intervention at-scale in Brazil: a quasi-experimental study nested in a birth cohort

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Background
Primeira Infancia Melhor (PIM) is a large-scale, state-funded, responsive parenting intervention that was first established in Rio Grande do Sul, Brazil in 2003. It has since reached 200,000 families and served as a model for Brazil’s federal home-visiting program, Crianca Feliz, which is the largest home-visiting program in the world (saude.rs.gov.br). A recent evaluation of PIM’s effect on child development found the program was only effective at improving child development for families who joined during pregnancy (Viegas et. al., 2022). The present study uses a quasi-experimental design to build off of these findings to evaluate the impact of PIM on 1) parent responsiveness, sensitivity, guidance, coerciveness, and the parent-child relationship and 2) determine whether intervention effects are moderated by family income, length of program involvement or timing of entry into the program.

Methods
Data for this propensity score matched, longitudinal, observational study, was obtained from the 2015 Pelotas birth cohort, with PIM related indicators linked from the Rio Grande state database. We matched those who had received PIM with one+ participants from the cohort on 27 key covariates. Analysis plans were pre-registered on OSF. Participants were excluded from the analysis if they were missing data on any covariate or outcome variables. Group differences on the five parenting outcomes were examined at 48 months. Participants were then rematched and separate moderation analysis was conducted for each potential effect modifier.

Results
Out of 4275 children in the Pelotas cohort, 797 were enrolled in PIM at any point up to 48 months of age. 3018 children (70.6%) were included in the analytic sample, of whom 587 were enrolled in PIM. Comparing families who received PIM with matched controls, we found a statistically significant effect of PIM on parent sensitivity (β=0.09, 95%CI 0.01 to 0.17, p=0.03) and parent responsiveness (β=0.12, 95%CI 0.02 to 0.22, p=0.02) approximately two years post-intervention. No effect was found on coerciveness, guidance, or the parent-child relationship.

Moderation analyses revealed mixed findings. No effect modification was found for length of program involvement or timing of entry into the program on any outcomes. However, for families from lower income backgrounds, PIM was found to be more effective at improving parent sensitivity (β=0.14, 95%CI 0.02 to 0.26, p=0.03).

Conclusions
A large-scale, responsive parenting intervention applied in a real-world setting in Brazil was found to improve caregivers’ sensitivity and responsiveness at 48 months. Not surprisingly, these caregiving behaviours were also found to be most strongly aligned with the program’s content and theory of change model. PIM was found to be significantly effective for families from the bottom income tercile, suggesting that caregivers in more vulnerable situations may benefit from the program the most.
P-391: Infant Mental Health and Post-natal Psychosis; a case study in systems of care and psychoanalysis

Ben Goodfellow

Introduction
Infant mental health and perinatal mental health have merged increasingly over the last 10 years in particular, more so in some areas than others. In Victoria, Australia several perinatal mental health services sit under infant mental health rather than an adult program, allowing an infant-centered approach to parental mental illness to be undertaken from a psychodynamic and family therapy perspective, parallel to any adult psychiatric treatment that is required.

Aims or Purpose
This poster aims to outline a system and team that is structured in such a way as to allow the comprehensive treatment of the mental health needs of both a mother, child and partner. A service map and de-identified case is described to outline the principles and modalities of treatment that can be applied, as well as underlining the role for a psychoanalytic approach in addition to medication and case management, regardless of diagnosis. The case also provides a context to explore how a child can be buffered from the parental psychopathology, and both parents supported in maintaining healthy connections with their baby despite the difficulties they are experiencing.

Description
The case is of a mother from a professional background referred to services one week after the birth of her first child when she developed acute agitation and psychotic symptoms requiring an inpatient admission and intensive outpatient care. The adult mental health service remained involved in the psychiatric treatment of the mother’s psychotic and depressive symptoms, while the infant mental health clinician engaged her in weekly psychoanalytically informed therapy. This latter treatment helped her to explore the experience and content of her psychotic and depressive phenomena which had arisen in the context of complicated grief and family trauma since her adolescence. Important existential questions emerged for her which she was aided in coming to terms with, meanwhile her role as mother remained well-preserved throughout the experience. Her husband was also seen on several occasions to help him in dealing with the trauma of all that had changed for him through his wife's illness and in his new role as a father.

Conclusions
Parental mental illness has a profound effect on an infant, even if symptoms in the child have not emerged. An integrated system and method of practice that goes beyond the management of symptoms, including psychosis, can have an important role in helping a family with the safety and recovery of the parent, and the well-being of the baby held equally in mind.
Developmentally Supportive Interactions across relationships and contexts: Babies, siblings, home visitors, and community settings

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1
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INTRODUCTION:
Developmentally supportive interactions (DSI) occur in various relationships and contexts. Early DSI between parents or other caregivers and children is an established predictor of positive developmental outcomes for infants and young children. Other relationships also include DSI, such as interactions between siblings or between coaches and home visitors who engage in DSI with parents of children at risk or with disabilities. DSI is part of a developmental relationship (Li & Julian, 2012), characterized by reciprocity, relationship, gradually increasing complexity, and increasing independence in the developing person. DSI may occur in home, community, or virtual settings.

AIM:
This symposium aims to (1) provide a sampling of diverse relationships and contexts in which DSI can be observed and used to support the development of infants, children, families, or practitioners; and (2) discuss the parallels and differences in DSI across these relationships and contexts.

MATERIALS & METHODS:
The five studies presented in this symposium have all used observational methods to observe DSI. They have adapted their observations to parents with young babies, in the US and in Spain, to older siblings playing with toddlers, to families exploring a Learning Landscape in a park, and to group coaching of home visitors who coach parents. These interactions have been observed during in-person home visits, from video recorded by parents, in virtual sessions, or in community settings. Measures include the Parenting Interactions with Children Checklist of Observations Linked to Outcomes (PICCOLO; Roggman et al., 2013) and the Home Visit Rating Scales (HOVRS; Roggman et al. 2019).

CONCLUSIONS:
These studies show the range of DSI across relationships and context and provide a broad view of how DSI can support not only the development of basic skills and knowledge needed by young children but also support the development of parents and the practitioners who work with them.
Developmentally Supportive Interactions with Young Children in a Learning Landscape

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INTRODUCTION:
Child development occurs mainly in the context of developmentally supportive interactions with others. Learning Landscapes (LLs) are designed to transform everyday spaces (e.g., parks, bus stops, libraries) into learning opportunities for children and families, to elicit developmentally supportive caregiver-child interactions that encourage age-appropriate learning. LLs are intended to foster learning opportunities for caregivers and children. Playful interactions through LLs have resulted in achievement gains for children from lower socioeconomic status backgrounds.

AIM:
In this exploratory study, we investigated the impact of a LL, near a community park, on caregivers’ developmentally supportive interactions with their young children.

MATERIALS AND METHODS:
An observational measure of developmentally supportive interactions, the Parenting Interactions with Children Checklist of Observations Linked to Outcomes (PICCOLO; Roggman et al., 2013), was used during live observations to measure how caregivers interacted with their young children (n = 10, M = 25 mo, range = 12-47 mo) while on a LL trail.

CONCLUSIONS:
Preliminary findings through observations of 10 caregiver-child dyads showed high scores across the PICCOLO domains and total scores (See Table 1).

- PICCOLO total scores for all families were substantially higher than the reported mean scores from the PICCOLO measurement sample (52.7pts, 12.7pts over the measurement sample mean (1.6 SD based on the measurement sample)).
- Teaching received the highest mean score (14.4pts, 6.8pts over the measurement sample mean (2.4 SD)), and the highest variability (ranging 11-16pts, 1-3 SDs over the measurement sample mean).
- Encouragement had the lowest mean score (12.3pts, yet almost a full SD over the measurement sample mean (2.2pts)).

The surprisingly high scores, even considering differences in sample populations, suggest that environmental prompts, like those provided in LLs, can promote developmentally supportive interactions in families’ everyday environments, offering support to entire communities to support children’s early development.
Developmentally Supportive Interactions with Young Babies in the US & Their Later Developmental Outcomes

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INTRODUCTION. Developmentally Supportive Interactions (DSI) are critical for children’s earliest development. Our studies using the Parenting Interactions with Children Checklist of Observations Linked to Outcomes (PICCOLO; Roggman et al., 2013) to measure parents’ DSI with toddlers and young children 10-60 months, showed that brief observations of parents’ DSI predict children’s skills at school entry and in early adolescence, many years later. The same measure of DSI in parent-infant interactions has been reported with infants in the first year of life (reported at WAIMH, 2018), and has now been tested in relation to both later DSI and children’s developmental outcomes in the second year of life.

AIM: Our purpose was to explore whether parent-infant DSI in the first year of life, as measured by the PICCOLO, is not only concurrently associated with infant development in the first year, but also predictive of later parenting and child development outcomes in the second year.

MATERIALS & METHODS. In the US, 87 mothers of 87 infants, 3 to 9 months old (M = 5.4m, sd = 1.4m) at Time 1, participated in a 10-minute video-recorded play session in their home, later coded with the PICCOLO, using expanded guidelines for infancy (PICCOLO+B). Trained assessors worked with parents to complete an age-appropriate Ages and Stages Questionnaire-3, (ASQ-3; Squires & Bricker, 2009). At Time 2, families were contacted again and were again recorded playing at home, coded later with PICCOLO, and completed the ASQ-3.

CONCLUSIONS. Mothers’ DSI with babies 3-9mo, as measured by PICCOLO, predicted both DSI and ASQ-3 scores at 14-18mo. Thus, DSI in the first year of life showed predictive validity in relation to both parenting and child development in the second year. The results demonstrate predictive validity of the PICCOLO for babies and reflect the key role of early DSI for infant development.
Developmentally Supportive Interactions with Home Visitors: A Coaching-based Community of Practice

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Introduction: Coaching is one example of a developmentally supportive interaction (DSI). Few coaching approaches show clear outcome evidence for home visiting (Walsh et al., in press), but home visitors can be viewed as coaches for caregivers, and home visitors can be coached using a parallel process. A Community of Practice (CoP) that incorporates DSI and focuses directly on improving home visitors’ practices will be described.

Aim. This presentation aims to describe the process and tools for implementing a coaching-based CoP for home visitors, to note the aspects of DSI in the CoP, to report the results of the CoP on home visitors’ DSI practices with parents in their programs, and to discuss the effectiveness of coaching in home visiting.

Method. CoP is a form of collaborative learning (Buysse et al., 2003). We focused on coaching home visitors to engage families in DSI practices that support child development (Roggman et al., 2019). Recommended coaching practices were followed (Innocenti & Roggman, in press): (1) The community selects practice goals. (2) Home visitors self-video the practice, then rate and reflect on their home visit practices. (3) Self-videos are shared in meetings along with descriptions of practices and reflections. (4) Participants reflect on strengths of each other’s ideas and practices (no negative comments allowed). (5) The process is repeated (cyclical). The Home Visit Rating Scales (Roggman et al., 2019) were used to guide the practice selection and for measuring outcome data. We worked with a multi-site, statewide evidence-based home visiting program for five years. Program staff improved their practices and maintained improvement.

Conclusion. The process for implementing a DSI coaching-based CoP focused on the actual practices of home visitors while in the home will be presented. This DSI model is relationship-based, strengths-based, collaborative, reflective, and exemplifies parallel process. The home visitors’ practices improved.
Developmentally Supportive Interactions Between Young Children and Their Younger Siblings

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INTRODUCTION. The sibling relationship is a unique but important context for early development. The effects of a positive or negative sibling relationship can affect children’s development in childhood and throughout their lives. Despite the important role of siblings and the unique aspects of the sibling relationship, sibling interactions are largely overlooked as a resource of developmental support. Instead, much of the research and interventions concerning early developmentally supportive interactions (DSI) have focused on observing and supporting DSI between adult caregivers and their children.

AIM. The purpose of this project is to identify DSI behaviors used by children, aged 3 to 8 years, with their younger siblings, aged 1 to 4 years, during play using the Parenting Interactions with Children: Checklist of Observations Linked to Outcomes (PICCOLO; Roggman et al., 2013) and to identify child factors that affect DSI.

MATERIALS & METHODS. A sample of 15 young sibling pairs and their caregivers in the US participated in this project by completing an online questionnaire to provide information about their families and their participating children. After completing these questionnaires, participating caregivers chose to either record their children playing together for 10 minutes then send the videos electronically to the researcher or meet virtually with a research assistant to record the 10-minute play video. These videos were coded using the PICCOLO by trained and reliable research assistants.

CONCLUSIONS. Our observations support the feasibility for observing DSI in young sibling pairs using the PICCOLO. Young children, particularly older siblings, engage in DSI with their younger siblings during play, though less frequently or adeptly than adult caregivers. Child factors such as age and gender, affect the DSI between children and toddlers during play. Identifying and fostering DSI between young siblings may expand available supports for children’s early development and also provide support overall family well-being.
Evaluation of the Danish version of the Prenatal Parental Reflective Functioning Questionnaire

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Introduction and Aim of the study: Parental reflective functioning is the capacity to focus on feelings and experiences in oneself as a parent and in the child. Research has demonstrated that the better the parental reflective functioning the better outcomes for the child. This study evaluated the Danish version of the prenatal parental reflective functioning questionnaire (P-PRFQ).

Material and Methods: We used data from a cluster-randomized trial of pregnant women recruited from Danish general practice. The sample included 605 mothers. Factor structure and internal consistency were investigated. Linear regression analysis was used to examine the associations between the P-PRFQ score and the five most predictive variables.

Results: The confirmatory factor analyses supported the three-factor model. The P-PRFQ had moderate internal consistency. The regression analysis showed a decrease in the P-PRFQ score with increasing age, increasing parity, current employment, better self-reported health, lower anxiety score and fewer negative life events with assistant impact.

Conclusions: The directions of the associations between P-PRFQ score and the predictive variables were opposite of what was hypothesized raising questions about whether the P-PRFQ can be used as an early pregnancy screening tool assessing prenatal parental reflective functioning. To assess what it measures needs further validation studies.
Social Justice in Infant/Toddler Education

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INTRODUCTION. Infants’ and toddlers’ sense of self is developed within their relationships with caregivers – their families, communities, and early child educators (i.e., childcare providers). The care and connection they experience build a child’s early sense of self as valued, respected, and loved. In order to provide this kind of care to each child equitably, and to help children learn to respect and value others who are both similar and different to them, early child educators need training, support, and models of practice that the early childhood field in the United States is not currently providing.

AIMS. This poster workshop brings together theoretical frameworks, original studies, pedagogical tools, and models of practice aimed to support social justice in infant/toddler education for children, families, and educators. We present work from the early childhood classroom to the college classroom to elucidate the structural inequities and biases pervasive in early childhood education within the United States, and share ways to work collectively toward equity and justice.

METHODS. Studies include literature reviews, qualitative (focus groups, interviews), and quantitative methods (surveys, national data), and scholarship of teaching and learning.

RESULTS. We begin by describing developmentally relevant Social Justice Learning Standards for infants and toddlers, and the Social Justice Educator Competencies needed to support them. We describe biases inherent within early child education classrooms, and college classrooms, and how these affect children, families, and teachers. We share models of education and support for the infant/toddler workforce to become social justice educators; and the policy and programmatic supports that must be in place to make this important work equitable and fair for the workforce.

CONCLUSION. After individual discussion, and brief presentations of each poster, a discussant will share common themes and rising questions, and invite participants to share insights from their positions and national contexts.
Identifying ECE Pre-Service Teacher Potential Biases in Perceptions of Infant-Toddler Behavior

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INTRODUCTION: Contemporary early childhood education (ECE) research points to the ways in which teachers’ practices are driven by implicit and explicit biases which directly and indirectly harm children and families of color. For example, children of color (especially males) are expelled from preschool at substantially higher rates than White children (Gilliam & Reyes, 2018). To combat these disparities, teacher training must emphasize not just diversity and inclusion, but must be explicitly anti-bias and anti-racist (Allen et al., 2021).

AIM: While much literature on bias in ECE is focused on preschool educators, this study aims to investigate gender and racial biases in pre-service infant-toddler teachers. By experimentally manipulating visual and descriptive characteristics of young children depicted in vignettes, this study will investigate how characterizations of infant race and gender impact teachers’ reflections and hypothesized decisions about infant-toddler actions in the classroom.

METHODS: We will survey approximately 500 undergraduate students with career goals in early childhood using a survey network established by the Collaborative for Understanding Pedagogy for Infant/Toddler Development (CUPID). In an online survey, participants will read vignettes, accompanied by images of infants in common infant-toddler classroom scenarios. Images and descriptions will be manipulated for infant gender and race and counterbalanced between-subjects. Participants will indicate their likely response to each vignette from four options ranging in appropriateness as well as their confidence in responding to the situation effectively. We predict that vignettes featuring boys and infants of color will elicit harsher responses from the participants. Data collection will be completed in February.

CONCLUSIONS: The results of this study will increase awareness of biases in infant-toddler educators and facilitate the development of competencies aimed at reducing biased practices and policies in ECE. Training in diversity and inclusion is not sufficient; rather, early childhood education must be rooted in explicitly anti-racist teacher training.
I Can/ You Can framework for ethnic-racial socialization in infancy and toddlerhood.

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Introduction: Ethnic-racial identity (ERI) is the way we come to understand our ethnic heritage and racial background, a process that begins to develop in the first three years of life, and is linked to later mental health and academic success. The lifespan model of ethnic-racial identity posits that individuals start to develop their ERI in infancy and continue to cultivate this identity throughout their lifetime. One common way ERI is cultivated is through ethnic-racial socialization (ERS). ERS refers to the messages children receive from people and their environment that help to shape their understandings of ethnicity and race.

Aim: To provide parents and early educators with practical guidance on how to cultivate positive ERI among infants and toddlers while also disrupting the development of harmful ethnic-racial biases.

Methods: Informed by evidence that children demonstrate awareness of ethnic-racial differences in infancy and begin to categorize people based on these differences in toddlerhood, we identified ERS practices that can be scaffolded according to the typical social-cognitive developmental milestones of children birth-to-3.

Results: We share a new approach to engaging in developmentally-relevant ERS practices called the I Can/ You Can framework. It aligns specific social-cognitive development of infants and toddlers (I Can) with recommended adult practices (You Can) to cultivate positive regard toward a child’s own ethnic-racial identity and that of others. ERS practices in the framework are intended to proactively build positive identity and disrupt the development of ethnic-racial bias during the critical early years when the concepts of self and other are first formed.

Conclusion: Engagement in the ERS practices presented within the I Can/You Can framework with infants and toddlers has a reciprocal impact on the ongoing development of ERI among the adults who are intentionally socializing children as they become more aware and deliberate about their practices.
Family Engagement Model of Incorporating Anti-Bias Education in Curricula for Infants and Toddlers

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Introduction. Infants and toddlers begin to develop a sense of identity, notice differences in others, and express racial preferences, making Anti-Bias Education (ABE) in curricula relevant for our youngest children. However, most infant/toddler curricula available in the U.S. show minimal evidence of ABE and lack guidance for cultural responsiveness. Family inclusion is key to cultural responsiveness that meets ABE goals, yet curriculum development efforts do not typically seek family voices to incorporate their knowledge and priorities.

Aims. This study elevates the perspectives of diverse families on what infant/toddler education should be in order to create a curriculum that is culturally responsive and relevant. Families provided insight into culturally relevant learning goals, curricular content, and professional learning for educators, to inform a family engagement model to enhance anti-bias goals within infant/toddler curricula.

Methods. We conducted three community focus groups (N = 21) across two metropolitan areas in the midwestern U.S. Coders used reflexive thematic analysis approach to assess and ensure reliability.

Results. We identified 4 themes of families’ perspectives on infant/toddler education: a) Family Engagement, b) Learning Goals for Children, c) Professional Development, and d) Culturally Relevant Curriculum. Subthemes emphasized the importance of families feeling respected can communicate with educators about goals for children. Families discussed how community contexts should shape infant/toddler education and expressed desires for children to have basic life skills (e.g., problem-solving), feel confident, and empowered. Families hoped their children’s educators would learn the community history and context to guide teaching practices and curriculum development.

Conclusions. We developed a family engagement model showing children situated within systems with contextual influences on their development and learning. Infant/toddler classroom environments and curricula can be enhanced when family, neighborhood, and cultural contexts are incorporated into curriculum. Family voices should be included in curriculum development efforts to integrate ABE within infant/toddler classrooms.

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- INTRODUCTION & AIM
In the United States (U.S.), under 3’s are cared for in a variety of out of home settings, including regulated home and center childcare. As each state creates its own regulatory framework, caregiving settings vary a great deal. Among the many dimensions that vary are discipline regulations. This poster presents an overview of state regulations regarding exclusionary discipline (time-out, suspensions, and expulsions) as applied to under 3’s in U.S. childcare settings.

- MATERIAL
The National Database of Childcare Licensing Regulations and state websites were used to locate center- and home-based childcare licensing regulations for all 50 states and the District of Columbia.

- METHODS
We conducted a qualitative content analysis, coding the licensing regulations related to discipline and expulsions/suspension. We coded for the presence of guidance on exclusions, with particular attention to the age of the child.

- CONCLUSIONS
Across the U.S. there is a lack of consistency in how under three’s are treated in terms of exclusionary discipline. For instance, some states have licensing requirements including discipline practices specific to those under 3’s. While many states require center-based programs to have an expulsion policy, we only find one requiring special attention to infants and toddlers. Regulatory guidance on “time out” specific to those under 3’s is more common in both centers and homes. Often states establish time-out parameters for all children, but several states prohibit its use or duration for children under 3 with age cut points varying from 12, 18, 24, and 36 months, depending on state and setting. Given that certain groups of children - boys, African Americans, and children with disabilities are often over-identified and for exclusions, understanding how state policies may also differentially influence treatment is important from a social justice and equity perspective.
Embedding Social Justice Principles in Coaching Practices in Infant/Toddler Classrooms

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INTRODUCTION
Coaches serving early childhood educators are a valuable resource to improve teacher efficacy and create higher quality classrooms. In the U.S., much attention has been given to educator coaching models in elementary, middle, and high school, but in infant and toddler classrooms research on coaching is very limited. Further, there is need to develop and test early educator coaching practices that prioritize the same social justice and cultural responsiveness that we want for children.

AIM
This study aims to develop a model that increases quality practices for early educator coaching based on the principles of a culturally sustaining curriculum in infant and toddler classrooms. This coaching model incorporates conversation guides, fidelity tools, and practices to create parallel processes in the teacher<>child and coach<>teacher relationships.

METHODS
A gap analysis literature review was conducted to examine coaching in infant and toddler classrooms as it relates to social justice orientation, literacy, and assessment. Inclusion criteria for the literature reviewed comprised of works which: have a focus on infant and toddler classrooms, understand coaching as an ongoing professional development process, and discusses teachers already working in the classroom. These criteria yielded 13 papers with publication dates from 2013 to 2021. Gap analysis results were applied to the development of a coaching model for the infant toddler portion of an assets-based, all-day curriculum which emphasizes equity and justice in early childhood.

CONCLUSIONS
We share a coaching model for infant and toddler teachers that provides clear guidelines and tools aimed to increase teacher efficacy and improve classroom quality while also allowing coaches to incorporate their expertise and creativity within the field of early childhood education. We discuss the need for parallel priorities and processes to increase cultural responsiveness, equity, and social justice within early child education, for both children and teachers.
Competency-based Models for Preparing Infant/Toddler Educators

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INTRODUCTION. Many infant/toddler educators in the U.S. do not have formal (i.e., college) teaching preparation, in part because traditional teacher preparation pathways are inaccessible due to cost, location, and time. Inaccessibility undermines equity, as people of color comprise 40% of the early childhood workforce but are underrepresented in lead teacher roles¹. Educators of infants and toddlers are less likely than those working with preschool or elementary-aged children to have degrees or credentials, undermining equity for children in their care.

AIM: This poster describes the development of alternative competency-based models for infant/toddler teacher preparation in two American states to increase access to degrees and credentials.

METHOD: The first model, Responsive Equitable System for Preparation of Early Childhood Teachers (RESPECT) across Nebraska, is defining competencies needed for professionals upon entry into the field and will design systems for assessing and awarding credit for demonstrating competencies. Community engaged research will inform design of community-based and culturally relevant education preparation pathways. Innovative approaches to learning and coursework that recognize cultural and community assets will be described.

The second model, the Gateways Infant Toddler Credential (ITC), is offered through the Gateways to Opportunity Illinois Professional Development System. The ITC utilizes a stackable credential framework that provides opportunities for infant/toddler professionals to earn different levels (2-6) of the credential by completing defined infant toddler competencies across 7 key content areas. The development and piloting of online competency-based modules aligned to the 54 competencies will be described as an avenue of increasing access and equity for infant/toddler teacher preparation and professional development.

CONCLUSIONS: Accessible, equitable, and culturally relevant pathways for infant/toddler educators are essential for workforce equity and for equitable educational experiences for infants, toddlers, and their families.

Social Justice Learning Standards for Infants and Toddlers

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INTRODUCTION. Infants and toddlers rely on their social identities to inform their sense of self and contribute to their overall adjustment. Familial factors — such as parents, siblings, and extended family — strengthen children’s sense of self through a socialization process that involves gradual acquisition of cultural values and patterns of behavior. Nonfamilial factors — such as early care programs, peers, and community — also have an impact on whether infants/toddlers learn positive, negative, or neutral messages about self and others. Early child educators who apply a cultural deficit or identity neutral lens to their care of infants/toddlers create cultural discontinuity for the child rather than a learning environment that affirms and sustains the child’s unique cultural and social identities.

AIM. This poster presentation introduces infant/toddler educators to an approach to care and relationship building that centers equity and justice, instills positive self and group identity, and relies on cultural and linguistic appreciation. Through an anti-bias pedagogy, educators actively engage in developing and shifting their own mindsets while simultaneously attending to social justice educational goals.

METHODS. The social justice standards are grounded in research on infant and toddler development and scholarship on anti-bias teaching and culturally responsive and sustaining pedagogy.

RESULTS. We will share developmentally relevant Social Justice Learning Standards for infants and toddlers. These standards are informed by anti-bias and culturally responsive teaching approaches that benefit infants/toddlers because they empower teachers to interrupt the social inequities from their national contexts that keep some children from thriving.

CONCLUSION. After a brief presentation, the discussion will center the educators’ orientation towards and understanding of the standards. Participants will build individual and collective agency as they address insights from their national contexts on bias and stereotypes that impact young children.
Developmentally Supportive Interactions with Young Babies in Spain

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INTRODUCTION:
Developmentally supportive interactions parents have with young infants provide the primary context for promoting infant development. Thus, reliable tools have been developed to support developmental supportive parenting behaviors. The Parenting Interactions with Children Checklist of Observations Linked to Outcomes (PICCOLO; Roggman et al. 2013) is an observational tool developed in the US and validated in Spain (Vilaseca et al., 2019) for children 10-47 months. Expanded observation guidelines for 3-9-month-old babies have been developed in the US to create the PICCOLO Baby version. However, this new version has not been adapted for or tested in the Spanish population.

AIM: The study aimed to analyze the psychometric properties of the PICCOLO for observing parents interacting with babies in Spain.

MATERIAL & METHODS:
The PICCOLO is an observational measure of parent-infant developmentally supportive interactions in a variety of cultural contexts. Twenty-nine items are divided in four domains: affection, responsiveness, encouragement, and teaching. Parent behaviors during parent-infant interactions are evaluated using a 3-point scale: 0 = absent, 1 = rarely, 2 = clearly. Domain and total scores are calculated by adding the rating for each item. For this study, the PICCOLO Baby version items and additional guidelines were translated to Spanish following a back-translation process. Fifty Spanish mother-infant dyad, with infants from 3 to 9 months participated in the study. Families completed a sociodemographic questionnaire through an online platform and recorded a 10-minute home video of a mother-infant free-play situation. Trained raters scored the mother-infants interaction using the Spanish translation of the PICCOLO Baby version.

CONCLUSIONS:
Inter-rater and scale reliability support the Spanish version of PICCOLO Baby to assess early developmentally supportive behaviors by caregivers of infants in Spain. Results from this study suggest the utility of PICCOLO for observing parent-infant interactions in the earliest months of life to support the child’s development.
INTRODUCTION. Infants and toddlers are developing their identities, understanding of diversity, and sense of belonging in their learning communities; and are already subject to systemic inequities in education. Thus, social justice learning standards (SJLS) and equitable practices are necessary components of preparing the infant toddler workforce. The Comprehensive Competencies for Educators of Infants and Toddlers, developed by the Collaborative for Understanding the Pedagogy of Infant/toddler Development (CUPID), articulate the knowledge, dispositions, and skills necessary for reflective, relationship-based practices in infant/toddler education across 9 domains. They serve as the basis for curricula for training infant/toddler educators. However, they lack explicit attention to intentional promotion of social justice (cultural and linguistic responsiveness, anti-bias, anti-racism) in infant/toddler education.

AIMS. This poster will share a theoretically and empirically grounded set of competencies for social justice in infant/toddler education, integrated into existing CUPID Competencies and in a new 10th competency domain.

METHODS. We conducted a conceptual crosswalk and alignment of the CUPID Competencies with SJLS from six U.S. organizations that address the infant and toddler workforce. We identified gaps in, and points of connection between, the CUPID competencies and the existing examples of SJLS.

RESULTS: The conceptual crosswalk revealed alignment of CUPID Competencies with many SJLS in infant/toddler education, including competencies in reflective-, relationship-based-, and family-centered-practices. This poster will present the revised CUPID competencies, including explicit articulation of knowledge of children’s development of identity and bias and identification of skills in creating opportunities for social justice learning for infants/toddlers.

CONCLUSIONS. The CUPID Competencies model can be used as a tool for providing infant/toddler educators with awareness and strategies necessary to become intentional social justice educators. This work reveals the need to explicitly include infant/toddler educators in the work of advancing equity in early child education through thoughtful preparation in social justice.
Parent Stress and the Validity of Rating Scales for Preschool-Aged Children with Behavioral Concerns

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Introduction

To optimize efficiency in healthcare, clinicians across disciplines have been relying more heavily on parent-reported rating scales to track development, determine diagnoses, and define needs. A strong reciprocal relationship between parent stress and child behavioral problems has been established in the literature.

Aim of the study

The purpose of the study was to determine if parent stress impacts the validity of parent ratings of a child’s behavior. We predicted that parents who report higher levels of stress would also endorse more extreme rating of their child’s behavior, warranting caution regarding the validity of their ratings.

Material and Methods

The Early Childhood Mental Health Clinic (ECMHC) provides multidisciplinary evaluations for children 0-5 with behavioral, social-emotional and development difficulties. Parents complete the Parenting Stress Index (PSI-4-SF) and the Behavior Assessment System for Children (BASC-3). The BASC-3 F-Index validity scale identifies unusual responses that may indicate that the parent rated the child more severely than warranted, suggesting interpretive caution.

Conclusions

Participants (N = 279) were primarily male (68.2%) with a mean age of 57 months. Pearson correlations were used to analyze the relationships between the PSI-4-SF domains and BASC-3 Clinical and Validity Scales. Results suggest that parents who are more distressed tend to rate their children as having more problems. Parents who reported more stress were more likely to elevate the F-Index, which indicates a tendency to overreport symptoms.

Although parent-report and the use of standardized rating scales provides a time- and cost-efficient means to collect information about children’s behavior and guide clinical decisions, this study highlights the need for direct assessment and observation of the child by a trained clinician. Providers who use rating scales to screen young children’s functioning should keep in mind that elevations on rating scales may potentially be more reflective of parental stress than the child’s behavior.
Increased parenting reflectivity following Infant Mental Health Home Visiting: A randomized controlled trial

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Introduction
Parental reflectivity is a parents’ ability to think about their child’s internal states including thoughts, emotions, and motivations. Increased parental reflectivity, often a target of intervention, is associated with improvements in sensitive parenting and secure child attachment.

Aim of the study
We hypothesized that mothers who received Infant Mental Health Home Visiting (IMH-HV) services would show improved parental reflectivity, compared to mothers who did not receive intervention.

Materials and methods
Data came from 73 mothers enrolled in a clinical trial studying the effects of Infant Mental Health-Home Visiting (IMH-HV), a relational, home-based intervention.

At baseline, average age of mothers was 31.91 years (SD=5.69) and children 10.88 months (SD=7.23). Mother’s race was 33% African-American, 70% white and 7% other. Average reported family income was $48,333 (SD =34,559).

We used a “per protocol” treatment group for analysis; the intervention group consisted of 33 participants assigned to intervention who received at least one home visit. Controls included 35 participants assigned to control and five assigned to intervention who received no home visits.

Following 6 months of treatment, the intervention group had a mean rating of 3.37 on the parental reflectivity scale of the Working Model of the Child Interview, whereas controls had a mean rating of 2.89. Ordinal logistic regression predicting reflectivity at 6 months, controlling for baseline reflectivity, race/ethnicity and family income-to-needs ratio, showed that those who received IMH-HV were more likely to be in a higher reflectivity category at follow-up (odds ratio = 2.99, p = .027) than controls.

Conclusions
Infant mental health home visiting helped mothers to increase parental reflectivity. Improved understanding of their child’s internal experiences and behaviors are expected to lead to more sensitive parenting and secure child attachment. Future research should explore these associations.
Thriving Together: Evidence for Efficacy of the Michigan Model of Infant Mental Health Home Visiting

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The Michigan Model of Infant Mental Health Home Visiting (IMH-HV) is the primary service delivered to at-risk families across the state of Michigan, USA. It was developed in the 1970s by Selma Fraiberg at the University of Michigan and integrated into the state public mental health system as a prevention service for infants at risk of early relationship failure and potentially resultant deleterious outcomes. Despite being based on well-established clinical and developmental theory, with refinement based on implementation experiences with thousands of families, until recently, the Michigan Model of IMH-HV had not been directly evaluated with the methodological rigor necessary for designation as an evidence-based practice. Through a community-university-state partnership, a collaborative team of researchers across eight universities have embarked on an evaluation of the efficacy and effectiveness of the Michigan IMH-HV Model. Most recently, in a randomized-controlled trial, researchers have demonstrated positive effects of the intervention across several key outcomes including parent mental health, reflective functioning, relational health, and child socioemotional outcomes. This symposium highlights four important findings documenting longitudinal intervention outcomes. Paper 1 reports on improved maternal depressive symptoms over the course of treatment for mothers receiving IMH-HV treatment, but not for the control group. In Paper 2, researchers demonstrate that IMH-HV improves parenting reflectivity after 6 months of IMH-HV treatment. Paper 3 shows improvements in the early relational health of parent-child dyads among families with mothers who report high levels of maternal stress and mental health symptoms, which without treatment, negatively impact early relational health. Finally, Paper 4 demonstrates that IMH-HV buffers the negative effects of adversity-associated DNA methylation on child socioemotional outcomes. These findings contribute to the growing evidence base for the Michigan Model. Importantly, findings span across maternal health, relational health, and child health outcomes demonstrating the wide-reaching beneficial effects of IMH-HV.
Infant Mental Health Home Visiting Buffers the Effect of DNA Methylation on Infants’ Socioemotional Health

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Introduction:
Early exposure to stress affects risk for mental health outcomes over the lifetime and across generations. Methylation of DNA is an epigenetic mechanism thought to be linked to environmental stress and intergenerational transmission of adversity. Methylation of the NRC31 glucocorticoid receptor gene is associated with heightened cortisol response and negative socioemotional outcomes (Parade et al., 2016).

Aim:
Research on interventions that disrupt the intergenerational transmission of adversity are nascent. The Michigan Model of Infant Mental Health Home Visiting (IMH-HV) is a needs-driven dyadic intervention focused on improving the quality of the parent-child relationship. The current study sought to examine the effect of IMH-HV on the relationship between toddlers’ NRC31 methylation and their socioemotional competence in a randomized-controlled trial.

Material and Methods:
Participants included 44 parents and toddlers randomly assigned to 12 months of IMH-HV treatment or to a control group. Toddler socioemotional competence was measured via the Brief Infant-Toddler Social-Emotional Assessment. Saliva samples were collected from children using Oragene kits (DNA Genotek). Methylation of the exon 1F region of the glucocorticoid receptor, NRC31, was measured via pyrosequencing and averaged.

Conclusions:
The overall regression predicting child socioemotional competence was significant, F(3,40)= 5.94, p =.05, R²=.17, and moderation analysis revealed a significant interaction effect, F(1,40)= 6.77, p =.013, ΔR²=.14). Simple slopes revealed that in the absence of treatment, methylation of NRC31 predicts lower socioemotional competence (b=.37, p =.03). However, this effect is not seen for children in the treatment group (b=.33, p >.1), suggesting that IMH-HV treatment buffers the effect of NRC31 methylation on children’s socioemotional outcomes. Analysis of additional genes, including SLC6A4 and BDNF, is currently in process. This is the first study to demonstrate a buffering effect of an IMH-HV intervention on the relation between methylation and socioemotional outcomes.

The Michigan Model of IMH Home Visiting mitigates maternal stress effects on early relational health

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Early Relational Health (ERH) is comprised of the mutual actions, affect, and skills exhibited by both the parent and the child during interactions. Importantly, ERH is more than the sum of the influence of the parent and child’s behavior during an interaction; rather it is the quality of the relationship or connectedness that is formed between the infant/toddler and their caregiver (Condon, 2016; Frosch, 2019). Parental mental health and experiences of trauma and/or stress has been linked with more difficulties in parenting, which in turn may impact the co-construction of strong ERH between parent and infant/toddler.

Participants were 64 mother-infant/toddler dyads enrolled in a clinical trial studying the effects of Infant Mental Health Home Visiting (IMH-HV). We hypothesized that maternal stress and mental health symptoms would be related with worse ERH, but that receipt of a relational intervention – IMH-HV would mitigate the negative impact of maternal symptoms on ERH. At study entry, maternal age averaged 31.91 years (SD = 5.69) and child age averaged 10.88 months (SD = 7.23). Approximately 70% of mothers reported their race as White, 33% reported their race as Black/African American, and 7% endorsed another race.

Pre-treatment levels of PTSD symptoms (r = -.32, p = .01), anxiety (r = -.35, p = .004), and maternal ACE score (r = -.29, p = .03) were associated with worse ERH assessed 12 months later. However, for those assigned to receive IMH-HV services, these associations did not remain. Additionally, mothers with the highest ACE scores who were assigned to IMH-HV had the highest ERH scores, suggesting IMH-HV services in the context of childhood adversity can promote optimal parent-child relational health.

Results suggest that IMH-HV can mitigate the negative impact of maternal stress and mental health symptoms on ERH.
Maternal mental health improvements following the Michigan Model of Infant Mental Health Home Visiting

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Introduction
Globally maternal mental health concerns, including depression and anxiety, are widespread and contribute to ruptures in parent-child relationships. The effects of home visiting (HV) programs on maternal mental health are mixed, and surprisingly few studies that have examined the effects of HV programs that employ parent-infant psychotherapy, such as the Infant Mental Health model, on maternal mental health.

Aims
The focus of the current study was to examine associations between receipt of an Infant Mental Health Home Visiting (IMH-HV) program and depressive symptoms among a community sample of mothers of infants. We posit that comprehensive nature of IMH-HV, pairing parent-infant psychotherapy with developmental guidance, and emotional and concrete supports, will be associated with improvements in mothers’ depressive symptoms and anxiety.

Methods
In a randomized controlled study, 73 mother-infant dyads were assigned to IMH-HV (n=38) or a non-treated control condition (n=35) and five dyads assigned to intervention but who received no home visits were reassigned to control. Home visits were provided by trained infant mental health clinicians over the course of one year and assessments were done every three months. Depression symptoms were assessed with the PHQ-9 and anxiety symptoms with the GAD-7. Data was analyzed using linear mixed modeling.

Results
The model results for depression symptoms showed a negative effect of time by treatment (estimate = -0.10, p = .039) indicating that the treatment group decreased more over time than the control group. For anxiety symptoms, the treatment by time was also negative (estimate = -0.14, p = .13).

Conclusion
Results suggest that IMH-HV improves maternal mental health over time, particularly depression. Anxiety symptoms, which may be less severe relative to depression, appear more difficult to improve, perhaps suggesting the need for closer investigation about the sources and forms of anxiety experienced HV programs might address anxiety.
Well-being of young children in institutional childcare: An observation-based assessment of potential and risk

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INTRODUCTION
Ensuring and promoting children’s well-being are core elements of pedagogical work and discussed as important indicators of quality in early childcare. However, due to their developmental stage, children under the age of three are only capable to a limited extent of providing information about stressful situations and demands, about their well-being or discomfort.

In Germany, two out of three children attend early childcare before the age of three, often for more than 40/h week. There they face challenges that place individual and situational demands on them and that, under unfavourable circumstances, can limit their well-being and constitute developmental risks.

AIM of the study
The project Well-being and Risk Assessment (WoGe), funded by the German Social Accident Insurance (DGUV), aims at developing an observation-based procedure of potential and risk assessment for toddlers in early childcare for use by childcare teachers and childminders. So far, existing risk assessments in institutional childcare refer mainly to physical-technical hazards and lack the description and evaluation of potential risk as well as resilience factors for children’s well-being and mental health. They also assess the childcare environment as a whole and don’t take into account the individual experiences that children make.

MATERIAL and METHODS
The well-being and risk assessment tool to be presented in the workshop combines a systematic evaluation of the general childcare environment as a whole and individualized observations of emotional expressions and well-being- or stress-related behaviors of children. The tool has been developed and tested in close cooperation with about 50 childcare teams throughout Germany, using a design-oriented practice research approach.

CONCLUSIONS
We will provide information on theoretical and empirical foundations of our conceptualization of child well-being and discuss issues of validity, usability and implementation of the assessment tool.
Developing the Parent Infant Interaction Observation Scale as an Outcome Measure

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Introduction
The parent infant interaction observation scale (PIIOS) is used clinically to assess “at risk” dyads from 8 weeks to the end of the 7th month in the United Kingdom (UK) and Sweden. The outcome of a PIIOS can be used to inform care planning to improve the parent-infant (P-I) relationship. The current scale timeframe is limited due to when families present to practitioners.

Aim of the Study
To develop a reliable, valid scale to assess the PI relationship from 8 to 15 months of age in UK and Swedish populations.

Material and Methods
The new PIIOS scale will be developed using the same PIIOS format of individual Likert scales and assessing similar domains, but through a set of interactional behaviours appropriate for the older infant.

Study 1
8 documented PIIOS reliable raters will code the same 20 3-minute archival video clips from the Sunderland Infant Programme. These clips previously being scored against the CARE-Index. The analyses will be based on 200 comparisons and comments from the practitioner focus group will identify items deemed as un-scoreable due to being “baby focused.” These will be replaced, and new items generated through reviewing underpinning PIIOS literature and new research.

Study 2
A validity set of 14 video clips including a wide range of interaction from highly sensitive to very highly insensitive will be rated for reliability and validity analyses by 12 documented reliable PIIOS practitioners. Concurrent validity assessed using the scores from the PIIOS and the CARE-Index Sensitivity Scale.

Study 3
Repeat Study 2 methods with Swedish practitioners to analyse reliability and validity for the Swedish population.

Conclusion
This is a complex and time-consuming undertaking, but worthwhile if PIIOS can be developed as an outcome measure across the wider age range.
Identifying families struggling with infant crying using a screening tool in pediatric clinics.

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INTRODUCTION and AIM of the study: Inconsolable or excessive infant crying is the most common complaint to pediatricians by parents with young infants, occurring in about one in five infants (Keefe et al., 2006). Parents of excessively crying infants report elevated levels of stress and depression (Maxted et al., 2005), as well as feelings of helplessness and frustration, which can lead to poor parent/child outcomes and even abusive actions (Barr, 2014). The Infant Crying and Parent Well-being (ICPW) screening tool was developed to provide a standardized method to identify families who are struggling with infant crying.

MATERIAL and METHOD: The ICPW tool was pilot tested with 17 pediatric resident trainees in an outpatient continuity clinic setting in an urban community. Residents completed post-clinic visit surveys and a post-study interview.

RESULTS: Residents reported that using the ICPW screening tool improved their practice by increasing their awareness of infant crying problems and providing anticipatory guidance on infant crying more frequently. The ICPW helped to facilitate conversations about infant crying with parents for 94% of the clinic visits in which it was administered. Additionally, the tool led providers to initiate conversations around family support and co-parenting.

CONCLUSIONS: Pediatric residents found it valuable to have a brief, standardized protocol for screening families for infant crying problems and found the screening tool helpful in determining which families to refer for support services.

References:


The conundrums of behavioural sleep interventions in infants: Parental voices and choices.

Professor Sarah Blunden

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Sleep the first year of life is difficult for mothers and babies. Behavioural sleep interventions (BSI) can be successful in improving this. However some parents find BSI difficult to execute because the vast majority of BSI utilised to reduce infant sleep and settling problems include leaving a child to cry alone at various intensities. Parental opinions and voices regarding BSI are under-represented in the literature. Alternative settling techniques, including more responsive BSI, exist yet there is similarly a paucity of data.

It is important to understand what parents, particularly mothers, do to improve sleep if they do not wish to leave their child to cry. Additionally to is necessary to understand if and how parents can access responsive, non-ignoring methods if they wish to.

With four international speakers, the symposium will present

1. a broad review of the literature on parental opinions and uptake of BSI and the need for responsive methods with the paper “How well does existing research and advice on behavioral interventions map to real-world parenting experiences?” (Macall Gordon, USA)
2. show the results of training UK health professionals to educate parents and help them manage family sleep with the paper “Evaluating Sleep, Baby & You: perception of parents and practitioners to a responsive approach to reducing infant ‘sleep problems’” (Helen Ball, UK)
3. a RCT comparison of a responsive method vs a method which leaves infants to cry alone with the paper “Comparing mental health in mother/infant dyads between responsive and extinction sleep interventions: A pilot study” (Sarah Blunden, Australia)
4. data showing maternal opinions and perceptions of co-sleeping, with the paper “Motivations and satisfaction in co-sleeping mothers” (Levita D’Souza, Australia)

The symposium will include an active panel Q and A at the end of the speakers.
Developing and evaluating a tool for assessing parent-child interaction in universal child health services: CARO

**Professor Philip Wilson**1,3, Dr Christine Puckering2, Dr Lucy Thompson3, Dr Anette Graungaard1, Ms Sarah De Voss1, Ms Clara Appel1

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Prospective cohort and case-control studies demonstrate strong associations between sound parent/child relations and good long-term physical and mental health outcomes. Early parent-infant interactions strongly predict mental wellbeing and are amenable to change. There are therefore strong arguments for developing tools to assess parent-infant interactions for use by non-specialist clinicians who come into routine contact with parent/infant dyads. Such a tool, potentially usable by general practitioners, community health nurses and community-based paediatricians, could assist clinicians in helping parents improve their parenting skills and ensure efficient access to specialist services where needed.

Puckering: The Mellow Parenting Observational System (MPOS) counts positive and negative parent-child interactions in six domains. The number of positive parenting behaviours (per minute) assessed with MPOS in video material from the ALSPAC birth cohort proved to be an extremely strong predictor of disruptive behaviour disorders but the tool requires a high level of training and inter-rater reliability is difficult to achieve.

Thompson: In order to allow non-specialists to assess parent-child relationships, and to improve inter-rater reliability, a simplified version of MPOS - the Child-Adult Relationship Observation (CARO) - was developed and piloted with Scottish health visitors (community child health nurses) who see almost all children in the UK. We have recently developed a CARO app for use by practitioners and researchers.

Wilson and Graungaard: Danish general practitioners perform routine developmental assessments on 0-5 year old children and are mandated to assess parent-child relations. At present, no tools are available to help them make good assessments. Here, the adaptation of CARO to these assessments and potential adoption into national guidelines is described.

De Voss and Appel: Description of feedback from Danish general practitioners and quantitative results from repeated assessments of 600 parent-child dyads.

All: The symposium will conclude with a panel discussion about adaptation of complex tools for community use.
Development and application of the CARO for use in Danish general practice

Professor Philip Wilson, Dr Christine Puckering, Dr Lucy Thompson, Dr Anette Graungaard

1University Of Copenhagen, Copenhagen, Denmark, 2Mellow Parenting, Glasgow, Scotland, 3Centre for Rural Health, Institute of Applied Health Sciences, University of Aberdeen, Inverness, Scotland

The Family Wellbeing (FamilieTrivsel) trial evaluates the impact of a web-based resource designed to promote parental mentalisation abilities during pregnancy and in early childhood. The trial, funded by TrygFond, takes place in the context of routine developmental assessments delivered by general practitioners (GPs) in pregnancy and at several stages of early childhood. The focus of these assessments has historically been on physical development but in the FamilieTrivsel trial participating GPs are asked to gather additional data on the child’s psychosocial environment. The content of existing child developmental assessments by Danish GPs is mandated by the National Board for Health and includes evaluation of the parent-child relationship – but lacks information about how this evaluation should be conducted.

Pilot work with 10 GPs was conducted with the aim of developing a standardised developmental assessment incorporating the evaluation of parental mental health, the parent/infant relationship and the child’s neurodevelopment. The Child/Adult Relationship Observation (CARO) was initially used to score the parent/infant interaction components in detail but strong feedback from the GPs was that it was too burdensome in the context of a 15-30-minute overall developmental assessment, so a simpler tool (“CARO-Lite”) was developed. A 2.5-hour training programme was developed using video clip examples of caretaking activities for different ages of child and a laminated checklist of example behaviours was issued to remind clinicians of the elements of the assessment system. In the developmental assessments, GPs are simply asked to record if they saw evidence of positive or negative Co-operation behaviours, positive or negative examples of respect for Autonomy and positive or negative examples of Responsiveness, and note any additional observations. CARO-Lite has received positive feedback from participating GPs, and the Danish National Board of Health is considering inclusion of CARO-Lite in its national guidelines for GPs.
The origins and development of the Mellow Parenting Observation System (MPOS)

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Introduction and Aim of the Study
The Mellow Parenting Observation System was developed as a systematic tool to describe parent (or carer) and child interactions.

Materials and Methods
Using brief video recordings of parent and child in a caretaking tasks such as feeding or dressing, a structured coding system was devised. An event-sampled method, recording every instance of key events was used with six dimensions as a framework. The dimensions were responsiveness, anticipation, autonomy, management of distress, cooperation and control. Positive and negative key events were recorded on each dimension, with positive and negative observations being shown to be independent.

Results
This system (MPOS) was shown to describe interaction and be responsive to change during an intervention for post-natal depression (Puckering, McIntosh, Hickey, & Longford, 2010) and to predict from observations at 12 months to independently measured child behaviour at age 7 years (Puckering, Allely, Doolin, Purves, McConnachie, P. ... & Wilson. 2014).

The MPOS system however was laborious and demanding to learn and become reliable. Ways to streamline the system to make it more clinically accessible and feasible were sought.
Coaching with PICCOLO in the USA, Spain, and Italy: Improving parent-child interaction and child development

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INTRODUCTION:
For infants and toddlers, a responsive home environment that includes developmentally supportive parent-child interactions is a powerful predictor of child developmental outcomes, at school entry and early adolescence, in both typical and atypical development (Innocenti, Roggman & Cook, 2013; Vilaseca et al. 2019).

AIM:
This symposium presents four studies—in the US, Spain, and Italy—that aimed to increase parents’ developmentally supportive interactions with their infants or young children, with or without disabilities, using a practical observation tool to identify parenting strengths at supporting child development.

MATERIALS & METHODS:
These studies used the Parenting Interactions with Children: Checklist of Observations Linked to Outcomes (PICCOLO; Roggman et al., 2013), a reliable and valid observational measure of caregiver-child interaction, as a coaching tool. The three studies each implemented an evidence-based parenting facilitation approach that included observational feedback with coaching on parenting interaction strengths (Provenzi, et al., 2020). Video was used both to identify parenting strengths by scoring PICCOLO and to provide feedback by selecting short video clips to share with parents during coaching. Along with showing each parent video examples of their own developmentally supportive behaviors that support their child’s development, researchers also described the child’s response and explained how the parent’s behavior supports the child’s development. In addition, two of the studies gave visual feedback with a book of photos from the video with text that included feedback and information about the child’s response and how the interaction supports development.

CONCLUSIONS:
In each study, the quality of developmental support substantially increased in the participating parent-child dyads. The measure and the procedures were implemented by researchers with a wide range of experience, from none to considerable. The substantial increases in parents’ developmental support and children’s development suggest the utility of this simple procedure using a practical observation tool.
INTRODUCTION: Coaching parent-child interaction is an empirically supported strategy for improving parents’ developmental support for infants and young children but often requires extensive training in clinical observation skills. The Parenting Interactions with Children Checklist of Observations Linked to Outcomes (PICCOLO; Roggman et al., 2013), however, can guide observers to quickly identify parenting interactions that support children’s development. Using this practical measure for giving effective feedback may help practitioners such as new home visitors increase parents’ strengths for supporting their children’s early development in many settings.

AIM: We tested the effectiveness of combining two key practices to increase developmentally supportive parent-child interactions: (1) coaching with observation feedback to parents, using PICCOLO as a practical observational measure of developmentally supportive parent-child interactions; and (2) collaboratively planning with parents to select a learning activity based on parenting and child development strengths.

MATERIALS & METHODS: Over four real-time tele-visits to six families in their homes, trained student researchers implemented: (1) Coaching with specific, descriptive feedback (e.g., Juffer et al., 2017; Kennedy et al., 2017; Schindler et al., 2017) from PICCOLO results, using two types of visual support, video clips and a photo book showing parenting strengths; and (2) collaborative planning (e.g., Fowler et al, 2012) with parents by guiding reflections about the results of PICCOLO and Ages and Stages Questionnaire (Squires et al., 1998) observations, offering some ideas from the ASQ Learning Activities (Twombly & Fink, 2013), and asking the parent to select an appealing activity appropriate for the child’s development and the parent’s strengths.

CONCLUSIONS: Independently scored parenting interactions showed substantial increases from visit 1 to visit 4, increasing in all families, with this sample’s average increases exceeding a standard deviation, based on the measurement sample. These results show the potential impacts of coaching by non-clinical or inexperienced practitioners.
The use of video feedback to promote developmentally supportive parent-child interactions with children with ASD

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INTRODUCTION: Positive parent-child interactions (PPCI) are crucial for infants and toddlers’ development (Innocenti et al., 2013; Provenzi et al., 2021), being especially critical for children with a disability, such Autism Spectrum Disorders (ASD) (Tomeny et al., 2020). Coaching and video feedback could be powerful ways to increase PPCI (Santos & Brazorotto, 2018), parental self-efficacy (Lorio et al., 2020), and parental emotional well-being (Rankin et al., 2019).

AIM: We aimed to design and assess the efficacy of a video-feedback intervention for improving PCI in families with a child at risk of ASD.

MATERIAL & METHODS: Participants were 5 families, specifically 5 children at risk of ASD aged 24-36 months and one of their primary caregivers, with adequate internet access, recruited from Early Intervention Centers in Spain. Inclusion criteria were: a) Child at medium-high risk of ASD; scores >=8 in M-Chat (Robins et al., 2009); b) Primary caregiver at risk of anxiety, depression, or parental stress; scores >=7 in the anxiety or the depression dimensions of HADS (Caro & Ibañez, 1992; Zigmond & Snaith, 1983), or scores >= 86 in the stress dimension of the PSI-F (Abidin, 1995; Diaz-Herrero et al., 2010); c) Primary caregiver with a low or medium-low level of PPCI (scores <=40 in the PICCOLO (Roggman et al., 2013; Vilaseca et al., 2021)).

Twelve biweekly sessions of approximately 90 minutes were conducted for 6 months, by videoconference with every family at home. Every session included video feedback and coaching strategies about three different PICCOLO behaviors that appeared in a monthly recorded caregiver-child interaction during play at home (book-reading, symbolic play, or manipulative play).

RESULTS: Our results showed an improvement on PPCI and indirect benefits on caregiver’s emotional wellbeing and parental self-efficacy.

CONCLUSIONS: Our results provide new data supporting the effectiveness of interventions based on the PICCOLO and video feedback.
Background, Design, and Major Findings in the Bucharest Early Intervention Project

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Introduction and Aim

Modern societies are challenged with identifying and providing care for orphaned and abandoned children. In Romania, institutional (orphanage) care was the primary form that care was provided to such children, with devastating consequences for child health and development. In 2000, the MacArthur Foundation provided funding to obtain a causal test of foster care as an alternative to institutionalized care, the Bucharest Early Intervention Project was initiated by Drs. Charles Nelson, Nathan Fox, and Charles Zeanah.

Material/Methods

Participants in this randomized controlled trial were 136 children age 6-31 months at the baseline assessment, and were drawn from 6 Bucharest institutions. Children were then randomized to foster care or to care as usual (which often meant remaining for a longer duration in institutional care). In order to create the foster care intervention, the study team recruited adults willing to serve as foster parents as foster care was not widely used in Romania at that time. Importantly, the study team provided local support to foster parents and received regular supervision from clinicians in the U.S. to support the aims that the foster care be child-centered and high quality, in which parents make a long-term psychological commitment to the child. In addition to a baseline assessment, children were again assessed across a number of domains at age 30, 42, and 54 months—at which time the intervention officially ended and control of the foster care network was transferred to local Romanian authorities.

Results

Using conservative intent-to-treat analyses, these trial results provide authoritative evidence that family placements led to higher IQs, lower rates of psychiatric disorder, larger physical growth, among many other outcomes.

Conclusions

Additional waves of follow-up assessment occurred at ages 8, 12, and 16 years (age 23 years is currently underway) that allow for examining the long-term outcomes of the intervention.
Bucharest Early Intervention Project: Implications for Developmental Science

Professor Nathan Fox

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Introduction: The Bucharest Early Intervention Project is a randomized trial of foster care intervention for young children who experienced early adversity and it is a longitudinal follow up of these children. Methods: One group of children were removed and placed into families (Foster Care Group) and those who remained in the institutions in which they were living (Care As Usual Group). Multiple domains including cognitive, social and physiological were assessed. This data allow us to answer critical questions about the effects of early experience, developmental change and the impact of stressors on learning and socio-emotional adaptation. Results: Data from the study suggest that there is a sensitive period during which the environment plays a significant role in ameliorating the effects of early psychosocial adversity. Across multiple domains, children removed from institutions before the age of 24 months are more likely to do better than children removed after the age of 2. Implications for developmental change suggest that there is a significant intervention impact on participants’ IQ scores lasting to age 16. And, the positive trajectories of both IQ and executive skills are in part a function of stability of placement. Children who remained in the foster homes they were originally placed into have more positive trajectories of both IQ and executive functions. A third area is the effect of stress on developmental outcomes. Data from the study suggest that children who were randomized to remain in the institutions (the Care As Usual Group) showed significant blunting of their autonomic and cortisol responses to stressors. As well, stressors experienced during early adolescence appeared to have a more significant impact on social development than stressors experienced later on. Conclusions: Data from this study illustrate the impact of early adversity on child development and the potential for remediation through family intervention.
How can perinatal research that integrates developmental neuroscience help us interrupt intergenerational violence?

**Professor Daniel Schechter**, Dr Erica Willheim, Sylvie Viaux Savelon

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Interpersonal violence (IPV) including family violence and child maltreatment particularly when experienced during early sensitive developmental periods, is known to be associated with a range of unfortunate mental and physical health outcomes. The isolation and stress imposed by the recent CoVid Pandemic has been associated with an increasing prevalence of IPV at a massive level. Recent empirical research that has begun to examine the impact of maternal exposure to IPV and its intergenerational impact on maternal-fetal and -infant relationship, and individual and relational psychobiological correlates offers an understanding of underlying mechanisms of intergenerational transmission of violence and related psychopathology. How might these mechanisms help as both targets of intervention and measurable markers of change to guide future intervention in the perinatal and early childhood periods?

Methods: This Symposium proposes a panel of international researchers who use diverse methods informed by developmental neuroscience (i.e. neuroimaging, physiologic measurement; behavioral coding) with IPV-exposed mothers, their fetuses, infants and toddlers to examine this question with a Chair and Discussant who are clinical researchers and clinicians experienced with high-risk populations to animate the discussion and bridge the translation of the research presented to clinical implications.

Results: Marion van Heuvel (Netherlands) will discuss pioneering research with Moriah Thomason (USA) involving fetal brain development via neuroimaging in a sample of inner-city mothers with childhood IPV exposure. Naomi Downes (France) will present prospective, longitudinal data linking prenatal maternal stress with hypothalamic-pituitary-adrenal axis functioning from infancy through pre-puberty. Nina Burtchen (Germany) will present a study of infants of high-risk inner-city mothers examining links between IPV-related psychopathology and mother-infant synchrony. Daniel Schechter (Switzerland/USA) will present prospective longitudinal findings of toddlers of mothers with IPV-related posttraumatic stress disorder at school-age and peri-puberty. Conclusion: Sylvie Viaux (France) will discuss the implications of this research for intervention. Erica Willheim (USA) will chair discussion.
Video feedback and family picture-books to strengthen developmental parenting with socially vulnerable mothers in Spain

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INTRODUCTION. Improving parental competencies benefits child development (Rogman et al., 2020), parental self-efficacy (Kwok & Wong, 2000) and parental emotional well-being (Rankin et al., 2019). Therefore, it is necessary to design interventions aimed at strengthening parenting skills and assess their effectiveness.

AIM. We aimed to analyze the efficacy of a short intervention to strengthen maternal skills in mothers in vulnerability conditions in Spain.

MATERIAL & METHODS. A short intervention based on the PICCOLO was conducted with two single-parent mothers, aged 24 and 28 years. The oldest presented intellectual disability. Children were 24 (male) and 17 (female) months of age.

PICCOLO is an observational tool for assessing 29 positive parental behaviors in four domains (Affection, Responsiveness, Encouragement, Teaching) that promote child development at early ages (10-47 months) (Roggman et al., 2013; Vilaseca et al., 2021).

Mother and child played for ten minutes in a care center room and were video recorded by the interventionist. The dyads played with toys arranged by the researchers in three boxes containing manipulative toys, toys for symbolic play, and books. Videotaped interactions were assessed with the PICCOLO.

Three intervention sessions were conducted for three months. Every session included video feedback about three different PICCOLO behaviors, selected by the interventionist from a previous videotape. Family picture-books (Boyce et al., 2017) were progressively created, with frames selected from the videotapes. Mothers were encouraged to look at and talk about the book with their children at home.

CONCLUSIONS. Both mothers increased positive parental behaviors in the four PICCOLO domains and reported that the intervention helped them to be more conscious about their maternal strengths and resources to support their child’s development.

Video-feedback intervention and family picture-books were useful to increase maternal behaviors supporting child development and were positively valued by the mothers.
Bucharest Early Intervention Project: Contributions to Child Protection

Professor Charles Zeanah

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Child protection systems are responsible for providing care for some of the most vulnerable children in the world— orphaned, abandoned and maltreated children who cannot be placed with extended family. When children require care outside of their families, how should they be cared for? The two most common forms of care are institutions and family foster care. About a dozen studies, dating back to the mid-20th century, consistently found that children placed in foster care fared better than those placed in institutional care. Nevertheless, questions about whether selective placements of children with more severe problems into institutions instead of with families complicated interpretation of prior results. The Bucharest Early Intervention Project (BEIP) was the first randomized trial of foster care vs. institutional care for young children who had experienced abandonment followed by deprivation. Although the trial concluded when children were 54 months old, follow-ups have been conducted at ages 8, 12 and 16 years. Thus, it represents an experimental, longitudinal effort to examine questions about placements of maltreated children. This presentation will highlight findings that are applicable to child protection efforts with severely neglected children: First, foster care is a better intervention than institutional care (implications for type of placements provided). Second, the sooner a young child is removed from an adverse environment, the more likely they are to recover and the fuller their recovery is likely to be (implications for decisions about removal). Third, quality of foster care provided matters a great deal (implications for training and supporting foster parents). Fourth, the stability of foster care is a crucial determinant of outcome (implications for minimizing unnecessary disruptions). Each of these conclusions is supported by longitudinal findings from BEIP.
A 20-Year Longitudinal Study of Early Deprivation:
Contributions to Neuroscience, Developmental Science and Child Protection

Professor Charles Zeanah¹, Dr Kathryn Humphreys⁴, Ms Laura Fahey², Professor Nathan Fox³, Dr Brenda Harden³

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The Bucharest Early Intervention Project (BEIP) is the only randomized controlled trial of foster care as an alternative to prolonged institutional rearing ever conducted. The trial began in 2001 -- at a time when foster care barely existed in Romania and more than 100,000 children were being raised in institutional settings -- and concluded in 2005 when participants were 54 months old.

Since the trial concluded, investigators have conducted systematic follow-ups have been conducted at ages 8, 12 and 16 years across a range of developmental domains, including brain structure and functioning, physical growth, attachment and socio emotional functioning, cognitive and executive function skills, and psychiatric symptoms, disorders and impairment. The study has contributed to clinical, research and policy questions.

In this symposium, we review findings relevant to neuroscience, developmental science and child protection.

In the first talk, Kathryn Humphreys will provide an overview of the background and rationale for the study. She will consider the design and an overview of the initial findings of the study at the conclusion of the trial.

This will be followed by three talks aimed at considering longitudinal findings from early childhood, mental childhood and adolescence and their implications for 3 important bodies of knowledge.

In the second talk, Charles Nelson will consider selected findings from BEIP related to brain development and neuroscience, including sensitive periods.

In the third talk, Nathan Fox will consider selected findings from BEIP related to developmental science and our understanding of developmental trajectories.

In the fourth talk, Charles Zeanah will present selected findings from BEIP that are relevant for child protection practice and policy.

The discussant, Brenda Jones Harden, will consider issues of translational research and its application to policy, practice and the advance of knowledge.
Prenatal pandemic-related stress associates with infants’ socio-cognitive development at 12 months: A longitudinal multi-centric study

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Introduction and aim of the study
Prenatal maternal stress is key for suboptimal infants' mental health. Previous research highlighted effects on socio-emotional and cognitive outcomes, but less is known for what regards socio-cognitive development. In this study, we report on the effects of maternal prenatal stress related to the COVID-19 pandemic on 12-month-old infants' behavioral markers of socio-cognitive development.

Materials and methods
Ninety-one infants and their mothers were enrolled. At birth, mothers reported pandemic-related stress during pregnancy. At infants' 12-month-age, a remote mother-infant interaction was videotaped: after an initial 2-min face-to-face episode, the experimenter remotely played a series of four auditory stimuli (2 human and 2 non-human sounds). The auditory stimuli sequence was counterbalanced among participants and each sound was repeated three times every 10 seconds (Exposure, 30 seconds) while mothers were instructed not to interact with their infants and to display a neutral still-face expression. Infants' orienting, communication, and pointing toward the auditory source was coded micro-analytically and a socio-cognitive score (SCS) was obtained by means of a principal component analysis.

Results
Infants equally oriented to human and non-human auditory stimuli. All infants oriented toward the sound during the Exposure episode, 80% exhibited any communication directed to the auditory source, and 48% showed at least one pointing toward the sound. Mothers who reported greater prenatal pandemic-related stress had infants with higher probability of showing no communication, t = 2.14 (p = .035), or pointing, t = 1.93 (p = .057). A significant and negative linear association was found between maternal prenatal pandemic-related stress and infants' SCS at 12 months, R² = .08 (p = .006).

Conclusions
This study suggests that prenatal maternal stress might increase the risk of less-than-optimal infants' socio-cognitive development at 12 months. Special preventive attention should be devoted to infants born during the pandemic.
Greater Parenting Stress Enhanced Inter-brain Synchrony During Shared Play: Is that Optimal? Evidences from Singapore

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Introduction and Aim of the study: Parent-child dyads who are mutually attuned to each other during social interactions display interpersonal synchrony that can be observed overtly, in the form of joint behaviours, and biologically, such as through the temporal coordination of brain signals called inter-brain synchrony. Joint play provides ample opportunities for parent-child dyads to engage in matching interactions which not just facilitate the formation of bonds but also alleviate parenting stress in caregivers. Despite the beneficial effects of play on parents and the parent-child relationship, no study has investigated the dyadic neural mechanism by which this occurs. The present study aimed to examine the association between parenting stress and inter-brain synchrony in 31 mother-child and 29 father-child dyads while they engaged in shared play for 10 minutes.

Material and Methods: Shared play was micro-analytically coded into joint (i.e., in-phase matching of dyadic behaviours) and non-joint (i.e., no matching of dyadic behaviours) segments. Inter-brain synchrony was computed using cross-correlations over 15 s, 20 s, 25 s, 30 s and 35 s fixed-length windows of joint and non-joint play segments. Results: Analyses of Covariance revealed that dyads with more parenting stress exhibited greater inter-brain synchrony in the frontal left cluster of the prefrontal cortex, but only for the 35 s fixed-length window. This finding suggests that continuous and positive instances of joint play may disproportionately benefit dyads who reported greater parenting stress, entraining underlying brain activation patterns involved in social cognition. Mother-child dyads also showed greater inter-brain synchrony than father-child dyads, alluding to possible gender differences in the effect of play on dyads. Conclusions: Findings present evidence of a potential dyadic neural pathway by which play benefits the parent-child relationship.
Fathers’ wellbeing, involvement, and contributions to maternal and child health: Informing father-inclusive early interventions

Professor Tova Walsh\(^1\), Dr. Alvin Thomas\(^1\), MD, MAPP Craig Garfield\(^2\), A/professor Richard Fletcher\(^3\)

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The infant and early childhood mental health (IECMH) field recognizes early relationships as the foundation for a child’s developmental trajectory and relational capacities across the life course. Most empirical evidence centers on mothers’ contributions to development, but a growing body of research demonstrates fathers’ unique contributions to development. Fathers’ influence begins prior to birth, and father involvement in pregnancy and the child’s early years can set the stage for involvement over the long term. Positive father involvement is associated with improved maternal and child health and it is protective when mothers experience depression. This symposium brings together a diverse group of scholars from the United States and Australia who conduct father-related research from multiple disciplinary perspectives. We will highlight advances in knowledge related to fathers’ wellbeing, involvement, and contributions to maternal and child health in the perinatal period, and introduce innovative strategies to engage fathers and strengthen their capacity as parents and partners.

Two presentations in this symposium utilize data collected from Black expectant and new parents living in one of the most segregated metro areas in the United States. These presentations explore the role of fathers in supporting mothers and promoting maternal mental health, and the association of paternal mental health with fathers’ perinatal involvement and bonding with their babies. Findings yield insights to promote Black family wellbeing in the context of persistent and egregious racial disparities in health outcomes. Two presentations in this symposium present findings of formative research to develop interventions to equip fathers to actively support their depressed partner and to provide parenting education to fathers in the newborn period. Each presentation highlights a promising practice to enhance support for fathers and strengthen their capacity to meet their children’s and partners’ needs. Discussion will explore opportunities for greater inclusion of fathers in IECMH research and practice.
Black fathers’ contributions to maternal mental health

Professor Tova Walsh¹, Dr. Alvin Thomas¹, Dr Vivian Tamkin², Helena Quince¹, Jacqueline Buck¹, Dalvery Blackwell³

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Introduction and Aim: Persistent and unacceptable racial and ethnic disparities characterize maternal health in the United States. The role of fathers in supporting mothers and promoting maternal mental health is increasingly well established among primarily white, married, and middle-to-upper class parents, but the potential role of fathers as a support to mothers among lower income, married and unmarried, racially and ethnically diverse parents is less well understood. We aimed to (1) assess interparental relationship quality, paternal support for mothers, and their contribution to maternal mental health, and (2) explore understanding of meaningful paternal support for mothers and a high quality interparental relationship, among Black parents in a metro area characterized by severe racial disparities.

Material and Methods: Using survey data collected from 75 Black mothers in Milwaukee, WI, USA, we examined whether relationship quality would mediate the association between paternal support and maternal mental health, and tested whether relationship quality would moderate the association between paternal support and maternal self-reported overall health. We used inductive thematic analysis to analyze data from focus groups with 15 Black parents.

Results: We found that mothers’ mental health was positively correlated with relationship quality, mothers’ subjective health was positively correlated with paternal support, and relationship quality significantly mediates the relationship between paternal support and maternal mental health while controlling for relationship status. Our thematic analysis yielded four central themes: (1) Teammates in pregnancy, parenting, and life; (3) Support is every day, in every way, (4) Communication is key, and (5) Challenge racism and disrupt intergenerational trauma.

Conclusions: Findings underscore the potential significance of paternal support and interparental relationship quality as buffers against the adverse effects of disadvantage and discrimination on maternal health. Supporting Black parents as they support one another in confronting oppression may help to mitigate maternal stress accruing from racial discrimination.
Evaluating 'Sleep, Baby & You': a responsive approach to addressing parent-infant sleep problems.

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In previous work we found that UK health professionals lacked training in how to support parents struggling with infant sleep and revealed that UK parents seeking help for ‘infant sleep problems’ had poor awareness or expectations of what normal infant sleep entails. To address these unmet needs we adapted the Possums Infant Sleep Programme for use in UK community health settings as ‘Sleep, Baby & You’. We trained UK health professionals to educate parents about infant sleep biology and support them in experimenting with small modifications to their infant care practices to improve the manageability of family sleep. We report here on the efficacy of this approach based on evaluations conducted with practitioners and families who used the intervention. Practitioners reported a strong positive response to the training and materials, while parents found the flexible, pragmatic strategies to be transformative for the enjoyment of family life. We conclude that Sleep, Baby & You is a viable approach for supporting parents experiencing perceived infant sleep problems.
The use of CARO-lite in the FamilieTrivsel trial

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INTRODUCTION
In the FamilieTrivsel trial, clinicians (general practitioners, midwives, or nurses) used CARO-lite during child development assessments when the children were five weeks, five months, one year, and two years of age. Clinicians observed the domains ‘Collaboration, Autonomy and Responsiveness’ when assessing the parent-child interaction during the examination. They noted if they could assess each concept and categorized it as positive, negative, or both.

AIM OF THE STUDY
We will present the preliminary statistical findings from the developmental assessments and the clinicians’ views on using CARO-lite.

MATERIAL AND METHODS
For each assessment, we will present data on the response rate within the CARO-lite domains and the presence of positive and negative interactions that the clinicians observed for the 600 participants.

Furthermore, we will present qualitative findings on the clinicians’ experiences with CARO-lite, including benefits and barriers.

CONCLUSIONS
The CARO-lite was widely applied in the trial, and the three domains were observed in most cases. There were few reports of negative behaviours.

The clinicians found CARO-lite to be supportive when assessing the parent-child interaction. They also gained a new vocabulary, which made advising the parents easier. Some clinicians, however, had difficulty separating the domains. A few considered CARO-lite too complicated for practical application, while others implemented it on all their developmental assessments.
Co-designing fathers’ role in actively supporting maternal mental health in the perinatal period

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Introduction: The consequences of maternal perinatal mental illness are well recognised and high-income countries have instituted screening and treatment aimed at reducing maternal depression and anxiety. However, equipping fathers to actively support distressed mothers has, to date, not been investigated. This study reports on the development of text messages for fathers who identified that their partner was mentally distressed (DadswDistressedMums).

Materials and methods: The SMS4dads text-based perinatal support program (www.sms4dads.com) provides 3 text messages per week from 16 weeks gestation until 48 weeks post-birth. The program has enrolled over 10,000 fathers across Australia. A co-design methodology was used to develop additional text messages for DadswDistressedMums. Mothers with lived experience of perinatal mental distress (MumDistressed) and DadswDistressedMums rated the helpfulness of message topics derived from research literature and parenting websites: positive affect; informational support; tangible support; and, positive social interaction. Mothers also indicated the most appropriate timing, at the point of diagnosis, with ongoing symptoms or during recovery. Draft messages derived from the survey results were rated as useful and understandable by MumDistressed and DadswDistressedMums, and by experienced mental health clinicians (as useful, understandable, and aligned with clinical practice). Messages were edited or deleted based on feedback and again reviewed by lived experience parents and clinicians. The texts, which will be linked to online resources, will be further tested using feedback from fathers enrolled in SMS4dads (results not reported here).

Results: Fifty-five mothers and 17 fathers completed the survey. Forty-two draft messages were evaluated and a set of 29 messages received (>3.5/5) approval from parents and clinicians. The final set of 12 messages were identified for inclusion in the SMS4dads message set.

Conclusion: Text messaging to assist new fathers whose partners are depressed or anxious can be developed by collaborating parents with lived experience, clinicians and researchers.
Beyond the parent-infant dyad(s): The role of family-level processes

PhD Hervé Tissot, Prof. Nicolas Favez, Dr. Valentine Rattaz, Mr Nilo Puglisi, Pre. Manuela Epiney, Prof. Chantal Razurel, Dr. Regina Kuersten-Hogan, MA Samantha Golemo, MA Zoe DiPinto, MA Alexa Berry, MA Kaitlyn Tonkin, Dr Maria Kalpidou, Mr Anthony Mauroy, Prof. Justine Gaugue, Professor Sarah Galdiolo, Dr Yana Sirotkin, Dr Erica Coates, Dr. Carla Stover, Dr. Selin Salman-Engin, Dr. James Mchale

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The quality of family relationships is known to be one of the key factors influencing infant social, affective, and cognitive development. While research in the field has mostly been conducted on mother–infant (and more rarely father-infant) dyads to investigate the influence of parenting, studies including family triads (two parents and the child) are scarcer. However, previous studies on family triads have demonstrated the importance of family-level relational processes for child development during infancy and beyond. For example, coparenting—i.e. the way in which two adults rearing a child (or several children) support each other and work as a team in the rearing tasks—or family alliance—i.e. the degree of coordination reached by mother, father, and child when completing a task—have been shown to explain specific proportions of variance in infant outcomes, over and above the influence of mothers’ and father’s individual parenting. In this symposium, we will present results of recent studies investigating family-level processes in relation to infant development.

Rattaz et al. studied the mediating role of maladjusted parental behaviors during triadic interactions in the link between family alliance and infant physiological regulation. Kuersten-Hogan et al. will present data on the impact of postpartum depression and parental stress on coparenting during infants’ first year of life in a sample of families with premature infants. Mauroy et al. investigated how parents can accurately understand each other’s thoughts and feelings (i.e. empathic accuracy) while playing with their toddler during a triadic free play interaction. Sirotkin et al. investigated social embeddedness of infant triangular capacity in a sample of unmarried, largely non-co-residential African American families transitioning to new parenthood. Finally, Tissot et al. will present results concerning the links between romantic attachment and parental sensitivity and the mediating role of family alliance in this association.
Maternal psychosomatic disorders and dyadic intersubjectivity: from neural response to infant cry to parenting behaviors

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During the early postpartum period, the quality of mother-infant interactions plays a critical role in supporting the child’s brain development and the subsequent acquisition of emotion regulation abilities. However, the presence of maternal clinical and subclinical forms of Somatic Symptom Disorders (SSDs) can result in parental maladjustment and dysfunctional intersubjectivity. The ongoing study aims to examine the association of several somatization-related variables (e.g., chronic stress, maladaptive coping styles and alexithymic traits) with brain response to infant stimuli and maternal behaviors in a sample of SSDs and healthy control mothers and their 4-month-old infants. First, mothers underwent an Infant Cry (IC) passive listening task during a fNIRS session to assess the neural response to their own infant cries compared to control sounds. Then, mother-infant dyads participated in two moments of video-recorded interaction: 15 min free-play interaction task (FP) vs distress-eliciting task (Still Face Paradigm; SFP). FP interactions and the reunion phase of the SFP have been coded through the Emotional Availability Scales (EAS) and the Mind-Mindedness (MM) coding system to assess maternal parenting behaviors and mentalization. We expect to find distinctive relational characteristics of mothers with SSD compared to healthy-control mothers (e.g., maladaptive coping styles and higher rates of alexithymic traits), which in turn would be related to specific impairments in brain response to infant crying and parenting behaviors, especially during stressful interactions. In light of alterations in parental intersubjectivity, clinical and developmental implications will be discussed.
Understanding Black Fathers’ Prenatal Involvement and Attachment with Their Baby

Dr. Alvin Thomas

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INTRODUCTION: Fathers play an important role in child health and development, yet fathers – especially those who are low-income, unmarried, Black and from minoritized communities – encounter individual and structural barriers to full participation in their children’s lives. Barriers during the prenatal period may include prenatal care appointments during the workday, living apart from the mother, and their relationship with the mother may also be a barrier. Still, research shows that a large majority of fathers attend prenatal ultrasounds for their babies and participate in pregnancy and prenatal care in various ways. Prenatal involvement and bonding set the stage for fathers’ future involvement in the lives of, and attachment to, their babies. For Black fathers, there is an unfortunate dearth of literature that explores involvement during their partner’s pregnancy, and attachment to their babies. AIM: The current study explores the influence of the quality of the relationship between father and mother, and paternal mental health on Black fathers’ prenatal involvement and attachment to their babies. MATERIAL and METHOD: The data are from a survey of 75 Black fathers, living in Milwaukee, Wisconsin who are expecting a baby or are a parent to an infant. Fathers responded to questions about their mental health, experiences during their child’s prenatal period, connection to their babies and mothers of their baby, as well as demographic characteristics. CONCLUSIONS: We found that interparental relationship quality moderates the link between depressive symptoms and involvement in pregnancy and attachment to their baby, and the link between pregnancy involvement and attachment. Relationship quality also mediated the link between depressive symptoms and involvement in pregnancy, and the link between depressive symptoms and paternal prenatal attachment. The findings suggest that interparental relationship quality and paternal mental health are key personal and interpersonal factors that contribute to father involvement in pregnancy and early attachment with the baby.
Discharge for Dads: Development and Outcomes of a Nursery-Based Video Education Intervention for New Fathers

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Introduction and aim of the study
Becoming a father has been described as a “magical moment.” Focusing on the time around that moment may lead to improved opportunities for paternal engagement. The purpose of this study was to examine the feasibility and outcomes of a novel video-education, nursery-based intervention with new fathers.

Materials and Methods
Following literature review and expert interviews, seven educational videos were created. English-speaking, first-time fathers were recruited beginning in April 2022 to watch videos and complete surveys in the nursery, one-week and one-month post-discharge. Survey topics included sociodemographics, parenting behaviors, self-efficacy, COVID impact and mental health (PHQ-9).

Results
Videos created include mental health, car seat safety, infant crying, lactation, safe sleep, and skin-to-skin. In this ongoing study, 55 parents consenting and 30 completed surveys after watching the videos (54% initial engagement); 21 completed the 1-week (70% retention) and 23 the 1-month (76%) surveys. Respondents were 74% White non-Hispanic and 90% college educated. At one week, 10% (n=2) of fathers endorsed mild depressive symptoms (PHQ-9) with 95% endorsing “feeling tired or having little energy”; at 1 month, 35% (n=8) endorsed mild depressive symptoms. Preliminary data reveals a high level of infant knowledge, interest and involvement in parenting, with 55% (1 week) and 75% (1 month) endorsing having skills “necessary to be a good parent.” 40% of fathers reported at least one unsafe sleep practice. Fathers reported struggles with COVID, with 95% reporting at least a mild change in routines due to COVID. Sample videos and final data analyses will be presented at symposium.

Conclusion
The nursery is a feasible and acceptable location to engage fathers with a brief video intervention. In this early analysis, fathers’ mental health and safe parenting behaviors appear to be of concern and can impact infants and families.
Varying Contexts for Caregivers’ Emotion-Related Practices with Infants and Toddlers

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Introduction and Aims
Caregivers’ (parents, educators) practices related to infants’/toddlers’ emotional experiences significantly impact children’s understandings of emotions in themselves and others. Such complex practices require varied and nuanced frames of study. This symposium highlights four studies each addressing different contexts of caregivers’ emotion-related practices.

Methods
We included a range of developmental contexts, including race, gender, classroom settings, and time. Studies varied in methodology (individual interviews, observed behaviors, and self-reported beliefs and attitudes). Following paper presentations, panel members will engage the audience and each other, facilitating discussion relative to contexts of caregivers’ practices, including measurement within contexts.

Results
Paper 1 examines African American’s fathers’ perceptions about their own and their toddlers’ experiences with emotions, reporting that while fathers view emotions as normative, negative emotions may be dangerous and require fathers’ guidance of their young children. Paper 2 focuses on toddler educators’ beliefs and perceptions about race and gender as related to their emotion language practices in the classroom. Researchers report on teachers’ color-evasive beliefs and gendered expectations related to their emotion validating and emotion minimizing language. Paper 3 highlights the ways in which infant and toddler educators’ mental-state-related language varies across play, booksharing, and mealtime interactions. Results show that infants and toddlers are exposed to different forms of mental-state-related language depending on context, that some contexts elicit more educator language than others, and patterns of use are stable over time. Paper 4 addresses parents’ use of internal state language and toddlers’ development of internal state talk across four time points from 12 to 30 months. Toddlers showed patterns of change in types of internal state words over time while parents tended to use similar forms of internal state language across time.

Conclusions
Collectively, the four studies demonstrate the contextual nuances of caregivers’ emotion-related processes with infants and toddlers.
Infant and Toddler Educators’ Mental-State-Related Language Across Play, Booksharing, and Mealtime Interactions

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Introduction and Aims:
The language environment reflects a key element in infant/toddler education. Young children’s exposure to mental-state-related language (e.g., language labeling and explaining internal states) is associated with positive outcomes, including toddlers’ theory of mind development, social symbolic play, prosocial behaviors, and social-emotional understanding, underscoring the importance of educators’ use of mental-state-related language with infants/toddlers. Despite many interactional contexts in infant/toddler classrooms, most research has focused on singular classroom contexts, often booksharing, limiting our understanding of how varying contexts may elicit more or different language. We assessed educators’ mental-state-related language in play, booksharing, and mealtime interactions.

Methods:
U.S. infant/toddler educators (N=59) were videotaped in play, booksharing (wordless book provided by research staff), and mealtime interactions. Videos were transcribed verbatim. Educator language was coded for three constructs: mental and internal state words (MISW; modulations, cognitions, emotions, desires, psychological attributes, states of consciousness, physiological states, and perceptions), support for children’s mental work (SMW; causal talk, explanations, factual talk), and mind-related comments (MRC; specific and full comments about their own and others’ mental states and invitations to mentalize). Findings were stable across three time points.

Results:
Analyses controlled for interaction length and educator verbosity; repeated measures accounted for multiple within-educator assessments. MISW comprised 4.5% to 10% of educators’ language, differed significantly across contexts, and were most prevalent in mealtimes and least prevalent in booksharing. Modulations and states of consciousness words occurred significantly more in play; cognition, desire and physiological state words occurred most in mealtimes. Psychological attributes and perceptions occurred significantly more in booksharing. SMW did not vary significantly between contexts. Educators used significantly more MRCs in play and meals as compared to booksharing.

Conclusions:
Educators’ mental-state-related language varied across contexts, highlighting the unique role play, booksharing, and mealtime interactions have in providing infants/toddlers with rich, emotional socialization experiences.
Supporting coparenting dynamics and infant functioning in the context of postpartum depression and premature birth

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Introduction
Prior research identified premature birth as key risk factor for infants’ developmental delays and risk factor for parental depression. Depression in parents of full-term infants has been associated with less supportive coparenting dynamics and with infants’ emotional dysregulation. Previous studies did not yet explore the impact of premature birth on the coparenting relationship.

Aim
The impact of parental and infant risk factors on early coparenting dynamics and infant functioning were explored across three separate studies. Specifically, postpartum depression, premature birth, and parental stress were hypothesized to shape the coparenting relationship during infants’ first year of life and affect their functioning.

Methods
Across all three studies, first-time parents completed interviews and questionnaires and were observed during coparenting interactions. Parents of prematurely-born infants were assessed within 6 months postpartum. Parents of full-term infants were assessed from pregnancy through 12 months postpartum. Infant functioning was assessed at 12 months.

Results & Conclusion
Findings across studies indicated that mothers’ prenatal depression and parents’ postpartum depression were associated with less supportive coparenting in 3-month-olds. However, premature birth and NICU hospitalization predicted more supportive coparenting observed at 6 months postpartum. As predicted, parental and family risk factors were associated with infant functioning at 12 months of age. Specifically, greater parental postpartum depression and less harmonious coparenting during pregnancy and infancy predicted infants’ lower competence in social communication, eating behaviors, and imitative behaviors. Findings suggest that parental stress due to infants’ premature birth may foster early collaborative coparenting relationships after infants’ discharge from the NICU, while parental depression challenges parents’ ability to develop coparenting alliances. These results are discussed within the context of previous research reports of infants’ risk for developmental delays after premature birth and negative child outcomes associated with parental depression. Suggestions for interventions to support the early coparenting relationship are described.
Born to be wired: The relevance of the early social interactions for infant mental health

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Introduction and aim. It is well established that the early parent-infant interaction is critical for establishing healthy trajectories of infant mental health. During the first thousand days, alterations of the caregiving environment might affect the quality of parent-infant interaction with long-term effects on socio-emotional and socio-cognitive developmental outcomes. Parenting stress and more severe forms of parental psychopathology (e.g., psychosomatic symptoms) are critical factors that might shape the emerging interactive synchrony in the parent-child dyad. Additionally, infants’ peculiar characteristics (e.g., preterm birth, emotional regulation, and temperament profile) also contribute to the quality of early parent-infant interaction, with relevant implications for later childhood outcomes. In the present symposium, we present four contributions that showcase state of the art in psychobiological and neuroscientific research on the role that early parent-infant interaction plays in infants’ socio-emotional and socio-cognitive development. Methods and results. First, Daniel Messinger will show how an automatic approach might detect indexes of facial expressions (i.e., Duchenne and non-Duchenne expressions) that are critical markers of dyadic co-regulation during the Still-Face Paradigm (SFP). Second, Eliala Salvadori will show how temperament contributes to infants’ emotion regulation and socio-cognitive communication while interacting with mothers, fathers, and strangers. Third, Bianca Filippi will highlight how maternal psychosomatic symptoms might affect mothers’ mentalization across the SFP. Fourth, Livio Provenzi will show how prenatal stress during the COVID-19 pandemic might have epigenetic programming effects on infants’ socio-emotional and socio-cognitive development. Finally, Gianluca Esposito will report on the association between parenting stress and inter-brain synchrony in father-infant and mother-infant dyads. Conclusions. The symposium will attract the interest of researchers and clinicians who work with typically developing and at-risk infants and it will favor a virtuous discussion on the importance of early parent-infant interaction to promote infant mental health.
Exploring Sociocultural Factors and Parenting Beliefs and Behaviors: African American Fathers’ and Toddlers’ Negative Emotions

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**Introduction and Aim of the study**

Demographic variables (e.g., race/ethnicity, gender) influence parenting beliefs and behaviors broadly (Garrett-Peters et al., 2008). However, less is known about how these sociocultural factors influence parents’ beliefs about emotion and emotion-related behaviors with their children. The current study explored the role of race and gender in parents’ beliefs about and experiences with their own and their children’s negative emotions.

**Material and Methods**

The sample included 58 secondary caregivers (57 biological, 1 step) of toddlers between 24 and 31 months of age. All secondary caregivers were African American fathers between the ages of 29 and 40 (Mage = 30.94). Parents’ beliefs about and experiences with their own and their children’s negative emotions were assessed using the Meta-Emotion Interview (Katz & Gottman, 1986). We conducted a thematic analysis of fathers’ MEI responses.

**Results**

Fathers demonstrated beliefs that emotions are a normal part of life, parents should guide their children through the experience of negative emotions (Parker et al., 2012), and negative emotion, particularly anger, is dangerous.

**Conclusions**

Fathers’ experiences as African American men will be discussed as potential influences of their beliefs about and experiences with toddlers’ negative emotions.


Want, Look, Think, See, Sleep, Hungry, Love: Development of Internal State Talk 12-to-30 Months

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Introduction. By six years old, children can talk and reason about their own and others’ internal states. When does this explicit awareness begin? In early toddlerhood parents focus their comments on children's desires, then shift to talk more about emotion and cognition in later toddlerhood; there is evidence that this pattern is developmentally salient and helpful for toddlers. But does toddlers’ development of internal state language follow suite? Most studies of young children’s internal state talk rely on cross-sectional parent-reported data. The current study uses observational data to examine changes in frequency and types of parents’ and toddlers’ internal state talk.

Methods. 62 parent-child dyads were followed throughout toddlerhood when children were 12, 18, 24, and 30 months. Transcripts of parent and child talk were created from videos of 5-minute free play interactions, and coded for the frequency and variety of child and parent internal state talk. Coding included the typical categories of desires, cognitions, sensations, and emotions, but because of the young age of the children, we added conceptually simpler and more concrete categories including perception (look, see, hear) and physical expressions of emotion (hug, smile, cry) which we thought may scaffold toddlers’ entrance into thinking and talking about internal states.

Results. Toddlers’ earliest internal state words were physiological sensations and expressions of emotion, but these were quickly overtaken in frequency by desires and use of perception words to guide attention (look), followed by states of consciousness (sleep), cognitions, and sensations. Parents’ most frequency internal state talk categories at each age were perception, desires, and cognitions. Parents’ and toddlers use of internal state talk is correlated both within waves and over time.

Conclusions. Toddlers’ explicit understanding of internal states is scaffolded through talk about desires and perceptions, with increasing ranges of concepts at 24 and 30 months.
Maternal stress experienced during pregnancy has potential lasting consequences on child development. One mechanism that can explain certain links between the activity of the maternal stress axis during pregnancy and the developmental trajectory of children is the maternal hypothalamic pituitary-adrenal (HPA) axis. Nevertheless, further exploration is needed as there are methodological limits in the existing literature, such as the lack of longitudinal data. To fill this gap, this DEVSTRESS research project was created with the aim of increasing our understanding of the mechanisms linking prenatal maternal stress to child development using longitudinal data from the EDEN cohort study. In this sample, various bio-psycho-social data were collected: (1) maternal stress was measured during pregnancy via questionnaires assessing childhood adversity, major life events, work-related stress, anxiety, and depressive symptoms; (2) children’s emotional and behavioural problems were reported at 3, 5, 8 and 11 years, and cognitive development was assessed by psychologists at 5 years of age; (3) maternal and child hair samples provided data on the level of cortisol in the hair, which were used as a biological marker of stress and were collected at birth for both mother and child, as well as 1, 3, and 5 years after birth from children. Various statistical analyses have been conducted using this data to explore the longitudinal links between self-reported maternal prenatal stress and child outcomes. This research project will be concluded in May 2023, thus findings from the overall DEVSTRESS project and practical recommendations will be provided.
Intergenerational Transmission of Maternal Childhood Maltreatment Before Birth: Effects on Human Fetal Amygdala Functional Connectivity

Dr Marion I. Van Den H euvel, PhD Catherine Monk, Ms. Cassandra L. Hendrix, Dr. Jasmine Hect, Prof. Seonjoo Lee, Ms. Tianshu Feng, Prof. Moriah Thomason

Background – Childhood maltreatment (CM) is a potent risk factor for developing psychopathology later in life. Accumulating research suggests that the influence is not limited to the exposed individual but may also be transmitted across generations. In this study, we examine the effect of CM in pregnant women on fetal amygdala-cortical functional, prior to postnatal influences.

Methods – Healthy, pregnant women (N=89) completed fetal resting-state functional magnetic resonance imaging (rsfMRI) scans between the late 2nd trimester and birth. Women were primarily from low socioeconomic status households with relatively high CM. Mothers completed questionnaires prospectively evaluating prenatal psychosocial health and retrospectively evaluating trauma from their own childhood. Voxelwise functional connectivity was calculated from bilateral amygdala masks.

Results – Connectivity of the amygdala network was relatively higher to left frontal areas (prefrontal cortex and premotor) and relatively lower to right premotor area and brainstem areas in fetuses of mothers exposed to higher CM. These associations persisted after controlling for maternal socioeconomic status, maternal prenatal distress, measures of fetal motion, and gestational age at the time of scan and at birth.

Conclusion – Pregnant women’s experiences of CM are associated with offspring brain development in utero. The strongest effects were found in the left hemisphere, potentially indicating lateralization of the effects of maternal CM on the fetal brain. This study suggests that the time frame of the Developmental Origins of Health and Disease research should be extended to exposures from mothers’ childhood and indicates that the intergenerational transmission of trauma may occur prior to birth.
Introduction: Infancy marks a sensitive period in human development when children need to acquire skills to regulate their emotions. Bio-behavioral synchrony between infants and their parents supports the development of these social competencies. Maternal Posttraumatic Stress Disorder (PTSD) increases the risk for adverse developmental outcomes in children, and co-morbid depression and anxiety is frequent in mothers with PTSD. Yet, it remains unclear if and how maternal PTSD and/or co-morbid depression and anxiety might affect infant social competencies six months postpartum.

Aim of the study: To identify pathways in the transgenerational transmission of trauma in order to optimize clinical interventions for mothers and their infants.

Material and methods: One hundred ninety-five women and their six-month-old term infants were studied in an at-risk community sample. Maternal trauma history, posttraumatic stress (PTSD) and major depressive (MDD) disorders were assessed via psychiatric interview. Maternal feelings of anxiety and maternal worries about the child were assessed using standardized clinical questionnaires. Mother-Infant Synchrony, maternal sensitivity, and infant social engagement were coded from videotaped interactions using a standardized coding method (Coding Interactive Behavior, CIB).

Conclusions: Maternal PTSD and MDD were independently associated with decreased maternal sensitivity six months postpartum. Maternal anxiety was a mediator between maternal PTSD and MDD and maternal sensitive parenting behaviors. Effects of maternal PTSD, MDD, and anxiety, on child social competencies were entirely mediated by maternal sensitive parenting. Correlations between video-coded child behavior and maternal concerns about child behavior were not apparent when analyzing the data in this model. In conclusion, maternal sensitivity is the most important target behavior for early intervention in the context of maternal trauma-associated psychopathology.
Predicting Pointing Gestures from Infant Emotional Communication with Mothers, Fathers, Strangers, and Temperament

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Emotional communication in the first year of life and referential communication in the first and second year of life are two primary manifestations of social engagement and affiliation in infancy. Although early patterns of emotional communication ought to form a foundation of referential communication, evidence for their developmental association is scarce. This study investigated the development of infant declarative pointing production as a function of early dyadic patterns of emotional communication with mothers, fathers, and strangers, and examined the contribution of temperament in moderating these associations. A sample of 51 families participated in this longitudinal study. Infant emotional communication (production of gaze, smile, vocalizations) was observed during home-based face-to-face interactions at 4 and 8 months. Each parent reported on infant temperament at both ages and an overall mean was calculated. Referential communication (declarative pointing production) was measured during structured lab-based observations at 12 and 15 months. Emotional and referential communication behaviors were micro-analytically coded second by second. Poisson multilevel regression analyses indicated that rates of pointing at 12-15 months were positively predicted by the levels of smiling with mothers at 8 months, the vocalization frequency with fathers at 4 months, and the frequency of vocalizations as well as of gazes to the stranger’s face at 8 months. Infants’ higher levels of temperamental surgency tended to enhance the positive associations between emotional communication patterns with mothers and fathers and pointing rates, while lower levels of negative affectivity tended to enhance the associations between communication patterns with strangers and pointing rates. Results provide new insights into the ontogeny of referential communication, and highlight the importance of infant early interaction with diverse social partners as well as of temperamental dispositions in predicting communicative development in the second year of life.
Infant and Mother Duchenne Facial Expressions in the Face-to-Face/Still-Face

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The Face-to-Face/Still-Face (FFSF) assesses infant responses to parent unresponsiveness, but little is known about intense affective displays in the FFSF. Duchenne smiles express intense positive affect, while Duchenne cry-faces appear to express intense negative affect. We investigated whether Duchenne and non-Duchenne smiling and Duchenne and non-Duchenne cry-faces differ across FF, SF, and RE episodes using computer vision-based automated measurement.

Forty 4-month-olds and their mothers were separately video-recorded in the FFSF protocol consisting of three 2-minute episodes: FF, SF, and RE. Baby-FACS (certified) coders coded facial Action Units (AU4, AU6, AU12, AU20) in each video frame for the first 30 seconds of each FFSF episode. Automated facial affect recognition (AFAR) indicated the same facial AUs for the entire episodes. Kappa between AFAR and FACS was above .63 for all mother and infant AUs. Moreover, expert coding and automated measurement of FACS AUs yielded similar patterns of change in infant and mother Duchenne and non-Duchenne expressions across the FFSF.

Full 2-minute AFAR (automated) analyses indicated that both infant Duchenne and non-Duchenne smiling declined from the FF to the SF (ps<.001). However, only infant Duchenne smiling increased from the SF to the RE (p=.001); infant non-Duchenne smiling levels did not change between the SF and RE. Infant Duchenne cry-faces increased from the FF to the SF (p=.03). By contrast, non-Duchenne cry-faces did not change significantly between episodes. Both mother Duchenne and non-Duchenne smiling declined from the FF to the RE (ps<.001). However, the magnitude of mother Duchenne smiling changes over the FFSF were 2-4 times greater than non-Duchenne smiling changes.

Duchenne expressions appear to be a sensitive index of infant and mother affective valence that are accessible to automated measurement during the FFSF.
Toddler Teachers’ Beliefs and Perceptions about Race and Gender, and their Differential Emotion Language Practices

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INTRODUCTION

Perceptions of appropriate emotions are rooted in beliefs about emotions (Eisenberg, 2020) and power structures regarding race and gender (Chaplin, 2015; Hochschild, 1996). Research has found differential emotion socialization by child race and gender, informed by beliefs about inequity (Denham et al., 2012; Valencia, 2020), and suggests teachers’ emotion language varies by toddler gender (King, 2020). Given teachers are socializers of toddlers’ emotions (Denham et al., 2012), examining teachers’ beliefs about race and gender, perceptions of emotions by toddler identity, and emotion language is warranted.

AIM

This work explores: 1) Teachers’ beliefs about racial inequity and gendered expectations for emotions, 2) teachers’ perceptions of children’s emotions by child race and gender and, 3) ways teachers’ observed emotion language, by toddler race and gender, relate to their beliefs and perceptions.

METHODS

Through a meta-inferential approach using questionnaires, interviews, and observations across one school year, we observed 13 teachers of children 12-36 months.

RESULTS/CONCLUSIONS

This study describes connections among teachers’ color-evasive beliefs and gendered expectations, and their emotion validating and minimizing language. Implications for teachers’ reflective practice on beliefs by child identity will be discussed.

Excessive crying and infant regulatory problems: Epidemiology, long-term outcomes, and treatment

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Introduction: Excessive crying and regulatory problems are among the most common reasons for parents to seek help from a health professional during the first year of life. However, our knowledge regarding the epidemiology, long-term outcomes and treatment of these difficulties remains limited.

Aim: This symposium brings together researchers from four countries (UK, Denmark, Germany, and Italy) to present the most recent evidence on the epidemiology, long-term outcomes and treatment of excessive crying and infant regulatory problems.

Material and Methods: This symposium brings together studies using a range of methods such as meta-analysis, longitudinal data analysis, parent-infant psychotherapy intervention, physiological analyses with genetic techniques, and animal models (i.e., mouse pups).

Results: Regarding excessive crying, most studies were conducted in the United States, the United Kingdom, and Canada (k = 32). The pooled estimate for cry and fuss duration was 126 mins (SD = 61), with high heterogeneity. Regarding the long-term outcomes of early regulatory problems, adults who had early multiple or persistent RPs (N=151) reported more internalizing (p=0.001), externalizing (p=0.020), and total behavioural problems (p=0.001) than those who did not have early regulatory problems. Regarding the treatment of excessive crying and infant regulatory problems, it was shown that five minutes of carrying seem sufficient to facilitate sleep in crying infants even during the daytime. Further, the treatment effects of parent-infant brief psychodynamic therapy on regulatory problems remained stable even after 1 year of therapy.

Conclusions: The duration of crying remains substantial in the first year of life after an initial decline. Early regulatory problems are associated with long-lasting outcomes particularly if they are multiple or persistent. However, there are available treatment options. Carrying infants briefly could reduce infant cry and physiological activation (i.e. heart rate). Furthermore, brief parent-infant psychodynamic therapy could be beneficial in the treatment of infant regulatory problems.
The association of early regulatory problems with behavioural problems and cognitive functioning in adulthood

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INTRODUCTION. Regulatory problems (excessive crying, sleeping, or feeding difficulties) that co-occur (i.e., multiple) or are persistent in early childhood have been associated with cognitive and behavioural problems in childhood. However, it remains unknown if these associations are evident in adulthood.

AIM of the study. The aim of the current study was to investigate whether multiple RPs at age 5 months or persistent RPs over three time points (at least one problem at age 5, 20 and 56 months) are associated with behavioural problems, and cognitive functioning in adulthood.

MATERIAL and METHODs. This large prospective longitudinal study (N=759) was conducted in two cohorts in Germany (N=342) and Finland (N=417). RPs were assessed at 5, 20, and 56 months via the same standardized parental interviews and neurological examinations. In young adulthood, questionnaires were used to assess behavioural problems. Cognitive functioning was assessed with IQ tests. We examined the effects of multiple or persistent RPs on the outcomes via analysis of covariance tests and logistic regression controlled for the influence of cohort.

RESULTS. Adults who had early multiple or persistent RPs (N=151) reported more internalizing (p=0.001), externalizing (p=0.020), and total behavioural problems (p=0.001), and, specifically, more depressive (p=0.012), somatic (p=0.005), avoidant personality (p=<0.001), and antisocial personality problems (p=0.006) than those who never had RPs (N=596). Participants with multiple or persistent RPs were more likely to receive any ADHD diagnoses (p=0.017), particularly of hyperactive/impulsive subtype (p=0.032). In contrast, there were no associations between multiple or persistent RPs and IQ scores in young adulthood.

CONCLUSIONS. The results indicate long-lasting associations between multiple or persistent RPs and behavioural problems. Thus, identifying and addressing early RPs through appropriate intervention programs could help prevent long-term behavioural problems.
Crying in the first 12 months of life: synthesising and modelling parent-reported data

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INTRODUCTION and AIM of the study. Crying is a key communicative signal in infancy, conveying information about an infant’s emotional and physical state. When infant crying is difficult to console or judged excessive in duration or intensity, it can be a significant source of stress for parents.

The aims of this study were to (i) systematically review and meta-analyse the available data on the duration of infant crying in the first year of life, and (ii) use data from the meta-analysis to test the classic ‘cry curve’ model of cry duration against alternate models of the change in cry duration over time.

MATERIAL and METHODS. We obtained data from 17 countries and 57 studies until infant age 12 months (N = 7580, 54% female from k = 44), from studies before the end of September 2020. We tested models of cry duration based on: a double exponent, a linear decay, an exponential decay, and a change point, assuming a period of high constant crying followed by a period of exponential decay.

CONCLUSIONS. Most studies were conducted in the United States, the United Kingdom, and Canada (k = 32), and at the traditional cry “peak” (age 5–6 weeks). The pooled estimate for cry and fuss duration was 126 mins (SD = 61), with high heterogeneity. We found that the double exponent model, corresponding to the classic ‘cry curve’ and change point model provided better fits to the data than the linear or exponential decay models. Both models indicate that the duration of crying remains substantial in the first year of life, after an initial decline. Entire continents are absent from our global perspective on infant crying, and where low-and-middle-income countries are represented, it is often by a single data point.
Infant calming behaviors and their physiological mechanisms in response to maternal regulatory stimulations

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Introduction. Many studies have focused on the maternal physiological mechanisms that promote bonding (e.g., mothers’ automatic responses to infant faces and/or cries), and relatively less have examined the infant physiological response. Thus, the physiological mechanisms regulating infant bonding behaviors remain undefined. Here we present different studies that elucidate the neurobiological mechanisms governing social bonding and cooperation in humans by focusing on maternal carrying and sleeping and its beneficial effect on mother–infant interaction in mammalian species (e.g., in humans and rodents). Aims of the study. In several studies, in collaboration with different groups in Italy, Japan and Singapore, we aimed to identify infant responses to maternal soothing practices alongside the underlying regulatory mechanisms. Methods. We combined event-locked physiological analyses with dynamic mother-infant interactions, pharmacologic and genetic techniques, and animal models (i.e., mouse pups). Results. In our studies we observed that infant cry and body movements, together with physiological activation (i.e., heart rate), are reduced when mothers briefly carry their infant as compared to when mothers sit or hold their infant. Five-minutes of carrying seem sufficient to facilitate sleep in crying infants even during daytime. Finally, the specific sleeping arrangement modulates the infant physiological responses. Conclusions. Our studies shed light on the regulatory mechanisms of the calming response across mammalian species and provided some insights into the on-site behavioral interventions to promote sleep and to soothe infants.
Father involvement matters during early child development: crossing pathways of influence

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Father involvement is considered a key source of family well-being and positive child development. Several studies have shown that increasing the quantity (e.g., time shared with the child) and quality (e.g., fathers’ positive behaviors) of father involvement improve child development. However, the pathways leading to father involvement and its consequences on child development are not always straightforward and can be influenced by a complex interplay of individual, social, cultural, and ecological variables, particularly during early child development, when the role played by fathers remains poorly acknowledged. This international symposium brings together several contributions that focus on the direct and indirect pathways of influence between the quantity and quality of fathers’ involvement and early child development, discussing the role played by parental and family variables (1st, 2nd, and 3rd presentations), new interventions (4th presentation) and social policies (5th presentation) to support father involvement.

Nilo Puglisi will present evidence on the association between the quality of father-infant interactions and 3-months-old infants’ vagal tone, considering father-infant shared time as a moderator.

Sheila Anderson will present a study investigating how early father communicative interaction with 1-year-old children influences longitudinal language and literacy outcomes in the context of mother-child interaction, and family conflict, among rural families with low-incomes.

Daniela Aldoney will present the preliminary results of a study on associations between parental stress, depressive symptoms, parental involvement, and children’s behavioral problems.

Natasha Cabrera will present a study that uses data for first-time parents to examine whether a book intervention with information about child development including play practices has an impact on parents’ playfulness and challenging parenting behaviors.

Monica Lidbeck will present evidence on parental roles and responsibilities concerning the Swedish context where parents have the opportunity to share parental leave equally, which enable fathers to spend time with their infant.
Infant vagal tone during father-infant interactions: two types of shared time as moderators

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**INTRODUCTION:** The quality of parent-infant interactions influences infants' vagal tone, an indicator of physiological regulation. Physiological studies have been conducted mainly on mother-infant dyads and less on father-infant dyads, especially during early infancy. The first aim of this study is to investigate the association between father-infant interactive synchrony, an indicator of the quality of the interaction, and infants' vagal tone during interactions. The father-infant relationship is influenced by two types of shared time, dyadic time (father and infant) and social time (father, infant, and others). The second aim is to investigate the moderating role of the amount of dyadic and social time on the associations between father-infant synchrony and infants' vagal tone. **METHODS:** Fathers (N=84) and 3-months-old infants were video-recorded during a standardized situation of observation. Synchrony was coded through the CARE-Index. The infants' ECG was recorded to calculate vagal tone. Fathers reported dyadic and social time using questionnaires. **RESULTS:** Father-infant synchrony has no direct link to infants' vagal tone. Moderation analyses revealed that the association between synchrony and vagal tone is moderated (i) by social time (mother present), such as more social time increases the association between synchrony and vagal tone, and (ii) by an interaction between dyadic and social time, such as the association between synchrony and vagal tone increases when fathers report spending little dyadic time and much social time. **CONCLUSIONS:** Father-infant synchrony and infants' vagal tone are not associated during interactions. At three months, fathers and infants rarely have the opportunity of interacting with the mother not being present, so father-infant synchrony may not be connected yet to the infant's vagal tone. More social time facilitates the association between synchrony and vagal tone. This could be explained by the non-independence between dyadic and triadic interactive contexts and the influence of family variables on the father-child relationship.
Parental stress, depressive symptoms and involvement and children’s behavioral problems

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Diverse studies have found a relationships among parents’ symptoms of depression, levels of parental stress and their ratings of their young children’s behavior problems (CBP)1. On the other side, research has suggested that under conditions of risk for CBP parental involvement would be a protective factor2. Few studies have tested this association and even fewer have included mothers and fathers.

In this study we aim to examine (1) differences in fathers and mothers report on CBP and levels of involvement; (2)the relation between mothers and fathers involvement, depressive symptoms, parental stress and CBP; (3) whether parental involvement mitigate the relation between parents´ mental health and CBP.

115 families with a 3-year-old child reported on depressive symptoms (CES-D 10), parental stress (PSS), involvement 3 and children´s behavioral problems (SDQ).

Preliminary results (N=83) showed that mothers and fathers don’t differ in their report on CBP, but mothers reported higher levels of involvement. Mothers and fathers higher levels of depressive symptoms and parental stress were related to higher levels of CBP. Regression analysis showed that for fathers and mothers only parental stress was a significant predictor for CBP. We did not find a mitigating role of involvement on CBP. Parental stress seems to have unique negative influence on children wellbeing.

Family alliance predicts infants' vagal tone: Infants' reaction to parental behaviors as a mediator

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Background. Physiological studies have shown that parental behaviors and the quality of early parent-infant interactions can influence infants’ vagal tone, which is an indicator of emotion regulation. Although research has shown that family-level relationships have a unique impact on infants’ socioemotional development, to date no study has been conducted on the association between the quality mother-father-infant interactions and infants’ vagal tone. We conceptualized the quality of mother-father-infant interactions in terms of family alliance. The aim of the present study is to investigate the association between family alliance and infant vagal tone, and to investigate the possible mediation of intrusive and withdrawn parental behaviors and of infants’ response to these behaviors in this association. Method. This study includes 82 parents with their 3-month-old infants. Mother-father-infant interactions were recorded in a standardized laboratory situation to assess family alliance. Intrusive/withdrawn parental behaviors were coded every five seconds along with the impact of these behaviors on the interaction. Infant’s ECG was recorded to obtain vagal tone. Results. Results showed that family alliance predicted infants’ vagal tone during triadic interactions and that the impact of intrusive/withdrawn parental behaviors on the interaction partially mediated this association. Discussion. Early family interactions are important in the development of physiological emotion regulation processes that can be involved in later socioemotional outcomes. Moreover, as infants’ response to unadjusted parental behaviors mediated this association, it underlines the importance of triadic interactive processes that combines parents’ and infants’ behaviors.
The efficacy of focused parent-infant psychotherapy: long-term stability and mothers’ subjective therapy experience

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INTRODUCTION. Focused parent-infant psychotherapy (fPIP) is a psychodynamic-based brief intervention for the treatment of early regulatory disorders. In the RCT on the efficacy of fPIP compared to standard pediatric treatment (TAU), N = 154 mothers of children diagnosed with regulation disorders (T1) showed significant improvement in child and maternal symptoms after 12 weeks (T2). Maternal self-efficacy and parental mentalizing improved at trend levels. These results are promising and raise further questions, such as long-term intervention effects as well as processes in place from the perspective of participating mothers.

AIM of the study. This study addresses the question of whether the effects of fPIP remain stable at follow up and how mothers retrospectively evaluate their therapy experiences and processes of change.

MATERIAL and METHODS. Mothers who participated in fPIP were asked to complete questionnaires on child psychopathology, parental and psychological distress, maternal self-efficacy, and mentalizing 1 year after the end of therapy (T3). Stability of effects (T1, T2, T3) were analysed using hierarchical multilevel models and Reliable Change Indices. The subjective therapy experience was investigated using retrospective semi-structured interviews and was analysed qualitatively (grounded theory).

CONCLUSIONS. The treatment effects of fPIP remained stable at T3. Participating mothers showed stable long-term improvements in depression, psychological and parenting stress, self-efficacy, and parental mentalizing. Very few children showed internalizing or externalizing difficulties in the clinically range, and few children showed sleep difficulties. The qualitative analyses yielded 7 categories that provide an in-depth understanding of the therapy experience. The results point to the long-term effects of early dyadic interventions for parent and child. fPIP may help to reduce the risk of developing emotional and behavioral problems and sleeping problems in children who were previously diagnosed with ERD. The results indicate which aspects of fPIP are perceived by mothers as particularly helpful and which as particularly difficult.
Understanding motivations and satisfaction with sleep location among co-sleeping parents

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Introduction and aims:
Night-time infant care practices differ across the globe. Western-centric ideologies favour independent, self-regulated, and consolidated sleep. Safe-sleep recommendations advice against all forms of parent-child bed-sharing while promoting room-sharing. In non-western cultures, parental presence at bedtime and overnight is the accepted norm, and withdrawal of parental presence is perceived as neglectful. Co-sleeping including bed-sharing is widely practiced globally and rates continue to increase in western countries. Yet, perspectives of co-sleeping parents remain under researched. This study aimed to understand intentions, preferences and satisfaction with co-sleeping arrangements in an internet-based sample of self-identified co-sleeping parents.

Materials and Method:
A mixed-method study design was used to understand co-sleeping parents' (n= 3298) intentions, preferences, and satisfaction with co-sleeping (including bed-sharing) choices through an internet based survey.

Results:
Co-sleeping practices were nuanced and varied with parents and children transitioning between sleep location and surfaces through the night. While 64% of parents did not intend to co-sleep prior to the birth of their child, 88.7% preferred the current co-sleeping location, and 81.5% indicated satisfaction with it. Children from birth to 4 years were more likely to share a sleep surface with the parent, with 5-12 years old more likely to transition between sleep surfaces and sleep locations, or sleep in their own rooms. A thematic analysis yielded nine themes and a range of influences on motivations and satisfaction with co-sleeping arrangements.

Conclusion:
Co-sleeping including bed-sharing continues to be practiced by parents in western countries with a range of internal and external factors influencing motivation and satisfaction. Considerations must be given to parents' perspectives in implementing night-time infant care practices. The study also highlights the need for the provision of culturally sensitive post-natal sleep and settling advice.
Individual Differences of Maternal Mind-Mindedness and Cultural Comparison

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Maternal mind-mindedness is one of the parental mentalizing skills describing mothers’ tendency to treat their children as individuals with a mind of their own. It has two indices: (a) appropriate mind-related comments reflect a mother’s tendency to comment accurately on their infant’s mental states and (b) non-attuned mind-related comments indicate a mother’s misreading of their infant’s internal states. Over the last two decades, a number of empirical studies reported that appropriate mind-mindedness in the first year of life predicted a range of children’s positive developmental outcomes. However, less is known about factors that account for individual differences in maternal mind-mindedness. This symposium focuses on potential factors that might be related to the individual differences in maternal mind-mindedness with data from four countries.

Study 1 investigated the relations between pregnancy risk and maternal mind-mindedness in a sample of Israeli mothers. Mothers who experienced high-risk pregnancy showed less appropriate mind-mindedness compared with low-risk pregnancy mothers. Mind-mindedness was linked with parental depression.

Study 2 explored the potential relations of maternal mind-mindedness with mothers’ cultural backgrounds and empathy in samples of British and South Korean mothers. Only Korean mothers’ empathy predicted their appropriate mind-related comments.

Study 3 focused on German mothers’ psychosocial functioning and infant temperament. They found potential predictive associations of mind-mindedness and maternal experience with their own mothers and infants’ negative emotionality.

Study 4 conducted a cross-cultural comparison of maternal mind-mindedness in samples from the UK, Israel, Germany, and South Korea. Israeli mothers showed high levels of appropriate mind-mindedness compared with mothers from other countries. Interestingly, South Korean mothers did not show stark differences in mind-mindedness compared with British and German mothers. Moreover, there were cultural differences regarding the contents of mind-related comments across the cultures. These findings will be discussed in light of their implication for cross-cultural generalizability.
How does maternal mind-mindedness differ across cultures: UK, Israel, Germany and South Korea

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Introduction: Although the cultural difference is a significant area to examine in parental mentalization, little is known about maternal mind-mindedness across cultures. Maternal mind-mindedness is a mother’s ability to attune to her infant’s mind. Only three studies explored cultural differences in maternal mind-mindedness: Chinese and Japanese mothers showed less appropriate mind-mindedness compared with British and Australian mothers. However, it is still unknown whether maternal mind-mindedness from a few Eastern or Western countries can be generalised to other cultures.

Aim of the Study: This study aimed to explore cultural differences in maternal mind-mindedness across four countries: UK, Israel, Germany, and South Korea.

Material and Method: Data for the present analyses were derived from independent projects from each country. Mother-infant dyads (nUK=71; nIsrael= 64; nGermany=64; nKorea=66) participated. Mind-mindedness was measured from a free-play observation. The analyses were conducted using (a) the proportion of mind-related comments, and (b) the contents of mind-related comments across countries.

Results: Israeli mothers showed more appropriate mind-mindedness compared with British, German and Korean mothers (Appropriate mind-related comments: F(3, 260) = 26.46 p < .001, Non-attuned mind-related comments: F(3, 260) = 14.79, p < .001). While Korean mothers showed more appropriate mind-related comments compared to German mothers (p=.001), there were no significant differences between Korean and British mothers (p=.177). German, British and Korean mothers showed similar levels of non-attuned mind-related comments to their infants. Regarding the contents of mind-related comments, there were cultural differences in terms of mothers’ focus on their infants’ preferences, emotion, and physical states.

Conclusion: Our study showed that maternal mind-mindedness is universal, but there are subtle differences in mind-mindedness which can’t be explained by a simple division of Western and Eastern cultures. The findings will be further discussed in a relation to cultural-specific parenting beliefs.
How Do Culture and Empathy Relate to UK and South Korean Mothers’ Mind-Mindedness?

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Introduction: A growing body of empirical evidence shows that mind-mindedness, referring to caregivers’ tendency to attune their infants’ minds, predicts various positive aspects of children’s development. However, little is revealed about maternal factors associated with higher levels of mind-mindedness. The present study focused on the potential influences of cultural background and mothers’ dispositional empathy on mind-mindedness between UK and South Korea (SK).

Aim of the Study: The present study aimed to investigate whether (a) there are cultural differences on mind-mindedness between British and Korean mothers, and (b) mothers’ dispositional empathy would predict to mind-mindedness across cultures.

Material and Methods: Mothers (nUK=63; nSK=66) participated with their infants (UK: M=6.14 months, SD=1.55, SK: M=7.49 months, SD=1.15). Mind-mindedness was measured from a 10-minute free-play observation, and mothers’ dispositional empathy was assessed using a self-report questionnaire.

Results: There was no significant difference in the total proportion of maternal mind-mindedness between British and Korean mothers. However, regarding the contents of mind-mindedness, British mothers made more comments about their infants’ desire and preference (appropriate mind-related comments: F(1,125)=15.19, p<.001; non-attuned mind-related comments: F(1,125)=8.49, p<.01), while Korean mothers made more comments about infants’ emotion (appropriate mind-related comments: F(1,125)=11.37, p<.01; non-attuned mind-related comments: F(1,125)=3.71, p<.10). Higher cognitive empathy predicted high scores for appropriate mind-related comments in Korean mothers, but no British mothers (β = .47, p<.001).

Conclusion: Our findings show that mothers may emphasize different mental aspects in accord with their cultural context. Furthermore, the relations with empathy may indicate that Korean mothers’ mind-mindedness might be more general trait compared to the UK mothers’ mind-mindedness. In conclusion, the findings of the present study imply that the practice of mind-mindedness may be universal, but the contents and determinants of mind-mindedness appear to be culturally dependent.
The effectiveness of video-feedback intervention to promote parenting for mothers of infants with neurodevelopmental disability

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Introduction: Neurodevelopmental disability (ND) comprises a wide variety of clinical condition including infant cerebral palsy, genetic syndromes, metabolic diseases and brain injuries. Infants with ND share high risk of impairment in several developmental domains with a consequent impact on parental psychological and emotional well-being and on the quality of the parent-child relationship. Several studies suggested that early parenting support interventions improve parental sensitivity and infants’ developmental outcomes, even in the presence of a ND. The video-feedback intervention (VFI) is an early parent-child focused intervention that aims to promote positive parenting and consequently the infants’ development. Here, we used the Parenting Interactions with Children: Checklist of Observations Linked to Outcomes (PICCOLO) as observational measure of parenting with infants with ND before (T0) and after (T1) the VFI. Aim of the study: Through a pre-post design we examined the effectiveness of VFI for mother of infants with ND in term of change in parenting behavior between T0 and T1. Material and Methods: 29 children aged 9 to 25 months were recruited with their mothers at three Italian research and care centers for children with a ND. Each mother and child dyad participated in two sessions (before and after the intervention) of a 10 minutes video-recorder interaction subsequently coded with PICCOLO, in order to assess four domains of parenting (Affection, Responsiveness, Encouragement and Teaching). Between the two observation sessions the mothers receive six weekly 90 min VFI aimed to improve sensitivity parenting and parent-child relationship. Conclusions: A pre-post comparison (t-test) revealed that in T1 mothers had improved in all the parenting domains. Our finding supports the potential effectiveness of parent-focused VFI interventions for parents of children with ND. Furthermore, the PICCOLO shows promise as a useful pre-post evaluation in parental support of parents who have a child with a ND.
A Physiological Perspective: Gentle Touch Stimulation enhances the Building of Infants’ Physiological Stress Resilience.

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INTRODUCTION. CT-optimal stroking touch has been shown to stimulate parasympathetic regulation in infants. However, it was not yet been examined whether providing gentle touch in a structured manner may stimulate changes in the reactivity of the parasympathetic regulatory system.

AIM of the study. We aimed at measuring the impact of a Gentle Touch Stimulation (GTS) program on physiological stress resilience of 3-12 weeks old infants in terms of parasympathetic regulation (i.e., respiratory sinus arrhythmia or RSA, heart rate, respiration and cortisol).

MATERIAL and METHODS. Forty-three mother-infant dyads enrolled for the program and were ascribed to a GTS group or control (CTRL) group. GTS mothers provided daily 10 minutes GTS with C-tactile (CT) afferent optimal stroking touch, for 4 weeks to their infants. CTRL-mothers provided no additional care. We measured mother-infant ECG, respiration, cortisol, video recordings, and diary reports at the start (T1) and end (T2) of the GTS program, comparing the physiological responses during a no-touch-baseline (BL), static-touch-baseline (BL-T), intervention/control (GTS/CTRL), Still Face (SF) and Reunion (RU) condition for GTS versus CTRL-infants.

CONCLUSIONS. At T1, physiological arousal significantly increased during SF in both groups, that is, decreased RSA and R-R interval (RRI). At T2, GTS-infants showed significantly increased parasympathetic regulation during GTS in terms of increased RSA and RRI and decreased respiration. Moreover, during SF they showed a clear buffer against SF-arousal, and they showed physiological recovery during RU. CTRL-infants showed higher arousal during SF and only a small recovery during RU that remained under their initial BL-levels. Maternal cardio-respiratory showed a metabolic investment during RU. Cortisol and behavioral analyses showed higher arousal in CTRL-infants than GTS-infants at T2. The results provide extra information in terms of phasic and tonic responses and attribute a potential role of CT-optimal stroking touch in the building of infant stress regulation and resilience.
New insight on neural correlates of affective touch in newborn infants

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Introduction: Early parent-child physical contact has a protective role associated with better infant’s development. The identification of C-tactile fibers (CT) opened new perspectives on the mechanisms underlying physical contact. Only one fMRI study highlighted that affective touch activates the somatosensory cortex and the insula in infants. Little is known about the impact of maternal touch on infants’ touch processing at brain level. Aim: This study explored the association between maternal sensitivity and patterns of cortical activation to touch. Material and Methods: 9 healthy infants were scanned at 2 months of age. Infants were swaddled and slept unsedated. A block design fMRI experiment was performed with an affective touch stimulus administered by an experimenter with gentle brush strokes manually applied to infants’ right tibia at a velocity of 5 cm/s. The fMRI task involved 2 runs lasting 9 minutes each. After the scan, a 5-minutes mother-infant interaction was videotaped and maternal touch were coded (affectionate touch; containment touch). For the region of interest (ROI) analysis insula, precentral and postcentral gyri were divided in 3 ROIs. We also include the cingulate gyrus, divided in 4 ROIs. The standard GLM analysis was applied to fMRI data to compute the ROI. We performed a Wilcoxon test to test if the betas were significantly > 0. To adjust for multiple testing, we used False Discovery Rate, setting a p threshold to 0.01. Conclusions: Significant activations emerged: insula (right anterior p=.002; left anterior p=.002); precentral gyrus (right middle p=.006); cingulate gyrus (left isthmus p=.006; right isthmus p=.004; right posterior p=.006). Spearman correlation analysis highlighted a link between left posterior cingulate activation and maternal containment touch (p=.033). Findings suggest that, not only infants present a cerebral activation consistent with CT activation, but also that exposure to maternal touch could be related to infants’ neural processing of touch.
The Neurobiology of C-Tactile Afferents: Their Role in the Developing Social Brain

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Recent research has shown that some skin sensory nerves (c-tactile afferents or CTs) send ‘feel good’ signals to the brain when activated by gentle touch, and how this kind of touch may be all-important in developing a healthy ‘social brain’, sustaining human relationships, regulating the immune system, and controlling stress. Research into the sense of touch has focussed mainly on touch receptors (mechanoreceptors) found in the fingertips where information is conveyed to somatosensory areas of the brain by fast-conducting nerve fibres, enabling this information to be processed in ‘real-time’ – an important factor when handling objects or tools or being touched. However, we have recently discovered that touch has another channel, beyond the purely discriminative one, an affective and affiliative one, comprising highly sensitive slowly-conducting peripheral nerves in the skin of the body that respond to gentle caressing touch – c-tactile afferents (CT). This opening talk will describe research that has characterised the structure and function of CTs using psychophysical measures, electrophysiological recordings, functional neuroimaging, psychopharmacology, and measures of stress hormones. These data provide support for the functional role of a body-based emotional touch system – one that underpins the pleasurable aspects of nurturing care between a mother and her infant, the reassuring hug from a friend in times of need, and the impact of social contact on the brain and the body’s stress regulatory systems.
Using a Video-Feedback Intervention (VIPP) for Parents and Children in different contexts

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- Introduction
The video-feedback intervention to promote positive parenting (VIPP) is an attachment-based parenting programme, aiming to promote the relationship between a child and their caregiver. The intervention was initially developed at the University of Leiden in the Netherlands, with an initial focus on supporting foster and adoptive families attune to their infants’ cues, ultimately improving caregiver sensitivity and the relationship with the child. Due to promising evidence supporting implementation of VIPP, the intervention has continued to be developed for use across different settings and countries.

- Purpose
This presentation will be the first talk in a symposium focusing on recent adaptations of VIPP for a number of different clinical populations. The symposium will present recent research evidence for these adaptations, whereas this talk will open the session by providing a description of the VIPP intervention, including the behavioural elements added for children aged over a year old (‘coined sensitive discipline’). This presentation will summarise the key clinical components of VIPP, giving an overview of how the intervention is delivered and what VIPP looks like in practice.

- Description of the work
The presentation will also describe the current evidence-base for VIPP, providing an overview to indicate why this intervention has continued to grow in popularity over the past decade, both from clinical and research perspectives. The gaps in knowledge will be highlighted, to introduce why further research is required to assess the effectiveness and acceptability of VIPP across different settings and with different caregiver-child dyads and triads.

- Conclusions
VIPP is an attachment-based intervention, using video-feedback to highlight key attachment moments in interactions between caregivers and children. The intervention has shown a high degree of effectiveness across different settings worldwide, and continues to grow in implementation. This talk will provide the backdrop for the remaining talks in this symposium.
Caregiver Adverse Childhood Experiences and Early Child Development: A Systematic Review and Meta-Analysis

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Introduction: Research suggests the reach of adverse childhood experiences (ACEs) may be intergenerational in nature. Currently, the magnitude of the association between caregiver ACEs and early child development is unknown. To clarify discrepancies across studies, we conducted a meta-analysis to synthesize findings on the association between caregiver ACEs and early child socio-emotional development (i.e., internalizing and externalizing difficulties).

Methods: Searches were conducted in MEDLINE, Embase, and PsycINFO up to November 2021 by a health sciences librarian. Inclusion criteria were as follows: (1) reported a measure of parental ACEs; (2) measure of ACEs assessed domains of maltreatment and household dysfunction; (3) reported a measure of child behavior problems; and (4) reported sufficient data to calculate an effect size. Potential moderators included: parent gender, child age, child sex, sample income level, racial/ethnic minority status, and methodological and design characteristics of the study. Data analysis was conducted using Comprehensive Meta-Analysis (CMA, Version 3.0).

Results: The electronic search yielded 3,049 studies after duplicates were removed and 140 studies underwent full-text review. In total, 22 studies (10,520 dyads) met full inclusion criteria for the meta-analyses. Maternal ACEs were significantly associated with children’s total socio-emotional difficulties (k = 18; r = .12; 95% CI = .08, .16), externalizing problems (k = 10; r = .18; 95% CI = .11, .26), and internalizing problems (k = 12; r = .14; 95% CI = .08, .19). The mean ACEs score was identified as a significant moderator of the association between parent ACEs and child externalizing difficulties.

Conclusions: Caregiver ACEs are associated with higher socio-emotional difficulties among offspring. Efforts to prevent exposure to ACEs as well as interventions that provide supports to caregivers with high ACEs are needed.
The Long Reach of Parent Adversity to Early Child Development: Implications, Mechanisms, and Prevention

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It is well established that parental childhood adversity has implications for the health and development of their children. Although research to date has focused on risk factors for the transmission of adversity, there remain gaps in our understanding of the magnitude of these associations, potential mechanisms of transmission, and what prevention approaches are effective for improving early childhood outcomes. In line with the WAIMH 2023 theme, this symposium will advance our understanding of how parental childhood adversity plays a role in disrupting early relationships as well as target mechanisms and practices for improving infant mental health. Researchers from across North America, using complementary methodologies (i.e., meta-analysis, longitudinal studies, clinic-based data), will explore the latest science on the intergenerational transmission of parent adversity to early child development. The first paper will set the stage with a systematic review and meta-analysis (>20 studies) summarizing the association between caregiver childhood adversity and socioemotional development in their offspring. Potential moderators of this association are explored and discussed. Study 2, examines potential mechanisms of transmission of both early adverse childhood experiences and benevolent childhood experiences. This study uses cutting-edge biological and behavioral measurement to examine family routines as a potential mechanism explaining the association between caregiver childhood adversity and early child development. The third study explores prenatal romantic satisfaction, post-natal maternal mental health, and mother-infant bonding as potential mechanisms of transmission of child maltreatment. This study has important implications for intervention targets, particularly in the perinatal period. Finally, a study of more than >600 mothers explores the impact of a trauma-informed approach on maternal and infant health outcomes in the postpartum period. Taken together, these four papers will provide a comprehensive presentation of innovative research focused on “when” and “for whom” caregiver adversity is transmitted to child outcomes.
Early Father Communicative Support and Family Conflict Among Rural Low-income Families in the US

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Introduction. Early responsive conversational parent-child interaction supports children’s communicative abilities, that in turn lay a crucial developmental foundation for social and academic success. Understanding early direct and distinctive contributions of fathers, as well as mothers, and contextual influences can aid in designing effective intervention supports for families. Aim. This study seeks to understand how early father communicative interaction with 1-year old children influences longitudinal language and literacy outcomes in the context of mother child-interaction, and family conflict, among rural families with low-incomes.

Material & Methods. Extant video observation and interview data from 63 fathers and 1-year old toddlers who participated at one site of the national Early Head Start Research and Evaluation project in the U.S were used for this study (Vogel, Xue, Moiduddin, Carlson, 2010). Mother and father communicative support was measured with a reduced set of items (7) from the Parenting Interaction with Children – Checklist of Observations Linked to Outcomes focusing on responsive language interactions (Roggman et al., 2009; Anderson et al., 2013; α = .65 - .75). The regression model (R2 = .45, Adj R2 = .40, p < .001) showed that controlling for children’s early language comprehension (MCDI Fenson et al., 1993), father communicative support when children were 1 year positively predicted child language development (PPVT Dunn & Dunn, 1997) at age 5 (effect size = .33, p < .05), and literacy (ECLS-K) at age 10 (effect size = .60, p < .01), but mother communicative support did not. Family conflict (Moos & Moos, 1984) when children were young directly negatively predicted child literacy at age 10 (effect size -.24, p < .05), but this effect was mediated by early father language support. Conclusions. Fathers’ early communicative interaction may directly support children’s long-term language and literacy development, and mitigate the effects of development stressors such as family conflict.
Child Abuse Risk in Maltreated and non-Maltreated Mothers: The Role of Relationships and Mental Health

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Background: Mothers with a history of child maltreatment (CM) are at increased risk of perpetuating maltreatment towards their children, a phenomenon known as intergenerational transmission of CM. The prevalence of the intergenerational transmission of CM is estimated to be around 30%, indicating that more than 2/3 of mothers with a history of CM will not abuse their children. It is imperative to better understand risk and protective factors associated the intergenerational transmission of CM to improve our ability to intervene early and more efficiently with CM survivors who are becoming parents.

Aims: This prospective longitudinal study aimed to explore the role of romantic satisfaction, early bonding, and mental health symptoms in the associations between sexual, physical, and emotional abuse, and neglect and child abuse risk in young mothers.

Methods: A sample of 85 at-risk pregnant mothers (18-29 years old) with and without a history of CM was recruited to complete an online survey at two time points (pre- and postnatally); 57 mothers completed the Time 2. Four sequential mediation models were tested using PROCESS in SPSS, one for each CM subtype.

Results: Results showed that a maternal history of CM was indirectly associated with heightened child abuse risk three months postpartum. CM subtypes were all negatively related to prenatal romantic satisfaction, which was in turn negatively associated with postnatal mental health symptoms. Postnatal mental health symptoms were related to lower mother-infant bonding which, in turn, was related to increased child abuse risk.

Conclusions: Our findings are consistent with theoretical models and empirical findings demonstrating the importance of relational factors and mental health in the intergenerational transmission of CM. While our findings await replication, they emphasize the need to intervene early on mental health and family relationships to interrupt intergenerational cycles of CM in at-risk mothers.
Parental Reflective Functioning during Pregnancy: Associations with Psychological and Demographic Risks, Parenting and Child Behavior

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Many infant mental health interventions, including those that begin in pregnancy, aim to increase parental reflective functioning (PRF). PRF mediates the relationship between adult and child attachment (Slade et al., 2005) and is associated with more sensitive and less disrupted parenting. Further, the relationship between PRF and child attachment is mediated by parenting behavior (Ensink et al., 2019; Grienenberger et al., 2005; Stacks et al., 2014). There are mixed findings with regard to the impact that demographic risk and psychological risk have on PRF, which can be measured in pregnancy. There are only four published studies of PRF using the Pregnancy Interview (Alismail et al., 2022; Pajulo et al., 2012; Sadler et al., 2016; Smaling, 2015; 2016). This symposium highlights findings from four other studies of PRF in pregnancy. The first two address predictors of PRF in pregnancy. Paper 1 demonstrates that a history of maltreatment predicts pregnancy PRF through BPD features. In paper 2, researchers demonstrate very low pregnancy PRF in a sample of women with a history of polysubstance use, child welfare involvement and trauma histories. RF was associated with polysubstance use, but not with trauma symptoms or mental health difficulties. Papers 3 and 4 examine concurrent and longitudinal associations of RF in pregnancy. Paper 3 examines pregnancy RF in a high-risk sample of mothers who smoked during pregnancy. Findings revealed that RF is positively related to fetal attachment, maternal warmth, and child externalizing problems but unrelated to maternal childhood trauma, cumulative risk, or stress and depression during pregnancy. Parenting behavior did not mediate the relation between RF and child behavior problems. Study 4 demonstrates that pregnancy RF is lower among those with a low level of education, but that stress, depression and anxiety are not correlates of RF. Pregnancy RF is correlated with parenting and child behavior.
Childhood trauma, borderline personality disorder features and prenatal parental reflective functioning in expecting adults

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**Introduction and Aim of the study:** Childhood maltreatment and borderline personality disorder (BPD) represent two important risk factors contributing to poor outcomes during pregnancy and the early postpartum years. Recent research suggests that maltreatment history and BDP features could impact child development and parenting through lower general or parental reflective functioning. The present study aims to evaluate 1) the association between childhood trauma and prenatal parental reflective functioning (pPRF) and 2) whether BDP features mediated the association between childhood trauma and pPRF in a community sample of pregnant women and expecting men.

**Material and Methods:** A sample of 107 pregnant women and 40 expecting fathers (Mage = 27.82, SD = 4.82) was recruited during prenatal meetings or at pregnancy-related medical appointments. They participated in the Pregnancy Interview (Slade et al., 2005) and completed self-reported questionnaires (Childhood Trauma Questionnaire, Personality Diagnostic Questionnaire) during the third trimester of pregnancy. Coding for pPRF in the Pregnancy Interview is currently undergoing.

**Results:** Total sample includes primarily primiparous (90.0%), white (92.9%) and educated (84.0% post high-school education) expecting adults, 41.1% of them having been exposed to childhood trauma. Preliminary analyses on 30 primiparous participants (n = 23 women) revealed an indirect effect of childhood trauma on pPRF through BDP features, b = -0.02, 95% CI [-0.07, -0.01].

**Conclusions:** Preliminary findings suggest that expecting adults having been exposed to childhood trauma are more likely to display BDP features, which would in turn be associated with lower prenatal parental reflective functions. They highlight the need for trauma-informed prenatal mentalization-based interventions targeting parents having developed BDP features following trauma.
Intergenerational Transmission of Caregivers’ Adverse and Benevolent Childhood Experiences via Family Routines and Rest-Activity Patterns

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Introduction and Aims: Caregivers’ adverse childhood experiences (ACEs) are associated with poor health and developmental outcomes for their children, but mechanisms underlying this transmission are poorly understood. Consistent family routines (e.g. mealtime, bedtime routines) are associated with healthy socioemotional outcomes for children, but providing this consistency may be challenging for caregivers with a history of adversity. We therefore test the hypothesis that family routines underlie the intergenerational transmission of both adversity and protective factors (benevolent childhood experiences, BCEs).

Materials and Methods: We conducted a cross-sectional study of caregivers with preschool-age children. Caregivers completed the ACEs Scale, BCE Scale, and Child Behavior Checklist. Routines were measured subjectively using the Family Routines Inventory and objectively using wrist actigraphy. Children wore wrist actigraphs for 8-10 days. Nonparametric methods were used to calculate child rest-activity rhythms, including interdaily stability (consistency of patterns from day-to-day) and intradaily variability (variability within a 24-hour period). Correlations were used to determine effect sizes between caregiver history, family routines, and child behavior. Adjusted regression models will be conducted at data collection completion (expected Spring 2023).

Results: Caregivers (N=63; 82% mothers, 18% fathers) identified as white (56%), Hispanic (12%), Asian (8%), and Black (8%). Mean child age was 4.2 years (45% female). Caregiver ACEs were associated with fewer reported family routines (r= -0.31; p=0.04) and lower interdaily stability (r= -0.29, p=.08). Caregiver BCEs were associated with more consistent family routines (r= 0.32; p=0.04) and lower child intradaily variability (r= -0.31, p=.06). Consistent caregiver-reported family routines were associated with fewer child total (r= -0.45, p=.06) and internalizing (r= -0.53, p=.02) behavior problems.

Conclusions: Preliminary analyses support our hypothesis that family routines may underlie the intergenerational transmission of both adversity and protective factors. While additional research is needed, promoting consistent routines may be an important approach to preventing intergenerational transmission of adversity.
A therapeutic perspective: Does dynamic touch amplify the effects of babywearing on neonatal opioid withdrawal?

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INTRODUCTION: Neonatal Abstinence Syndrome (NAS) is a spectrum of clinical symptoms associated with withdrawal from intrauterine drug exposure, most commonly from maternal opioid use, resulting in long-term neurodevelopmental infant morbidity and mortality. Infants with NAS experience elevated heart rate (HR), an indicator of withdrawal; infant holding through skin-to-skin contact or carrying using a carrier (babywearing) decreases symptoms of withdrawal. However, it is unclear whether these effects are the result of activation of C-Tactile afferents (CTs) or from static touch.

AIM: To compare dynamic touch (CTs activated) to static touch (CTs not activated as strongly) during a babywearing procedure.

MATERIAL and METHODS. Starting at four days old, infant physiological readings (N=133 readings; N=23 infants; 44% White, 31% Latinx; 61% male) were conducted daily in a Neonatal Intensive Care Unit in the USA; heart rates of infants were taken every 15-seconds for 5-minutes, before, during, and after babywearing (30 minutes per phase). Infants were monitored by cardiopulmonary machines using a pulse oximeter wrapped around their foot. Infants alternated (randomly) in a static touch (hands-free babywearing) or dynamic touch (stroking the top of the infants’ head at a velocity of 3 cm/sec while babywearing) condition (approximately 6 readings each: 3 dynamic, 3 static). A 3-Level Hierarchical Linear Model accounted for the nested data.

CONCLUSIONS. Compared to baseline (infant calm/asleep and without contact), infant’s HRs significantly declined during (20 minutes in the carrier) and after (30 minutes following) babywearing, controlling for pharmacological treatment (receiving a dose of morphine/clonidine within 3 hours). There was a significant condition by sex effect such that dynamic stroking enhanced the therapeutic effects of babywearing for male infants. Males showed the largest decrease in HR during the dynamic stroking touch condition (change of 12.5 bpm). Activation of CTs appears to be an important mechanism in the physiological benefits of babywearing.
Maternal depression and anxiety: relation to maternal embodied and verbal mentalization, and styles of interaction

Professor Cristina Riva Crugnola¹, Dr. Adi Dascalu¹, Dr Dana Shai¹, Dr Rose Spencer³, Dr. Elena Ierardi¹
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INTRODUCTION: Depression and anxiety, often in comorbidity, are among the most frequent disorders for mothers in the perinatal period, affecting maternal parenting and their mentalizing abilities (Cameron et al., 2016). Researches showed mixed results on associations between maternal distress and maternal mentalization, focusing for the most part on verbal level. Parental Embodied Mentalizing (PEM) system was developed in the effort to investigate non verbal mentalizing, through an embodied relational and non verbal communication perspective (Shai & Belsky, 2011).

AIM OF THE STUDY: The aim of the study is to evaluate the relation between maternal depression and anxiety, maternal style of interaction, and different level, verbal and non verbal, of mentalization.

METHOD: 88 mother-infant dyads that have been recruited at Azienda Sanitaria Locale No.2 Savonese in the Northern Italy. At infant 3 months, EPDS for maternal depression, STAI-Y for maternal anxiety, AAI for reflective functioning were administered to the mothers; the videorecordings of mother–infant interactions were coded to analyze parental embodied mentalizing (PEM), mind-mindedness (MM), and maternal style of interaction with Care-Index.

RESULTS: Pearson correlation and mediation analysis were performed. Results showed that embodied non verbal mentalizing was negatively correlated to maternal depression, state anxiety and maternal controlling style; it was not associated to verbal mentalizing (RF and MM). Moreover, maternal depression and anxiety had direct effects on maternal sensitivity; maternal depression had an indirect effect partially mediated by PEM on controlling style; maternal anxiety had an indirect effect totally mediated by PEM on controlling style.

CONCLUSIONS: Our study found significant associations between maternal depression, anxiety and embodied mentalizing, highlighting how they could influence the quality of maternal interaction styles with three-months-old infants through mediation effects. Results show the importance of early prevention and clinical programs focused on embodied mentalizing aimed to mothers with psychological distress in the perinatal period.
The contribution of mentalizing and contingent parenting to early empathy and symbolic play

Dr Ronit Roth-Hanania¹
¹The Academic College of Tel Aviv Yaffo, Tel Aviv, Israel

In the proposed symposium, the findings of 4 different longitudinal studies will be presented. These different studies all investigated the impact of maternal mental and behavioral characteristics on infant early socio-emotional development. While the contribution of maternal mental capacities and parenting behavior to children’s emotional and social growth is well documented, not much is known about how they are involved in the development of these capacities in infants and preschoolers. The studies presented demonstrate different operationalizations and assessments of maternal characteristic and child outcomes, in investigating the links between the two early in life.

Discussant: Dr. Jessica Borelli
University of California, Irvine

The following presentations will be included in the symposium:
1. Forms of sensitive parenting and empathy development during infancy
   Tal Orlitsky¹, Maayan Davidov¹, Yael Paz¹, Ronit Roth-Hanania², and Carolyn Zahn-Waxler³
   ¹ The Hebrew University of Jerusalem, Israel
   ² Tel Aviv-Yaffo Academic College, Israel
   ³ University of Wisconsin–Madison, USA

2. Links between mother’s mentalization, child’s symbolic play in triadic (mother-father-child) interaction and child’s behavior problems
   Keren Hanetz-Gamliel and Daphna G. Dollberg
   The Academic College of Tel Aviv-Yaffo, Israel

3. Maternal Prenatal and Postnatal Mentalizing and Infant Empathy at 15 months
   Daphna G. Dollberg and Ronit Roth-Hanania
   The Academic College of Tel Aviv – Yaffo, Israel

4. Maternal contingent responsiveness longitudinally predicts neural and behavioral indices of emerging social skills across the first year of life
   Tahl I. Frenkel¹, Lindsay C. Bowman² and Sofie Rousseau³
   ¹ Reichman University, Israel
   ² University of California, Davis, USA
   ³ Ariel University, Israel
Maternal Prenatal and Postnatal Mentalizing and Infant Empathy at 15 months

Dr Daphna Dollberg Ginio¹, Dr Ronit Roth-Hanania
¹Academic College Tel Aviv-Yaffo, Israel, Tel Aviv-Yaffo, Israel

Introduction: Empathy, feeling for another person, is crucial in the formation of healthy social relationships. Markers of empathy’s affective and cognitive components are observed already during the first year of life. Maternal mentalizing, i.e., her tendency to regard her infant as an individual with a separate mind and her understanding of the nature of her infant’s mental states, can be traced from the prenatal period into early childhood and is crucial for the child’s socioemotional development.

Aim: To examine the links between mothers’ prenatal and six-months postpartum mentalizing to infant’s empathy at 15 months.

Hypotheses: (1) mothers’ prenatal and postnatal mentalizing will be associated with infant’s empathy at 15 months (2) mothers’ prenatal mentalizing will predict directly, and indirectly via the mother’s postnatal mentalizing, infant’s empathy at 15 months.

Materials and Methods: 37 mother-infant dyads completed three phases of this longitudinal study. Mothers’ reflective-functioning (RF) and mothers’ representational mind-mindedness (MM) were measured during pregnancy and 6 months postpartum. The mother’s interactional MM was assessed during mother-infant interactions at six months. Infants were shown two 60-second videos: a crying baby and an adult in distress. A variety of empathy related behaviors were coded.

Results: Significant correlations between mothers’ prenatal RF opacity factor and the infant’s empathy towards a distressed adult were found. Mothers’ RF certainty factor at six months was positively correlated with infants’ affective empathy for a crying baby. Infants of mothers who expressed more appropriate interactional MM expressed more concern for a crying baby. Importantly, the model predicting infant’s cognitive empathy from the mother’s prenatal RF mediated by her interactional MM at 6 months was significant.

Conclusions: Mothers’ prenatal and postnatal mentalizing are associated longitudinally with infants’ emerging empathy. These preliminary findings highlight the importance of the social environment to the development of infants’ empathy.
Parental mentalization and psychological distress: associations with parent-infant interaction and child socio-emotional and cognitive competence

Dr Dana Shai1, Mrs. Adi Laor Black, Dr Dr Rose Spencer, Dr. Michelle Sleed, Mrs Tessa Baradon, Dr. Tobias Nolte, Prof. Peter Fonagy, Professor Cristina Riva Crugnola

1Academic College Tel-Aviv - Yaffo, Tel-Aviv - Yaffo, Israel

Research has shown that children’s cognitive and language development, being a central aspect of human development with wide and long-standing impact, is significantly shaped by the parent-infant relationship. Associations between quality of parental care, namely parental sensitivity, and children’s cognitive and language development have been documented repeatedly. Nonetheless, whether, the extent to which parental mentalizing—a parent’s understanding of the thoughts, feelings, and attitudes of a child, and presumed to underlie sensitivity—is involved in children’s cognitive functioning, has yet to be extensively investigated. According to the epistemic trust theory, parents with high mentalizing often use ostensive cues, which signal to the infant that he or she are considered by the parent as unique subjective beings. By doing so, parents foster epistemic trust in their infants, which in turn encourages the infant to use the parents a reliable source of knowledge to learn from. Parental mentalizing has traditionally been limited to verbal approaches and measurement. In the current presentation, work including both verbal and nonverbal, body-based, approaches to parental mentalizing to examine whether parental mentalizing in a clinical sample predicts children’s cognitive and language development 12 months later will be presented. Specifically, results from a longitudinal intervention study of 39 mothers and their infants showed that parental embodied mentalizing (PEM) in infancy significantly predicted language development 12 months later and marginally predicted child cognitive development. Importantly, PEM explained unique variance in the child’s cognitive and linguistic capacities over and above maternal emotional availability, child interactive behavior, parental verbal mentalizing, depression, ethnicity, education, marital status, and number of other children. The clinical implications of these findings will be discussed.
On Parental Embodied Mentalizing, Epistemic Trust, and infant cognitive and language development in longitudinal follow-up

Dr Dana Shai¹, Dr. Einav Afek, Dr. Dita Federman, Prof. Rachel Lev
¹Academic College Tel-Aviv - Yaffo,

Research has shown that children’s cognitive and language development, being a central aspect of human development with wide and long-standing impact, is significantly shaped by the parent-infant relationship. Associations between quality of parental care, namely parental sensitivity, and children’s cognitive and language development have been documented repeatedly. Nonetheless, whether, the extent to which parental mentalizing—a parent’s understanding of the thoughts, feelings, and attitudes of a child, and presumed to underlie sensitivity—is involved in children’s cognitive functioning, has yet to be extensively investigated. According to the epistemic trust theory, parents with high mentalizing often use ostensive cues, which signal to the infant that he or she are considered by the parent as unique subjective beings. By doing so, parents foster epistemic trust in their infants, which in turn encourages the infant to use the parents a reliable source of knowledge to learn from. Parental mentalizing has betraditionally been limited to verbal approaches and measurement. In the current presentation, work including both verbal and nonverbal, body-based, approaches to parental mentalizing to examine whether parental mentalizing in a clinical sample predicts children’s cognitive and language development 12 months later will be presented. Specifically, results from a longitudinal intervention study of 39 mothers and their infants showed that parental embodied mentalizing (PEM) in infancy significantly predicted language development 12 months later and marginally predicted child cognitive development. Importantly, PEM explained unique variance in the child’s cognitive and linguistic capacities over and above maternal emotional availability, child interactive behavior, parental verbal mentalizing, depression, ethnicity, education, marital status, and number of other children. The clinical implications of these findings will be discussed.
Links between mothers’ mentalization, children’s symbolic play in triadic (mother-father-child) interaction and children’s behavior problems

Dr Keren Hanetz Gamliel¹, Dr Daphna Dollberg Ginio¹
¹The Academic College Of Tel-aviv Yaffo, Tel Aviv, Israel

Introduction: Mothers’ mentalizing skills are associated with children’s symbolization in play (Slade, 2005) and are linked with the quality of the triadic interaction (León, & Olhaberry, 2020). Moreover, children with behavior problems often have difficulties with symbolic play, specifically with emotional regulation and the ability to play with others (Halfon, & Bulut, 2019).

Stud’s Aim: (1) to examine the associations between mothers’ mentalization abilities and children’s symbolic play in triadic interaction. (2) to examine the moderating role of children’s internalizing and externalizing behavior to the association between the mother’s mentalization and the child’s symbolic play in triadic interaction.

Material and methods: 75 families (fathers, mothers, and 3-5 years children, 48.1% girls) participated in the study. Mothers reported on their children’s internalizing and externalizing behavior (CBCL). Mothers’ mentalization was assessed with the Mind-Mindedness interview (MM), and symbolic play was assessed as part of the CIB coding for triadic interaction.

Results: Pearson correlations between the mothers’ MM and the triadic symbolic play were not significant. Nevertheless, the moderation model indicated that when children had low or medium levels of internalizing behavior, the association between the mother’s MM and the triadic play was significant. For children with a high level of internalizing behavior, this link was not significant. No significant effects were found for the child’s externalizing behavior.

Conclusions: The findings suggested that the mother’s ability to consider her child’s implicit world as well as her emotional dynamics promoted the quality of the child’s play in the triadic interaction, but not for all children. For apprehensive, anxious children, that may have more difficulty expressing themselves freely through symbolic play and struggle to play with the parents, the mothers’ mentalization doesn’t contribute to the symbolic play.
Intricate associations between maternal risk factors and children’s socio-emotional development - Mediating and moderating factors

Dr Keren Hanetz Gamliel1, Dr. Stella Tsotsi2, Dr Dana Shai1, Dr Kiat Hui Khng3

1The Academic College Of Tel-aviv Yaffo, Tel Aviv, Israel, 2PROMENTA Research Centre, Department of Psychology, University of Oslo, Norway, , , Norway, 3National Institute of Education, Nanyang Technological University, Singapore , , Singapore

Symposium organizer: Keren Hanetz- Gamliel
The Academic College of Tel-Aviv Yaffo, Israel.
Discussant: Pasco Fearon
University College London.

Symposium Summary:
Mothers’ mental health and their ability to mentalize and reflect on their own and their child's behavior are central factors for young children’s development. However, the associations between mothers’ psychopathology, mentalizing skills and children’s socio-emotional development are complex and increasing evidence suggests that these associations compromise moderating and mediating variables. In the proposed symposium, the findings of four different studies will be presented. All studies address the intricate associations between mothers’ risk factors, such as psychopathology, anxious attachment, low mentalizing abilities, and between the children's socio-emotional behavior, while focusing on different moderating and mediating variables. The studies present different methodologies and developmental stages and are culturally diverse.

The following presentations will be included in the symposium:
1) Maternal prenatal mental health, offspring polygenic risk, and co-occurrent aggression and internalizing difficulties in preschoolers
Presenter: Stella Tsotsi
This study focused on the moderating role of child genetic susceptibility to positive affect on the association between prenatal maternal mental health and children’s aggression and internalizing difficulties.

2) Mothers’ anxious attachment, psychopathology and mentalization, and children’s behavior problems - A mediated moderation model
Presenter: Keren Hanetz- Gamliel
The study examined a mediation-moderation model for the associations between mothers’ insecure anxious attachment, maternal psychopathology and mentalizing, and child behavior problems

3) Parental embodied mentalizing mediates the longitudinal association between prenatal spousal support and toddler emotion recognition
Presenter: Dana Mcdevitt Shai
This study showed that maternal PEM moderated the association between prenatal observed spousal support and children’s emotion recognition at 24 months.

4) Maternal mindfulness, early child temperament, and internalizing, externalizing, and executive function problems in later childhood
Presenter: Kiat Hui, KHNG
The study’s findings indicated that maternal mindfulness contributed directly to children’s externalizing behavior and executive functioning but did not serve as a moderator for the association between the child’s temperament and subsequent outcomes.
Mothers’ anxious attachment, psychopathology and mentalization, and children’s behavior problems – A mediated moderation model

Dr Keren Hanetz Gamliel¹, Dr Daphna Dollberg Ginio¹
¹The Academic College Of Tel-aviv Yaffo, Tel Aviv, Israel

Introduction: Mothers’ anxious attachment orientation is a known risk factor for mothers’ psychopathology symptoms and children’s behavior problems. Mothers’ psychopathology was suggested as a mediator for the link between mothers’ insecure attachment and children’s outcomes. Mothers’ mentalizing skills can serve as a protective factor for children's behavior in the presence of mothers’ psychopathology. However, the study of the associations between mothers’ anxious attachment, maternal psychopathology and mentalizing skills, and the child’s behavior is lacking.

Study’s Aim: The main goal was to examine indirect links between the mother’s anxious attachment and the child’s behavior. Specifically, we hypothesized that the mother’s psychopathology will mediate the association between the mother’s anxious attachment and the child’s internalizing and externalizing behavior, and the mother’s mentalization will moderate the association between the mother’s psychopathology and the child’s internalizing and externalizing behavior.

Material and Methods: 70 mothers and their 3-5 years children (48.1% girls) participated in the study. Mothers reported on their attachment style (ECR), their psychopathology (BSI), and their children’s internalizing and externalizing behavior (CBCL). Mothers’ mentalization was assessed with the Mind-Mindedness interview (MM).

Results: We found that the mother’s psychopathology mediated the association between the mother’s anxious attachment orientation and the child’s externalizing and internalizing behavior. Furthermore, the mother’s MM moderated the link between the mother’s psychopathology and the child’s externalizing behavior. No moderation effect was found when predicting children’s internalizing behavior.

Conclusions: Mother’s anxious attachment style, reflected in her preoccupation with her relationships and her concerns about abandonment can lead to more distress and psychopathology symptoms, which in turn are associated with more children’s behavior problems. However, maternal mentalization, reflected in the ability to identify the mental states that underlie the child’s behavior may lessen the link between their psychopathology and the child’s externalizing behavior.
Mind-Mindedness among Israeli High and Low-Risk Pregnancy Mothers

Dr Daphna Dollberg Ginio
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Introduction: Mind-mindedness refers to the mother’s tendency to view the child as a psychological agent with own mind. Appropriate mind-mindedness reflects the mother’s capacity to accurately read the infant’s mental states during dyadic interactions.

High-risk pregnancy is diagnosed when progression of the pregnancy is at risk. Studies on the psychological sequela of high-risk pregnancy show mixed results. Some show that following a healthy birth, high and low-risk pregnancy parents do not differ. Others argue that the distress that accompanied a risky pregnancy interferes with parenting.

We adapted the Mind-mindedness observation measure to Israeli parents and compared high and low-risk pregnancy mothers during free play interactions with their babies.

Aims: To examine whether (1) high and low-risk pregnancy mothers differ in their mind-mindedness when interacting with their infants (2) mind-mindedness is associated with prenatal depression and postnatal stress and (3) pregnancy status and mothers’ distress interact to predict mind-mindedness.

Materials and Methods: 63 Israeli mothers (30 high-risk pregnancy and 33 low-risk pregnancy) participated. During pregnancy, mothers reported of their depressive symptoms. When infants were 3-4 months old mothers reported of their parental stress and mother-infant interactions were coded with the mind-mindedness tool.

Results: High-risk pregnancy mothers used significantly less mind-related and fewer appropriate mind-mindedness comments compared to low-risk pregnancy mothers. Mind-mindedness was negatively and significantly associated with prenatal depression but not with postnatal stress. Pregnancy risk alone predicted appropriate mind-mindedness.

Conclusion: High-risk pregnancy is a risk factor for parenting, predicting a lower tendency of mothers to refer to and accurately read the infants’ mental states. Prenatal negative affect but not postpartum stress was associated with the mothers’ inappropriate reading of their infants’ mind. Interventions that promote mothers’ accurate mind-mindedness can be helpful for high-risk pregnancy mothers and their babies.
Reflective Functioning in Pregnancy: Concurrent and Longitudinal Predictors in an Urban Community Sample

Dr Ann Stacks\(^1\), Dr Kristyn Wong Vandahm\(^2\), Dr Marjorie Beeghly\(^3\), Dr. Jordan Boeve Katti\(^3\), Dr. Christopher Trentacosta\(^1\), Prof. Moriah Thomason\(^4\)

\(^1\)Wayne State University, Detroit, United States of America, \(^2\)University of Michigan, Ann Arbor, United States of America, \(^3\)Applied Survey Research, Rocklin, United States of America, \(^4\)New York University, New York, United States of America

Introduction: Parental reflective functioning (RF) is robustly associated with adult attachment, parenting quality, child attachment, and child behavior. However, few studies have examined concurrent and longitudinal correlates of RF during pregnancy. This study explores (1) concurrent and longitudinal associations among mothers’ pregnancy RF, demographics, mental health, parenting, and child behavior in a diverse, urban sample.

Methods: In their 3rd trimester of pregnancy, women (N = 68, Mage = 25.0 years) completed self-report measures of mental health (Pregnancy Anxiety and Edinburgh Prenatal Depression Scale), Difficult Life Circumstances, and Maternal Fetal Attachment, and completed the Pregnancy Interview to assess RF. Subsequently, at 7 months postpartum, mothers completed the Parent Stress Index-SF (N = 47). At 36 months postpartum, maternal parenting quality was rated from videotapes of mother-child free-play and teaching tasks, and mothers completed the Child Behavior Checklist (N = 40).

Results: Mothers were predominately African-American/Black (83.8%) and fewer than half had achieved an education beyond high school (45%). Prenatal RF scores were quite low (M = 2.94, range 0-6), and mothers with a high school education or less had lower RF scores than mothers with higher education (p = .02). Prenatal RF was not associated with age, race, depression, maternal fetal attachment, or anxiety or with 7-month parenting stress. However, at 36 months, pregnancy RF was positively correlated with observed parenting quality (r = .357, p = .02) and negatively correlated with child behavior problems (r = -.303, p = .06). After accounting for education and prenatal depression, RF was marginally associated with parenting (p = .08) and child behavior problems (p = .07).

Preliminary findings suggest that RF moderates the association between prenatal depression and positive parenting (p = .002).

Conclusions: Interventions that target RF and parental mental health in pregnancy may support parenting and child behavior into preschool.
Parent-Child Interaction Across Countries, Cultures and Contexts: Implications for Policy and Practice

Professor Lisa Boyce¹
¹Utah State University, ,

Parents’ positive affect along with their responsiveness, encouragement and teaching behaviors measured with the Parenting Interaction with Children: Checklist of Observations Linked to Outcomes (PICCOLO, Roggman et al., 2013) have been associated with positive child outcomes in culturally diverse countries (e.g., United State, Ecuador, Brazil, Spain, Italy and Turkey). In this symposium, four talks will examine the use of PICCOLO in research and practice in four different countries. The first talk will address impacts of the pandemic on family functioning, interactions, and resources and the implications for developmental outcomes for babies born in Turkey during the pandemic. The second talk will focus on the similarities and differences between practitioner and parents’ own PICCOLO scores in Italy as part of the participatory assessment process. The third talk will present the psychometric properties of the Chinese cultural adaptation of PICCOLO among the urban and rural, low and high SES populations in China. The final talk will focus on the association between maternal mental health and PICCOLO scores in the Ecuadorian Amazon. Collectively, these papers use a common measure to identify positive parenting behaviors across cultures that can be used to inform country specific policy and practice across a variety of contexts.
Usage and Outcomes of NICU2HOME: A Smartphone App Intervention for NICU parents

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¹Northwestern University/Lurie Children's Hospital, Chicago, United States of America

Introduction and Aim of the study
Admission to the NICU begins a rollercoaster of emotions for parents. “Pervasive uncertainty” is how NICU parents describe this experience with increases in stress and anxiety. mHealth technologies may provide feasible methods to support NICU parents.

Material and Methods
NICU2HOME (N2H) is a parent-empowering mobile app being tested in 3 Chicago-area NICUs as a quasi-experimental, time-lagged study comparing usual care control (n=261) with app intervention NICU parents (n=163) of premature infants. Intervention usage from admission through 30 days post-discharge is collected along with parent reported outcomes including the User-focused Mobile Application Rating Scale (uMARS), Net Promoter Score (NPS, app satisfaction) and a perceived app impact survey.

Results
Average infant gestational age was 32.3 weeks and LOS 33 days. The average parent age was 32 years; 43% were White, 22% Hispanic, 17% Black, 11% Asian, and 7% Other. Daily average app usage was 19 minutes (range 3-273) and total study period time was 10 hours (range: 17-48 hours). Parents opened a page/session 5 times on average per day. Based on a 1-5 scale, app satisfaction was high on functionality (mean 4.3), aesthetics (mean 4.4), and information quality (mean 4.5) based on 1-5 scale. NPS was outstanding (77).

App users report N2H helped them: 1) understand the progress their baby was making (86%); 2) feel confident in taking care of their baby (87%); 3) feel less anxious about their baby’s daily NICU experience (85%); 4) “Google” information less (76%); and 5) call the NICU less (69%).

Conclusions
A novel mhealth solution is well received by NICU parents with strong uptake, usage, and satisfaction. Parent's using the NICU2Home app report feeling more engaged with their NICU infants. It can be suggested that mHealth technology may offer effective support for NICU parents.
An mHealth Mobile App Intervention Supporting Mental Health of Black Parents of NICU Infants

MD, MAPP Craig Garfield¹, Mr. Joshua Santiago¹, Dr. Justin Knoll¹, Ms. Rebecca Christie¹, Dr. Young Lee¹
¹Northwestern University/Lurie Children's Hospital of Chicago, Chicago, USA

Introduction and Aim of the study
Optimizing the mental health of parents with infants in the NICU is key for infant and family wellbeing. Black families are at risk for prematurity, poorer maternal birth outcomes, and historical biases within the healthcare system. Novel interventions to support NICU parents may benefit all NICU parents, especially Black parents.

Material and Methods
In this time-lagged quasi-experimental study in 3 diverse Chicago-area NICUs, usual care control (n=261) parents were compared with parents receiving the NICU2HOME (N2H) parent-empowering mHealth app (n=163). Validated mental health measures including Perceived Stress Scale (PSS) and the Medical Outcomes Scale (MOS) for social support were collected at NICU admission, discharge, and 30 days post-discharge. Univariate group differences were assessed along with linear mixed effect regression models to assess treatment group effect on mental health measures across time (including adjustments).

Results
Of the sample of 424 parents (308 babies), 43% were White, 22% Hispanic, 17% Black, 11% Asian, and 7% Other. Overall, compared to Whites, Black parents reported lower education, employment status, marital status and income; Black control and intervention parents did not differ in demographics. Multivariate analyses shows the interaction effect of being Black and in the intervention was associated with significantly better scores; PSS (-2.65, p<.05) and MOS (0.73, p<.01) compared to Whites in the control group. Conversely, simply identifying as Black was associated with significantly worse scores; PSS (1.2, p<.10) and MOS (-0.52, p<.01).

Conclusions
App users who are Black reported the better mental health outcomes in the sample. Comparing Black app users to White and Black controls suggests a nonlinear relationship between the intervention and self-reported mental health when race is considered. Engagement of minority populations via technology may create opportunities to shrink the gap of support, improving outcomes for infants and families.
Maternal and child correlates of pregnancy RF in a longitudinal study of tobacco exposed children

**Professor Of Psychology Brent Finger¹, Associate Professor of Psychiatry Suena Massey², Dr Ann Stacks³, Professor of Psychology Pamela Schuetze⁴, Professor of Psychology Rina Eiden⁵**

¹Montana State University Billings, Billings, United States, ²Feinberg School of Medicine, Northwestern University, Evanston, USA, ³Merrill Palmer Skillman Institute, Wayne State University, Detroit, USA, ⁴Buffalo State University, Buffalo, USA, ⁵Pennsylvania State University, State Colleg, USA

**Introduction & Aims:** Reflective Functioning (RF) during pregnancy may influence mothers’ adjustment to pregnancy and future parent-child relationship. The current study aims to examine relations between pregnancy RF and subsequent parenting and child behavior problems.

**Materials & Methods:** Data was collected from low a-income diverse sample involving mother’s who smoked during pregnancy. Participants included 247 mother-child dyads who were assessed during each trimester of pregnancy and at 2, 9, 16, 24, and 36 months of child age. Pregnancy Interviews (PI) were collected during the second trimester visit and 118 of these interviews have since been coded for RF. Five of these interviews were considered invalid due to inadequate probing and were removed from the data analysis. Child behavior problems assessed by maternal report with CBCL at 24 and 36 months of child age. Results: Findings revealed that RF is positively related age, education level, fetal attachment, maternal warmth at 9 months, child responsiveness at 9 months, maternal warmth at 24 months and child externalizing problems at 24 months but unrelated to maternal childhood trauma, cumulative risk, or stress and depression during pregnancy. Parenting behavior did not mediate the relation between RF and child behavior problems. Conclusion: RF during pregnancy may impact future parenting behavior and child outcomes.
Adapting Attachment and Biobehavioral Catchup for young children with intellectual disabilities in South Africa

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1Vrije Universiteit Amsterdam, Amsterdam, Netherlands, 2North-West University, Potchefstroom, South Africa, 3University of Pretoria, Pretoria, South Africa, 4Bartimeus, Doorn, Netherlands

Introduction and Aim:
Attachment and Biobehavioral Catch-up (ABC) is a potentially useful intervention for addressing the psychosocial needs of children with intellectual disabilities/developmental delays (ID/DD). Given that ABC was not originally developed for this cohort, this study aimed, firstly, to explore the effects of ABC in families with a young child (age ≤ 24 months) with ID/DD in South Africa. Second, it aimed to explore possible adaptations to the intervention for greater population- and context-specific alignment.

Materials and Methods:
A mixed-methods multiple baseline trial of ABC was conducted with weekly measures of maternal sensitivity (n=52), attachment security (n=52) and cortisol regulation (n=165) across three families for a 5-, 8- and 9-week baseline phase, respectively, as well as a 10-week intervention phase and 2-week follow-up phase. Furthermore, interviews were conducted with the parents and intervenors regarding their experiences of ABC. Interviews were also conducted with clinical experts and a group of caregivers of children with ID/DD exploring their impressions of ABC.

Results and Conclusion:
Results indicated positive effects of ABC on maternal sensitivity and attachment security although findings related to cortisol regulation were inconclusive. The experiences of the parents and intervenors largely supported these findings. Participants reflected positively on ABC and emphasised its relevance and usefulness for children with ID/DD in South Africa, but offered recommendations that may further enhance its applicability for this population. Recommendations included: integration of ID/DD-specific content for parents, and training for intervenors; expanding supervision capacity; building cultural sensitivity and competence for intervenors; access to referral networks; sourcing intervenors from local communities; and greater flexibility in how sessions are organised.
Starting early matters - Increasing pre- and postnatal Emotional Availability (EA) in clinical contexts

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While the significance of EA has been extensively studied postnatally, less attention has been paid to interventions starting prenatally. This symposium presents findings from different naturalistic clinical and community settings as well as the use of specific interventions focused on enhancing early EA. The goal is to explore whether EA can be increased through work with parents, and to discuss how different interventions use experiential mechanisms to improve early EA.

The work of Flykt and colleagues shows that community-based parenting interventions in Finnish naturalistic clinical settings are able to improve parental mental health, and intensive therapeutic support also improves parental EA.

In the study of Salo and colleagues focus was on evaluating the implementation of EA-focused pre- and perinatal intervention called the Nurture and Play in mother-child shelter homes. The experiences of the clinicians and their line-managers, and adherence to the intervention model will be discussed, as well as examples of client sessions.

Biringen and colleagues will present a novel approach, Movement Through Motherhood (MTM), inspired by Dance Movement Therapy (DMT) and EA principles, which utilizes the power of movement to enhance body-mind connection. In this initial study, the dance workshops were created and judged by team members as having “face validity” to incorporate sufficient EA principles, with the goal of enhancing mother’s ability to be affectively positive and expressive with her fetus.

Finally, Branson Dame and colleagues will present findings of MTM to explore the power of movement/dance as a potential method for improving maternal EA and wellbeing. They will show that mothers in the intervention groups compared to the control group reported lower depression. Additionally, there was an increase in self-reported EA and a decrease in anxiety.

The collection of findings from these diverse backgrounds could have implications for interventions aiming to increase early EA.
Parental experiences with the promises of extinction for infant sleep: A review of the literature

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Extinction (popularly called crying-it-out, controlled crying, Ferberizing) is considered the most researched intervention for ameliorating infant sleep problems. The vast majority of existing infant sleep training books and programs for parents, in fact, endorse it as an effective method for preventing sleep problems. It is well understood, however, that many parents strongly dislike extinction and its reliance on letting infants cry for prolonged periods. Researchers have reported high rates of attrition resulting from actual or even potential assignment to extinction groups. In real world contexts, without the high degree of support, assessment, and follow-up that occurs in a research context, parents in the real world report less success and higher levels of difficulty with extinction. What do we know about the effectiveness of extinction, especially in real-world contexts?

METHODS: Ten bestselling parenting books on pediatric sleep training, as well as two popular internet-based sleep training programs were summarized and compared to research on extinction derived from hierarchical evaluations of empirical support, as well as systematic reviews and meta-analyses (N=25).

RESULTS: Advice uniformly endorses variations on extinction as effective for all infants. Across studies listed as empirical support (N=67), however, extinction failed to work for 25-50% of samples. Parenting advice encourages the initiation of extinction as early as three- to four months. Research on extinction with younger infants is extremely limited. It is also important to note that despite the well-documented difficulty that more sensitive/reactive infants have with consolidated sleep, temperament is rarely considered in extinction research. One large parent survey found that parents of these infants experienced even less success with extinction than their peers.

DISCUSSION: The combination of high parental resistance and potentially large groups for whom extinction does not work warrants the investigation of alternative approaches that are consistent with both parents’ preferences and infants’ developmental capacities.
Do early community-based parenting interventions improve parental EA, parenting efficacy, and mental health?

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Introduction
Perinatal mental health problems may be harmful for child development and early parenting. Many parenting interventions are developed and validated in highly selective environments, whereas less is known about intervention effectiveness in unselected, naturalistic community samples. There is also a need to understand treatment-related moderators of intervention effectiveness, such as inclusion of fathers or starting interventions prenatally.

Aim of the study
We examined whether community-based parenting interventions (practical help, short-term psychological services, and intensive therapeutic support) in Finnish naturalistic settings are effective in improving maternal and paternal parenting (parenting efficacy and Emotional Availability, EA) and mental health (anxiety and depression). We also test whether treatment characteristics: number of sessions, content of interventions, father’s participation and starting the intervention prenatally moderate treatment effectiveness.

Material and Methods
The intervention groups comprised 181 mothers and 63 fathers (expectant or having a baby younger than 12 months), receiving parenting interventions in community-based clinics in Southern Finland. Control group comprised 86 mothers and 45 fathers from the same area. Parenting (parenting efficacy and EA) and mental health (depression, anxiety) were measured with questionnaires at three time-points: pre- and post-intervention and after 6 months. Additionally, for a subgroup of mothers (n=31), observed EA was measured pre- and post-intervention. Clinicians reported about treatment characteristics.

Conclusions
Our preliminary findings showed that maternal self-reported EA and parenting efficacy especially improved in the intensive therapeutic support group. Maternal depression decreased in all intervention groups, and anxiety in short-term psychological services and intensive therapeutic support. The results for fathers (two-group comparison, intervention vs. control), observation-based EA and treatment moderators will be presented at the conference. The results indicate that also naturalistic interventions developed with practical premises as part of basic health care systems may be effective for parental mental health. Yet, more intensive interventions are effective to improve parenting.
PICCOLO within the Participative and Transformative Evaluation framework in the italian anti-poverty policy “Citizenship income”

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The Italian anti-poverty policy (Citizenship Income) establishes a priority of attention to children aged 0 to 3 years old, through parenting support, within the comprehensive care plan aimed at social and labor inclusion of all family members, as appropriate.

A research-action-training initiative has been conducted to evaluate parenting and children outcomes of these care plans and to study factors of effectiveness. Drawing on a pragmatic methodology called "Participatory and Transformative Evaluation" (P.T.E.; Serbati & Milani, 2013; Serbati, 2017), initial and in-process training, service professionals’ actions with families, and research actions related to data production and analysis are organized in iterative phases. Within this framework, the information produced has two purposes: to create accountability for the professional services; to create spaces for negotiation and reflexivity with families and professional teams to define and monitor the goals of the care plan. P.T.E. also informs the Citizenship Income policy family support actions.

The presentation will focus on the usage mode and the results of PICCOLO as part of the participatory assessment process. It was employed in two different moments with 58 families to explore the presence of parents’ responses to young children’s developmental needs. In addition to the practitioner’s observation and score, it was proposed to parents – conceived as co-evaluators – to self-assign scores to their interactions. The practitioner was invited to facilitate a dialogue with the parent, analyzing convergences and divergences, asking the parent how much they felt represented by the descriptions returned by the practitioners and the relevance he attributed to the behaviors analyzed, to stimulate the emergence of the parent’s point of view. The comparison between scores shows that the differences between observers have decreased at the second evaluation, and not considerably changed in absolute terms at the end of the support experience.
Parents’ Smartphone Use and Effects on Young Children’s Development

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Smartphones are now ubiquitous in everyday family life. Mothers and fathers use smartphones routinely and frequently, even when interacting with their infants and young children. Additionally, parent-infant interactions, such as during in-person playtime, are often interrupted by push messages. The fact is, infants and young children are growing up in a world where screens are part of their social experiences. Parents and professionals are concerned about whether the ubiquity of smartphones is having a negative impact on parent-child interactions and child development. This symposium brings together four research groups working on this topic. In the first presentation, Agnes von Wyl will present insights drawn from a longitudinal study on the impact of aspects of smartphone use on parental sensitive behavior and hence on parent-child interactions. Second, Aleksandra Mikić will report the results of an experimental study on children’s affective responses to interruptions due to text messages. The third study, presented by Carolin Konrad, uses a similar experiment and examines whether text interruptions have an immediate or deferred effect on imitation learning. Finally, Valérie Brauchli will present a review study on the influence of screen media use on early child development and the role of individual and contextual moderator variables.

Discussant:
Prof. Dr. Annette Klein
International Psychoanalytic University Berlin gGmbH
INFANT TEMPERAMENT AND PARENTING STRESS: RELATION TO MATERNAL AND PATERNAL REFLECTIVE FUNCTION

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Introduction
Temperament is a basic disposition that differentiates individuals in terms of reactivity and regulation, and it is the result of complex interactions among genetic, biological, and environmental variables across time.

Aim of the study
The current study aims at evaluating parental reflective function (RF) as a relevant environmental co-determinant of temperament. Indeed, reflective function facilitates within the interactive exchanges the child’s capacity to fully experience, regulate and organize a wide range of affect and other mental states.

Material and Methods
RF was evaluated in 40 first-time parents’ couples - mothers’ mean age was 32.7 years (SD = 4.2 years), and fathers’ mean age was 36.8 years (SD = 5.4) - during the seventh month of pregnancy, through the Adult Attachment Interview. Also, at six months of the baby, parents filled out the Infant Behavior Questionnaire–Revised to assess the infant’s perceived temperament, and the Parenting Stress Index–SF.

Results
Both maternal and paternal lower RF during pregnancy was related with higher child dysfunctional interaction. Moreover, lower maternal RF was related with higher perceived infant sadness, while lower paternal RF was related with higher infant negative affectivity.

Conclusions
Our findings highlight that early parenting programs should target reflective functioning in both mothers and fathers, considering their potential differential impact on child temperament and parental mental health. Indeed, supporting and enhancing parental reflective functioning may favor the child’s development and her family’s wellness.
Parents’ Empathy in dyadic/triadic Interactions: links between Empathic Accuracy, Parents’, and Child’s social behaviours

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INTRODUCTION
Accurately understanding a person’s current thoughts and feelings when interacting is an ability known as empathic accuracy (EA) [1]. Dyadic studies have shown that couple partners benefit from understanding each other when interacting [2]. However, parental couples face relational and communication challenges during the child’s early years. Such challenges impair their EA in daily interactions [3]. While partners achieve around 15-20% of accuracy in dyadic settings, how can they understand each other when interacting with their child?

AIM
The purpose of this study was to determine differences in parent’s EA depending on the context (dyad/triad) and to examine the links between parents’ EA and parents’ and child’s social behaviours toward a partner (i.e., gaze, positive affect, object manipulation, vocalization, interactive focus).

MATERIAL and METHOD
Triads of 15-months-old children and their parents participated in a free play interaction, using standardized material. A dyadic (parent/parent) interaction followed immediately by a triadic interaction was videotaped. Parents then proceeded individually to describe self-thoughts/feelings and to infer partner’s thoughts/feelings during both interactions.

CONCLUSION
EA differs between the dyadic and triadic contexts, and both parents and child’s social behaviours were associated with parents’ EA.

KEYWORDS: empathic accuracy, triadic interactions, observation, toddler, social behaviours

REFERENCES
The contribution of mentalizing and contingent parenting to early empathy and symbolic play

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Forms of sensitive parenting and empathy development during infancy

Empathy is a highly valued socio-emotional capacity. Recent work has shown that empathic responses to others' distress can be observed in the first year of life (Davidov et al., 2013, 2021), yet research has not yet examined the precursors of these early empathic concern abilities of infants. This study aimed to examine the parenting contributions to the development of empathy during infancy. It focused on distinct associations between three forms of sensitive parenting – responsiveness to distress, responsiveness to nondistress, and warmth – and infants' empathic responses to others' distress. We hypothesized that maternal responsiveness to her infant's distress, but not warmth or responsiveness to nondistress, would predict infant's empathic concern abilities.

A longitudinal sample of 165 infants was followed at 3, 6, 12, and 18 months. Mothers' responsiveness to distress, responsiveness to nondistress, and warmth, were coded from mother-infant interactions at 3 and 6 months, and infants' empathy for others’ distress were assessed at 3, 6, 12, and 18 months, based on three distress stimuli: experimenter and mother simulations, and peer crying video. Infants' responses were filmed for subsequent coding.

A path analysis was conducted in order to test our hypothesis. The findings supported our conceptual model, which specified that maternal responsiveness to distress predicted infants' empathic concern, whereas maternal responsiveness to nondistress and maternal warmth did not. To rule out possible alternative explanations, infants' empathic abilities were controlled in the model, as was the shared variance between the different forms of parenting.

Examining the contributions of the three aspects of parenting to empathic concern during infancy can have implications for theory – understanding the early development and parenting antecedents of empathic abilities, and for practice – by informing early intervention and prevention efforts aimed at promoting children’s empathic abilities.
Adapting a Video-Feedback Intervention (VIPP) for Parents and Children in different contexts: Evidence and Implementation

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- Introduction and Aim of the study
The video-feedback intervention to promote positive parenting (VIPP) is an attachment-based intervention, aiming to enhance the relationship between a child and their caregiver. The intervention involves recording footage of a caregiver and an infant or young child playing together, then receiving detailed feedback on their interactions. The VIPP method aims to help caregivers notice and respond sensitively to their child’s communication, with the objective of increasing parental sensitivity, child attachment security and reducing risk of child behaviour difficulties. This symposium aims to provide a better understanding of the possible benefits and challenges of using VIPP by presenting the findings of three recent randomised controlled trials conducted across different UK contexts.

- Material and Methods
The symposium will open with a description of VIPP, and how to implement the intervention. Presentation 1 will present the findings of a large trial with children aged 12-36 months, showing early signs of behavioural problems. Presentations 2 and 3 will present two feasibility trials in infants whose parents show enduring emotional difficulties consistent with a personality disorder, and in young foster children showing attachment difficulties such as reactive attachment disorder.

- Results
Across the three trials, parents, foster carers and practitioners gave positive feedback on the helpfulness of the intervention and there were strong indications of intervention effectiveness, feasibility and acceptability. However, the trials also highlighted some challenges for implementation.

- Conclusions
The three UK trials indicate that VIPP can be a helpful intervention for at-risk parents and young children across different contexts, whilst also highlighting challenges. Implications for real-world implementation and further research will be discussed. The symposium will conclude with a discussion on the use of VIPP, considering benefits of using this method in different early years settings as well as a critique of the intervention.
Nurturing Change: Feasibility trial of a video feedback parenting intervention for foster carers and children in the UK

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Title: Nurturing Change: Feasibility trial of a video feedback parenting intervention for foster carers and children in the UK¹

Introduction: Children in care are at increased risk for poor developmental outcomes, including attachment difficulties. However, the evidence base for interventions to support foster carers and improve children’s outcomes remains very limited. The ‘Nurturing Change’ study was a feasibility randomised controlled trial of the Video-feedback Intervention to promote Positive Parenting for Foster Care (VIPP-FC) for children under 7.

Aim of the study: To modify an existing parenting intervention for children in the UK foster care setting, and test the feasibility of conducting a randomised controlled trial (RCT) of the modified intervention.

Material and Methods: The VIPP-FC manual was modified for the UK foster care context, to suit the needs of foster carers, foster children and practitioners delivering the programme in the UK. This involved revisions by a manual development group consisting of experts in the looked after children field. In this talk we will discuss the clinical delivery of VIPP in the UK foster care context, presenting the modifications made to the manual and the challenges faced when using a manualised approach with a diverse range of carers and children. We will also present qualitative feedback from foster carers who received the intervention and VIPP practitioners who delivered it.

Conclusion: The adapted VIPP-FC programme was well received by foster carers and practitioners. The documented insights from this trial will be able to inform future research in this area.

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Making parent-infant observation more accessible to non-specialists: development of the CARO app

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INTRODUCTION Health visitors (community child health nurses) in Scotland are expected to assess the quality of parent-child relationships in the whole population of preschool children. They lack structured tools to do this. Most structured tools are complex and require a high level of specialist training. We have developed a simplified version of the Mellow Parenting Observation System (MPOS) for use (a) by early years / primary care professionals in day-to-day practice and (b) as a research tool.

AIM of the study To assess how reliable and user-friendly the new Child and Adult Relationship Observation (CARO) is when used by non-specialist practitioners, including its use as a smartphone app.

MATERIAL and METHODs Stage 1 – consensus discussion about streamlining of existing MPOS coding and scoring system; Stage 2 – correlation of old and new systems to test for agreement; Stage 3 – trial training of new system with health visitors (public health nurses); Stage 4 – development of an app to code interactions in real time.

CONCLUSIONS The simplification includes (a) reduction in number of coding dimensions used, (b) removal of potential multiple coding of each interaction element, and (c) applying a limit of one positive and / or one negative code per 10 second segment of interaction. Stage 4 is in progress and the presentation will showcase the new app, including reliability data. CARO may be useful as a simple observational tool for use both in clinical practice and in research studies. The smart phone app may make it possible to rate interaction footage in real time.
Implementing Nurture and Play -mentalizing based play intervention in Mother-Child Shelter Homes

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Introduction
Nurture and Play (NaP) is a short-term intervention aimed at increasing parent-child Emotional Availability (EA) and reflectiveness. It is offered already prenatally and with infants and toddlers. The NaP has been shown to increase maternal sensitivity and reflectiveness among prenatally depressed mothers. However, the implementation of NaP is real-life clinical settings with parents who have severe problems in their mental health and early bonding has not been assessed. In implementation of any intervention the clinicians’ adherence to the model and the support of the whole working environment is necessary.

Aims of the Study
Our study aims at exploring feasibility of the intervention in the Mother-Child Shelter Home units which provide care for high-risk parent-child pairs, and adherence to the intervention model. We also evaluated whether the support from the unit leadership and the clients’ self-efficacy during the intervention session affected the success of implementation.

Materials and Methods
Three Mother-Child Shelter Home units from different parts of Finland (all trained in NaP) participated in the study. The data was collected using separate questionnaires for staff, leadership and clients. Furthermore, using a smaller subsample, we gathered video recorded intervention sessions and used an outsider assessment on the adherence to the intervention and EA between the parent and clinician experiences.

Results
The clinicians reported positive experiences in using (implementing) the NaP in Mother-Child Shelter Homes. They mostly commented on the usefulness of having a structured model to focus on EA as well as reflectiveness. Implementation was supported by training several staff members to the NaP and by support for their line-managers. The preliminary assessment of the videomaterial also suggests good adherence to the intervention model and client satisfaction with the NaP.

Conclusion
The implementation of the NaP was successful in the Mother-Child Shelter Home units.
The Geneva Early Childhood Stress Study after 12 years: New findings and implications for intervention

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The Geneva Early Childhood Stress Study prospectively and longitudinally followed a cohort of mothers suffering from Interpersonal Violence-related Posttraumatic Stress Disorder (IPV-PTSD) and their children at ages 1-3,5 years (N=84), 5-9 years (N=62), and 9-13 years (N=47). This presentation focuses on how maternal IPV-PTSD and associated neural activity in response to film stimuli of menacing social interaction in study Phase 1 (toddler years), thus during children’s formative development of emotion regulation are associated with school-age and peripubertal outcomes in Phases 2 and 3 respectively. Methods: In Study A of Phase 1 to Phase 2 outcomes, we will summarize findings from a currently submitted paper showing factors via application of canonical correlation analysis. In Study B of Phase 1 to Phase 3 outcomes, we present preliminary findings from a paper in preparation that examines the predictive value via regression analysis for child outcomes in Phase 3 of a specific brain activation signature from one of our published studies from Phase 1. Results: Study A: For N=62, the highest weighted Phase 2 outcomes in relation to maternal IPV-PTSD and comorbidity in Phase 1, on clinician-rated measures and/or child self-report were those of child psychopathology: PTSD, anxiety and depressive symptoms as well as bullying and victimization. Study B: For N=31 (17 mothers with IPV-PTSD vs 14 without), who had fMRI scanning in Phase 1 and completed Phase 3, maternal brain activation clusters in the mid-cingulate cortex interacted with IPV-PTSD to be significantly predictive of peri-pubertal anxiety and precuneus and ventral-medial prefrontal cortical activity were associated with peri-pubertal emotion-regulation strategies (i.e. cognitive reappraisal). Degree of maternal sensitivity on CARE-Index was a mediating factor. Conclusions: Maternal IPV-PTSD during formative early development of emotion regulation adversely impacts the caregiving environment via effects on maternal psychobiological self-regulation with outcomes showing increased psychopathology and altered emotion regulation among offspring.
Maternal Substance Misuse, Unpredictability of Sensory Signals and Child Cognitive Development: An Explorative Study

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INTRODUCTION: Maternal substance misuse forms a remarkable risk for child development, affecting the child both directly via fetal exposure as well as indirectly via mother-child interaction. Maternal sensory signals represent a novel way to study patterns of maternal interactive behavior, and include vocal, tactile, and visual signals directed toward the child. Unpredictability of maternal sensory signals has been identified as a risk factor for children’s cognitive functioning in community samples. However, the association remains unknown among high-risk, substance-misusing mother-child dyads. Further understanding is also needed on the structure of maternal sensory signals and whether it differs in high- and low-risk mother-child dyads.

AIM of the study: We explore the associations of maternal sensory signals and children’s cognitive development in substance-misusing and non-misusing mother-child dyads. We also explore the structure (quantity and duration) of maternal sensory signals in dyads with and without maternal substance-misuse.

MATERIAL and METHODS: We studied 48 mother-child dyads (23 with and 25 without maternal substance misuse) at children’s age of 2 and 4 years. Dyads with maternal substance misuse were recruited from a children’s health clinic specialized in substance-using families and non-misusing dyads from communal family health clinics in southern Finland. Maternal sensory signals were evaluated with videorecorded dyadic free-play situations when children were 2 years old, and entropy rate was calculated as a measure of the unpredictability. Also, the quantity and duration of maternal sensory signals were coded from video recordings. Children’s cognitive development was evaluated with Bayley Scales of Infant and Toddler Development (third edition) at age 2 years and with Wechsler Preschool and Primary Scale of Intelligence (third edition) at age 4 years.

CONCLUSIONS: This explorative study will provide novel insights into maternal sensory signals and their associations with children’s cognitive development among high-risk mother-child dyads. Results will be presented at the conference.
Feasibility trials of the video feedback intervention for positive parenting in perinatal mental health services

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- Introduction and Aims: Children of parents experiencing perinatal mental health difficulties, particularly personality disorder, are at increased risk of developing emotional and behavioural difficulties. Evidence on effective parent-infant interventions is scarce. We aimed to establish the feasibility of the video feedback intervention for positive parenting (VIPP) – an intervention to promote sensitivity and secure attachment - for parents experiencing perinatal mental health difficulties.

- Materials and Methods: Study 1. A feasibility randomised controlled trial of VIPP for mothers with enduring difficulties in managing emotions and relationships, consistent with a personality disorder, and their 6-36 month old infants. Following piloting, 34 mothers were randomly allocated to receive VIPP or treatment-as-usual alone. Study 2. A case series in 13 mothers using perinatal mental health services, with an adapted VIPP intervention for 2 to 6 month old infants. Qualitative interview feedback from parents and clinicians, and outcome data, were collected.

- Results: 76% of eligible mothers consented to participate. Intervention uptake and completion rates were 95% (≥ 1 VIPP session) and 70% (6 sessions) respectively. Quantitative data indicated positive effects on observer-rated parental sensitivity and self-reported parenting confidence. Mothers valued the focus of the intervention on the positive aspects of their relationship with their child and the supportive, non-judgemental therapeutic relationship. They described feeling better able to understand and respond sensitively to their child’s communication, and feeling more confident in their relationship with their child and their parenting.

- Conclusions: There is preliminary evidence that VIPP is feasible and acceptable in this patient group. Further testing in a large definitive trial is required.
Parental embodied mentalizing and mind-mindedness: Associations with mothers’ mental health, cognitions, and parenting attitudes

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Recent research in developmental psychology has focused on the unique role of non-verbal and implicit processes underlying parental mentalizing – namely parental embodied mentalizing (PEM) – and its potential complementarity to the verbal dimension, such as mind-mindedness. As expected, previous studies have shown that higher PEM is associated with greater maternal sensitivity where PEM contributes to infant attachment beyond mind-mindedness. Interestingly, although parental mentalizing was found to be a factor that may affect mother’s mental health (e.g., depression) and her parental attitudes (e.g., overprotection), little is known about how PEM, in complementarity with the verbal dimension of parental mentalizing, is associated with maternal psychopathology. Moreover, none of these studies examined the relation between PEM and maternal psychopathology regarding the mother-infant interaction context. This exploratory study conducted within 107 mother-infant dyads at moderate psychosocial risk aimed to investigate the associations between PEM and mind-mindedness in relation to psychological characteristics, cognitions, and maternal attitudes according to the mother-infant contexts (toys and no toys). Psychological characteristics (depression and anxiety), cognitions (self-efficacy and perceived maternal impact), and maternal attitudes (overprotection and parental warmth) were assessed via self-report questionnaires when the infant was 4- and 8-months. PEM and mind-mindedness were assessed based on observations made during 8-minute mother-infant free-play context with and without toys at 8-months. Results indicated that the capacity to verbally and non-verbally mentalizing differs regarding the mother-infant interaction contexts. In a structured context, distinct associations were found: PEM was associated with anxiety and maternal warmth, while mind-mindedness was related to cognitions. In a context with no toys, only mind-mindedness was associated with depression and anxiety. These findings shed light on distinctive associations between PEM and mind-mindedness with certain aspects of mother’s psychopathology and highlight that the interaction context may play an important role in the expression of maternal mentalizing capacity.
In 1958 Harry Harlow set about trying to understand the mechanisms by which new-born rhesus monkeys bonded with their mothers. Interpreting their behavior, based solely on a prospective and observational approach, he posited that new-born infants had an innate drive for touch that went beyond the need to just obtain food. However, with no idea what the mechanism for this could be, he concluded that an amorphous construct he called ‘love’ was the primary driving force behind this need for physical closeness. Around the same time John Bowlby, in a series of seminal papers (1958–1960) and building on Harlow’s research, claimed that traditional psychoanalytic theory could not explain the attachment of infants and young children to their mother, nor their responses to being separated. This led him to develop his theory of attachment, emphasizing the role of close relationships in the early life of an infant. However, attachment theory remains work in progress as it still lacks an underpinning driving neurodevelopmental mechanism that fully explains the various attachment types described by Bowlby. There is a clue emerging from both Harlow’s and Bowlby’s research of a putative mechanism that could explain their theories of love or attachment - touch. It is now well recognized that a significant part of brain development is experience-dependent, with sensory inputs providing a key element of this experience, and for the infant the primary source of sensory input is social touch, now recognized as promoting both neuronal development and offspring-parent bonding. Although there are many other sensory inputs that may be contributing to development such as smell, hearing, nutrition etc., in this symposium we aim to focus on touch, showing that a relatively recently discovered population of gentle touch sensitive C-Tactile nerves may provide a neurobiological explanation for bonds between parents and infants.
Maternal mindfulness, early child temperament, and internalizing, externalizing, and executive function problems in later childhood

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INTRODUCTION: Temperament in early childhood reflects emerging patterns of individual differences in children’s affective, attentional, and motor reactivity and self-regulation. Aspects of early temperament have repeatedly predicted later psychopathology risk. At the same time, parenting behaviours exert continuing influence during a child’s development and can serve as risk or protective factors in the development of self-regulation problems and youth psychopathology. An area of parenting or parent-child interactions, amenable to intervention, is interpersonal mindfulness in the parenting context.

AIM: We examined how maternal mindfulness in parenting contributed to children’s internalizing, externalizing, and executive functioning (EF) outcomes in middle-to-late childhood, specifically, whether maternal mindfulness interacted with child temperament (Surgency, Negative Affectivity, Effortful Control) in predicting outcomes.

MATERIAL and METHODS: Participants (N=281; 52.9% female) were drawn from the Singapore Kindergarten Impact Study Follow-up (SKIP-Up) study. Parent-reported child temperament (CBQ) was collected when the children were in Kindergarten 1. Teacher-reported EF difficulties (BRIEF-2), children’s self-reported internalizing and externalizing behaviours (SDQ), and mothers self-reported interpersonal mindfulness in parenting (IMP) were collected when the children were in Grade 5 to 6. We also collected data on children’s self-reported sensory processing sensitivity (HSC), as it is a risk factor for developing internalizing problems.

RESULTS: Maternal mindfulness in parenting did not interact with early temperament dimensions but contributed directly to children’s externalizing and EF problems, with higher mindfulness in parenting associated with lower problems (i.e., better outcomes). Additional analyses showed internalizing outcomes to be predicted indirectly by preschool Negative Affectivity via child sensory processing sensitivity in later childhood. The mediation was not moderated by maternal mindfulness in parenting.

CONCLUSIONS: Maternal mindfulness in the parenting context may potentially have protective effects on the development of externalizing and EF problems irrespective of the child’s temperament. Conversely, mothers who engage in parenting contexts with low mindfulness may contribute to increased risk.
The Paternal nonverbal Dance: Similarities and Differences in fathers and mothers’ Parental Embodied Mentalizing

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Fathers today take an active and involved role in the caregiving and raising of their infants. While this cultural shift has been identified and acted upon by policy and legal institutions, the scientific world has sorely lagged in answering to this change by the means of direct empirical research, resulting in most of the parent-child research focusing, in fact, on the mother-infant relationship. As a result, the unique and growing contribution of fathers to the child’s socio-emotional development is understudied within the scientific community. The novel conceptual and empirical approach brought forward in this presentation involves investigating fathers’ impact on their infants’ development under a framework of Parental Embodied Mentalizing (PEM) and examine whether this capacity varies between mothers and fathers. PEM refers to the parental capacity to (1) implicitly conceive, comprehend, and extrapolate the infant’s mental states--such as wishes, desires, or preferences--from the infant’s kinesthetic patterns and (2) adjust one’s own kinesthetic patterns accordingly. The construct and measure of parental embodied mentalizing (PEM; Shai & Belsky, 2011a, b; Shai & Fonagy, 2014), an implicit, body-based, and interactive approach to parental mentalizing. Studies have found that mothers’ PEM profile not only predicted the child’s attachment over and above established measures of maternal sensitivity, but also social skills, language and academic performances, and behavior problems as far as the first grade (Gange et al., 2021; Shai & Belsky, 2018; Shai & Meins, 2018; Shai et al., 2022). Taken together, these findings suggest that the nonverbal, whole-body movement parent-infant interaction carries meaning of the parent’s internal representations of the child, the parent, and their relationship, and may very well be a vehicle through which preverbal infants are impacted by these parental internal forces. As promising as these findings are, they pertain only to mother-infant interactions, and do not consider the father-infant interaction. In effort to promote the understanding of the nature of father-infant interaction, we investigated what are the behavioral similarities and differences between paternal and maternal PEM that impact the infant’s developmental trajectory. Put differently, what is the unique contribution of fathers’ nonverbal interaction to their child’s socio-emotional development? To this end, in this presentation, we will present findings from two longitudinal studies (N=250 families) involving mothers and fathers interacting separately with their infants at 6-months of age at home during a free-play session vis-à-vis parental variables (such as depression, parental stress, parental sensitivity) and compare and contrast the unique and shared movement patterns of mothers and fathers in their PEM capacities and how it relates to individual differences in their developing child. Results show that fathers and mothers do not differ in their parental embodied mentalizing capacity. This contrasts with verbal measures of mentalizing, and sensitivity measures employed in these studies. Moreover, findings reveal independent and unique developmental trajectories in fathers, versus mothers, parental embodied capacities. This research holds the potential to make an important contribution to the study of human embodiment from a whole-body movement perspective and will lead to the development of novel therapeutic interventions for fathers and infants.
Long-term neurocognitive and behavioral development of children born to opioid-maintained mothers

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Introduction. Opioid maintenance therapy (OMT) is generally recommended for pregnant opioid-dependent women. Despite evidence of the beneficial effects of OMT in the care of pregnant opioid-dependent women, prenatal methadone or buprenorphine exposure may not be without risk. While numerous studies have investigated the neonatal outcomes of infants prenatally exposed to methadone or buprenorphine, little is still known about the long-term development of children born to women in OMT.

Aim of the study. To investigate the long-term neurocognitive and behavioral development of children born to opioid-maintained mothers focusing on developmental functions known to be particularly vulnerable to the effects of early insults including visual processing, executive functions and memory.

Material and methods. In this prospective longitudinal study, a cohort of 72 children was followed-up since birth and throughout the first 10 years of life. In addition to measuring general development, children were tested using sensitive measures of neurodevelopment including eye tracking, CANTAB (executive function; EF), and TOMAL-2 (memory).

Results. Children prenatally exposed to methadone or buprenorphine and cigarette smoking were found to track objects more slowly compared to non-exposed children, $p = .02$, which predicted children’s performance on a visuomotor task, $R^2 = 0.37$. The OMT group scored lower on verbal as well as nonverbal memory tasks, even after controlling for general IQ, all $p$-values <.05. The OMT group scored significantly lower on EF at 4 years old, however, no differences in EF were found at 10 years old. Reports of child behavior problems were significantly higher in the OMT group at all points of assessment.

Conclusions. Findings suggest that children born to women in OMT may have specific difficulties relating to visual processing and memory. Future studies should include sensitive measures of cognitive function in addition to tests of global development when studying the effects of prenatal opioid exposure.
Movement Through Motherhood: Promoting Maternal Wellbeing and Prenatal Emotional Availability (EA) through Dance

Mrs Katelyn Dame¹, Dr Zeynep Biringen¹, Professor Madeline Jazz Harvey¹, Dr Stephen Aichele¹, Ms Steffany Joslin¹, Dr Marjo Flykt¹, Dr Saara Salo¹

Introduction
Emotional availability (EA) is a construct expanding upon and correlated with attachment. While there is significant research on EA, few EA studies focus on the prenatal period before the baby is in arms. Further, no research on interventions specifically promotes the vital nonverbal aspects of interaction that the EA construct relies upon, including smiling, range in facial/postural expressions of emotions, or holding/touch. Here, we examine whether maternal training in the nonverbal components of EA is possible through movement/dance. Movement is a universal form of nonverbal communication that serves as a common language across cultures. Additionally, it is the first form of communication used by infants and the primary method in which they perceive and make meaning of caregiver interaction.

Aims of the Study
Our study sought to explore the power of movement/dance as a potential method for improving maternal EA and wellbeing. Movement/dance workshops were created based on EA principles, designed to improve mothers’ attunement, responsiveness, and, especially outward emotional expressiveness. To date, our study is the first to utilize dance/movement in this manner.

Materials and Methods
There were 3 arms: 1) a dance only arm; 2) dance plus psychosocial arm—that is, whether such dance training is enhanced by direct EA instruction; and 3) a control arm. These three conditions were implemented with 22 pregnant mothers during the 2nd to 3rd trimester and their impact on observed and self-reported prenatal EA, maternal wellbeing, and maternal mood were assessed. Assessments included self-reported depression, anxiety, and emotional availability, as well as observed prenatal EA (a new measure).

Conclusions
Mothers in the intervention groups (dance-only and dance + psychosocial) compared to the control group reported lower depression. Additionally, when the intervention groups were combined, there was an increase in self-reported EA and a decrease in anxiety from pretest to posttest.
Movement Through Motherhood: Incorporating Emotional Availability (EA) Into a Dance Intervention for Pregnant Moms

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Introduction
Dance Movement Therapy (DMT) is an internationally accepted, multi-cultural art-based psychotherapeutic technique that utilizes the power of movement to enhance body-mind connection and is a worthwhile avenue to consider for promoting emotional availability (EA). DMT fosters a connection between verbal and nonverbal communication and utilizes mindfulness components that foster awareness of bodily sensations, performing body scan exercises, making conscious contact with others, and distantly observing feelings and thoughts. DMT has revealed that attunement exercises with adults can be beneficial and long-lasting, extending into the home environment post-intervention. However, DMT work has not always been scientifically rigorous nor has it focused on pregnancy.

Aims of the Study
Dance/movement workshops for this study were inspired by DMT as well as EA principles and coined Movement Through Motherhood (MTM), The aim was to promote mothers' nonverbal communication, expressiveness, and attunement towards the unborn baby.

Methods and Materials
Workshops were co-created with DMT and EA concepts in mind by researchers Madeline Jazz Harvey (dancer/choreographer) and Dr. Zeynep Biringen (developmental/clinical psychologist). Dance components incorporated vital EA-aspects like positive facial expression, touch, open reciprocal interaction during pregnancy. A progressive sequence was used throughout both dance workshops to improve mothers' comfort level, allowing them to develop the necessary confidence to perform solo improvisations and co-create “choreography” based on their individualized pregnancy experiences. Participants were exposed as a group to 2 dance workshops tinged with (nonverbal aspects of) EA principles.

Conclusions
The dance workshops were evaluated by members of our team and judged as having “face validity” to incorporate sufficient EA principles that can enhance maternal internal peace and well being as well as mother’s ability to be appropriately expressive both with her fetus and her baby after birth. Dance workshop details will be presented, along with actual video clips illustrating this novel intervention.
INTRODUCTION: Trauma is not just an event that took place sometime in the past; it is also the imprint left by that experience on mind, brain, and body (Bessel A. van der Kolk, 2014). Individuals that have experienced consistent disruption upon their sense of self and safety in the context of interpersonal and attachment relationships impacts development in multiple, diverse and complex ways. As individuals transition to parenthood, the risk of “Ghosts in the Nursery” of unresolved feelings associated with early relational trauma in childhood are illuminated (Fraigberg et al, 1975). Interrupting the cycle of intergenerational trauma is a central focus of parent-infant focused interventions, and naturally privileges language as the predominate mode of communication and understanding. However, what about the impact and communication from the body, and arguably how the baby experiences the mind of their parent?

PURPOSE: This presentation explores how embodied relational trauma can become engrained in the body tissues. Through a high-risk clinical case, we discuss the therapeutic application of Parental Embodied Mentalizing Assessment (PEMA; Shai, 2018), which is a 13-point assessment and intervention tool that captures risk and protective factors of how mind is expressed through the body in dynamic parent-infant movement interactions (Shai, 2018).

DESCRIPTION: A mother and her baby were admitted hospital following a mental health crisis. PEMA—a mentalizing-based therapy video-feedback intervention model—was used to address embodied trauma in the dyad. PEMA provided a tool to address the unconscious, non-verbal and implicit processes manifesting in the mother-infant interactions and helped the mother to promote her mentalizing capacity and beginning to address early trauma.

CONCLUSIONS: PEMA was a valuable and effective intervention in a short-term high-risk setting. The clinical case demonstrates how PEMA was used to help promote the mother-infant interactions as well as processing aspects of the mother’s own early traumatic childhood experiences.
Parental Smartphone Use and Parental Sensitivity at 3 Months Postpartum: Findings of a Longitudinal Study

Professor Agnes von Wyl¹, Dr. Katrin Braune-Krickau¹, Dr. Laura Wade-Bohleber¹, Larissa Schneebeli¹, Dr. Michael Gemperle¹, BSc Anouk Joliat¹, Prof. Dr. Jessica Pehlke-Milde¹
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Background: Many professionals observe with concern how parents of infants and toddlers frequently use smartphones, even in the child’s presence. They are worried that smartphone use could negatively influence parents’ sensitive behavior and thus impair the child’s development. Three aspects are proposed as possible influencing factors: duration of parental smartphone use, parent distraction with smartphones, and parents’ focused immersion during smartphone use.

Aims: In a longitudinal observational study with first-time mothers and fathers we investigated how duration, technoference, and immersive smartphone use of parents is associated with parental sensitivity at 3 months postpartum.

Method: Ninety-five first-time parents completed questionnaires during the last trimester of pregnancy and at 6 and 12 weeks postpartum. Parental sensitivity was assessed at 12 weeks postpartum based on a video-recorded short free-play interaction using the CARE-Index.

Results: Self-reported feelings of focused immersion (the experience of total engagement) were associated with a lower overall quality of sensitivity and reduced parental sensitivity. However, technoference (reported by the partner) and self-reported daily smartphone use time were not associated with parental sensitive behavior.

Conclusion: This study is among the first to systematically assess longitudinal data on the impact of parental smartphone use on infant development. Our results suggest that focused immersion in particular has a negative impact on parental sensitive behavior.
Parental mental health problems, dyadic interaction and intervention in pregnancy and early childhood

Dr. phil. Sandra Gabler¹, Ms Julia Festini¹, Dr Jennifer Gerlach³, Anne Jung², Professor Gottfried Spangler¹, PhD Ana Mesquita⁴
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Parental mental health and prematurity are risk factors for dysfunctional parent-child-interaction and child development. This symposium presents an overview of maternal mental health and the associations with dyadic behaviour. Furthermore, we report findings from longitudinal studies that elucidate the role of postpartum mood disorders, prematurity and risk prevention for parent-child-interaction and child outcome.

Firstly, Anne Jung will show results from a systematic review of dyadic interaction in mothers with mental illness. It aims at identifying potential distinctive impacts of mothers’ mental health problems on their dyadic behaviour. These findings can potentially aid the design of parenting programs for mothers with mental health problems.

Gottfried Spangler presents findings from longitudinal studies examining short-term and long-term effects of maternal depression and prenatal substance abuse on maternal behaviour and child adaptation.

Subsequently, Ana Mesquita show findings from a longitudinal project that investigates the role of caregiver-child interaction and the development of preterm children’s self-regulation.

Sandra Gabler and Julia Festini report results from a longitudinal study examining maternal postpartum mood disorders and its impact on observed maternal sensitivity and mother-child attachment. Affected mothers show impaired ability to identify infants’ needs and react promptly and adequately to their cues compared to healthy controls. Currently ongoing analyses examine the relationship between postpartum mood disorders and mother-child-attachment later on.

Lastly, Jennifer Gerlach will present initial results from a randomized control-trial study evaluating a behavioural psychotherapeutic and mindfulness-based intervention on maternal stress and substance use in pregnancy. The impact of the intervention on child mental health outcomes (i.e. self-regulation) will be reported.

Finally, we discuss specific implications for intervening adequately with families at risk for dysfunctional parent-child-interaction. Developing effective support for parents with premature infants and those with mental health problems is highly relevant to empowering these vulnerable groups.
A systematic review evaluating mobile education and support applications for parents of preterm infants post-discharge

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Introduction and aim of the study:
Parents of preterm infants need accessible, reliable information when their infant is discharged home, preferably provided on a mobile phone. This study aims to identify and evaluate the quality of information and usability of mobile apps for parents of preterm infants targeting the period after discharge.

Materials and Methods:
One reviewer systematically searched the Apple App Store, Google Play, and the web using Google along with an online literature search using Pubmed. Multiple keywords were used (ie."preterm baby," "app," and "home"). Apps were included that provided information for parents after hospital discharge in English or Dutch. Apps that did not include educational material, were aimed at professionals, were not free of charge and were not freely accessible were excluded. Two independent reviewers assessed the quality and usability of the apps. The Mobile App Rating Scale (MARS) was used to measure the app's quality, and the Patient Education Materials Assessment Tool for Audiovisual Materials (PEMAT-AV) was used to measure the app’s content usability.

Results:
The title and descriptions of 202 apps were screened for eligibility. Nine English apps were included in the review. No Dutch apps were identified or apps that covered only the post-discharge period. Seven apps received an acceptable quality score and one received a good score. The understandability of the PEMAT-AV was high (>75%) for four apps, and actionability was 100% for six apps. Topics most commonly addressed in the apps were feeding, growth and development. Additional functionalities were monitoring (n=4), sharing information (n=3) or sharing experiences (n=2).

Conclusions:
Only nine English apps contained specific information for parents of preterm infants for the period after discharge, with mostly only moderate quality and understandability. More and better quality apps are needed in order to meet the demand of these parents after hospital discharge.
No effect of smartphone interruptions during learning on imitation in 18-22-month-old infants

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INTRODUCTION
Disruptions to parent-child interactions during smartphone use have been termed technoference. A previous study has shown negative effects of a phone call for language learning in toddlers. However, texting occurs more frequently and might even more disruptive due to the still face that parents display while looking at their phone.

AIM of the study
In this talk, we will present two studies that tested the effect of a text interruption on immediate (study 1) and deferred (study 2) imitation learning and by varying the number and timing of interruptions (study 1) and type of interruption (study 2).

MATERIAL and METHODS
In both studies, parents demonstrated three target actions to their infants and then infants were given the opportunity to repeat those actions immediately afterwards (study 1, N=90) or 30 minutes later (study 2, N=43). The actions were demonstrated four times. In study 1, parents were randomly assigned to an interruption-first condition, one-interruption condition, or three-interruptions condition. In study 2, parents were randomly assigned to a texting interruption or a paper-pencil interruption condition. Performance was compared to a baseline-control group where the infant did not see a demonstration of the actions and a no-interruption condition where the parents demonstrated the target actions without interruption. Maternal reliance on their smartphone was measured using the CAFE questionnaire.

CONCLUSIONS
In study 1, across text-interruption groups parents showed high levels of still face during the interruptions. In both studies, there were no differences between interruption conditions. Furthermore, infants in all interruption groups imitated significantly above the baseline control and did not differ from a no-interruption condition. In both studies, higher reported maternal reliance on the smartphone was related to poorer imitation performance overall. The results from this body of work to date suggest that infants can learn under different conditions of brief technoference.
Supporting Parent and Infant Well-Being in the NICU and beyond: There’s an app for that!

Ms C Monique Flierman¹,², PhD Martine Jeukens-Visser¹, MD, MAPP Craig Garfield⁴, Dr. Young Lee³

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Preterm infants have a significantly higher risk of short-term and long-term developmental problems. In addition, their parents are at increased risk of psychological or parenting stress after the unexpected birth and long hospital stay. This can have a lasting negative impact on the parent-child relations and the well-being of the child. Attuned information provision is a prerequisite for self-efficacy and empowerment of parents and links to positive parenting outcomes. The increase in knowledge generates a sense of control, facilitates the coping process and increases parental self-efficacy. Web-and app-based support programs hold promise to support parents in the NICU and beyond.

Our objective for this symposium is to describe the development and share the results of Mobile Health (mHealth) interventions for parents of preterm born infants. First, we will give a systematic overview of existing mobile apps, their quality and usability. Next we will provide insights in the co-creative development and outcomes of the supportive apps from the USA (NICU2HOME) and the Netherlands (e-TOP). Finally, as information needs and preferences can differ among subgroups, we will focus specifically on parents from minority populations and with low literacy levels.
On gender and cultural differences in parental embodied mentalizing

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This presentation will be about my experiences regarding the coding of PEM and my PhD work in light of culture. As a Norwegian man born and raised in the rural parts of Norway, I have often come upon conflicts regarding my own personal preferences in meeting with more urban cultures. I want to reflect on how this might show in the smallest of micro-interaction to the makro-interactions in the broader context.

I will relate these cultural differences from my experiences as a psychotherapist, both in the rural parts and in meeting with clients from urban upbringings.

In the theoretical part of the presentation, I will describe the Norwegian, rural culture and how this might affect the way we express ourselves in language and in embodiment communication. I will describe how this might be related to the literature, art, architecture and more that the Norwegian, rural culture consist of.

In addition to this, I will give a description of the work of Alfred Lorentzer which I use in my PhD. He is a psychoanalysis and a philosopher who has developed a qualitative research approach called Depth-hermeneutics. In his theories we find a heavy emphasis on how the embodiment expressions is embedded in culture. Culture effects fetus and mother relation and this period in life lays the ground for relational processes trough life. In using his theories in my research, I will describe how we look for these cultural traces in the embodiment interaction of the participants. “The body keeps the score” said van der Kolk, and I think Lorentzer could have added “the body also keeps the culture”.
Development and evaluation of the e-TOP app for parents of preterm infants after hospital discharge.

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Parents of preterm born infants report struggles to feel confident in their capacity to parent after hospital discharge. They seek accessible and understandable information about the consequences and the impact of the premature birth. The aim of this study was to develop a digital information source for parents of premature infants.

Methods:
The e-TOP app was developed in an iterative co-creation process. Interviews were conducted with parents (n=10). Three online co-creation sessions were held with TOP interventionists (N=8) and parents with different health literacy skills (n=14). Experts were consulted to generate content for the main topics. The research team reviewed and adapted the content for understandability and tone of voice. In co-creation with parents, prototypes of the e-TOP app were designed, leading to the final draft of the e-TOP app. In the next phase we will test feasibility with a pre-posttest design. Eighty families receiving the TOP home visits will use the e-TOP app for six months after discharge. Outcome measures for feasibility include parental experiences, parental self-efficacy, and child motor and socio-emotional development.

Results:
Based on parent and expert input, the final prototype consists of ten relevant topics, including: understanding and guiding your premature baby, sleep, feeding, motor development, corrected age, parenthood after premature birth, long-term consequences, general health issues, back to work, and professional aftercare.

The feasibility study starts November 2022, and the first preliminary results will be presented at the symposium and include parental satisfaction, parent-child interaction and child outcomes.

Conclusions: The development of the e-TOP mobile app provides an accessible source of parent- and expert-generated content for discharged NICU parents. Insights into the use, parental experiences, and potential effectiveness of the e-TOP app will be used for further development and implementation.
Supporting early relationships among parents and their infants who are hospitalized in the Neonatal Intensive Care Unit: A Protocol Paper

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Introduction: Up to 15% of newborns will experience a NICU hospitalization and most of those infants are at risk for long-term neurodevelopmental difficulties. Opportunities for optimal early relationships are hindered and early intervention (EI) to support the caregiver-infant dyad, beginning in the NICU and continuing at home, is critical. We propose to test the effect of a family-centered, developmentally supportive EI program, the Newborn Behavior Observational - Supporting Play Exploration and Early Development Intervention (NBO-SPEEDI), for EI-eligible NICU infants. NBO-SPEEDI pairs 2 evidence-based and complementary interventions, with the goal of supporting early caregiver-infant relationships to enhance infant neurodevelopment and positively impact caregiver mental health.

Aims: The study aims are to test the effect of the intervention on 1) infant neurodevelopmental outcomes, 2) parent mental health, and 3) EI access and care plan quality.

Materials and Methods: Below we describe our study protocol including our strategies and decisions to enhance family engagement; stakeholder participation; knowledge translation; and scalability and sustainability. The proposed study is a single site randomized clinical trial. Infants will be randomized into one of 2 groups: Business as Usual (BAU) or NBO-SPEEDI + BAU. The intervention group will receive the 4 NBO-SPEEDI visits during their NICU course and 6 NBO-SPEEDI visits via telemedicine from NICU discharge until 6 months of adjusted age. Infants will be followed for 12 months, and outcomes measures will be collected at NICU discharge, 6 months, and 12 months.

Conclusions: We met with multiple stakeholders and learned about family needs and care preferences; system-level barriers and facilitators; and clinical and programmatic knowledge gaps. We integrated this information into the development of the current study protocol, which is slated to begin July 2023. Stakeholder engagement allowed the protocol development processes to be thoughtful about parent and infant outcomes as well as optimal knowledge translation.
Responsive Caregiving: Evidence for Infants’ Mental Representations and Promising Intervention Effects Across Contexts of High-Risk

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Responsive caregiving, contingent upon infant cues, plays a central role in fostering infants’ emotional development and social reciprocity. Abundant data underscore responsive care in supporting infants’ emerging attachment security and associated behavioral signaling toward attachment-figures. Theory posits that recurring experience of caregiver responsiveness shapes infants’ underlying mental representations of the self, the caregiver and the attachment-relationship. Infants are thought to come to expect responsive exchanges thereby supporting continued infant signaling and emergence of reciprocity central to social relations. Despite well established theory, empirical research evidencing infant’s mental representations is scarce. How might these representations be measured and do they associate with early responsive care? Can maternal responsiveness be manipulated within the first months of life in high-risk contexts and populations? Do effective manipulations associate with elevated infant signaling and cues? The present symposium provides multiple perspectives on these open questions in three talks demonstrating the importance of maternal responsiveness across the first months of life and effective targeting of responsiveness in early interventions administered in high-risk populations across the US and Israel. The first talk (Aptaker Ben-Dori, Atzaba-Poria and Frenkel) empirically supports infants’ mental representations of the attachment-relationship and associations with prior experience of responsive care and concurrent infant signaling. The second talk (Katz, Dahl and Dozier) demonstrates the ability to effectively increase maternal responsiveness in opioid-dependent mothers via the Attachment and Biobehavioral Catch-up (ABC) intervention administered as early as the first weeks of life. Finally, the third talk (Morag) underscores the importance of individualized responsive care within the medical context of the neonatal NICU. Morag demonstrates clinical benefits of an intervention administered within the NICU, aimed at enhancing parental responsive feeding guided by infant cues in transitioning of preterm infants from nasogastric tube to oral feeding. Dr. Kristin Bernard, an expert on early parenting interventions, will discuss clinical implications.
The Associations Between the use of Screen Media and Early Child Development: A Review.

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Screen media devices are becoming increasingly accessible and pervade many aspects of modern society, including early childhood. Most research on the effects of screen media on child development has focused on examining the effects of television viewing on language acquisition, cognition, and motor skills. However, few studies have addressed the influences of modern and portable screen devices, despite the fact that technological development has opened up new possibilities that go far beyond passive, socially isolated television viewing. Hence, we cannot assume that findings from previous research apply to modern screen media. Furthermore, data on the impact of exposure to screen media on the development of children under three years of age is comparably scarce. Although the available evidence base on the topic is evolving rapidly, there has yet to be a review of existing literature that encompasses multiple developmental outcomes. This research gap is crucial to the importance of early childhood for children’s physical, cognitive, and socio-emotional development. The present literature review focused on (1) the influences of screen media use on young children’s developmental outcomes, specifically sleep-related parameters, physical health, cognition, language, motor skills, socio-emotional skills, and social interaction and (2) the role of individual and contextual moderator variables. Ten databases were systematically searched, and 95 studies were identified. Mostly undesirable/negative or nonsignificant, and few desirable/positive effects of screen-time on child development were found. Younger children seem to be more susceptible to screen media, educational and age-appropriate content tend to have weaker effects, and the role of parent-child relationship and activities without screen media are understudied. Overall, the available evidence base is limited, particularly regarding modern screen media. Longitudinal and experimental studies on the role of child, content, and context variables need to be considered in future research to support a critical reflection on screen-time in early childhood.
Correlates of maternal mind-mindedness in a German-speaking sample—maternal characteristics and infant temperament

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INTRODUCTION: Maternal mind-mindedness (MM) describes a relatively stable tendency to focus on the child’s mental states, particularly during a mother-infant interaction. Despite extensive research, there is still little known about (a) maternal or child-centred correlates that could help explain individual differences in MM and (b) whether MM could be associated with the development of child-centred correlates.

AIM of the study: Our study aims to investigate (a) the associations between MM, maternal characteristics (psychosocial functioning and recalled parenting by own mother), and infant temperament and (b) the predictive effects of MM on infant temperament development.

MATERIAL and METHODs: As part of a longitudinal cohort study, a subsample of n=76 German-speaking mother-infant dyads provided data for the present analyses. Maternal MM (appropriate and non-attuned) was assessed using 15-minute observations at 7 months postpartum. Maternal emotion dysregulation, parenting efficacy, depression, anxiety, and recalled parenting by own mother were assessed using established self-report questionnaires at 3 weeks or 7 months postpartum. Infant temperament (negative emotionality and soothability) was measured using the Infant Behaviour Questionnaire (IBQ) at 7 and 12 months postpartum.

RESULTS: No substantial correlations between MM indicators and maternal characteristics were found. However, multivariate analyses indicated a paradoxical negative effect of recalled parenting by own mother as optimal on appropriate MM. Regarding infant temperament, no substantial concurrent correlations were found. Still, a higher frequency of appropriate MM was significantly associated with lower levels of infant negative emotionality later on.

CONCLUSIONS: Our findings align with the current understanding of MM as a maternal trait, relatively independent of maternal characteristics, but also highlights potentially unreflected experiences with their own mother that could impact mothers’ MM while interacting with their child. The predictive effect on infant temperament provides insights into possible underlying mechanisms of the associations between maternal MM and infants’ emotional development.
Maternal contingent responsiveness longitudinally predicts neural and behavioral indices of infant’s emerging social skills

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INTRODUCTION: Theories contend that contingently responsive exchanges with caregivers support infants’ understanding of others as social partners. Nonetheless, there is general paucity of longitudinal research examining how social contingency shapes early brain development to support emerging social behavior.

AIM: We examine how maternal contingent responsiveness (CR) predicts infants’ developing brain and social-emotional behavior across the first year of life (N=60).

MATERIALS AND METHODS: At 4-months, maternal CR was coded from mother-infant interactions and infant temperamental negative reactivity was observed using standard reactivity tasks. At 10-months, Infants’ ‘baseline’ electroencephalography (EEG) was recorded. Frontal 6-9hz alpha EEG asymmetry indexed infant regulation between social approach/withdrawal and global alpha EEG power indexed general maturation/organization of the infant brain. At this same lab visit, infant EEG was recorded while infants interacted with mothers. Mothers were instructed to imitate their infant (to maximize contingent responding), and real-time neural responses to maternal imitation were extracted. Finally, infants’ concurrent empathic prosocial behaviors were observed using standard paradigms.

CONCLUSIONS: Infant temperamental negative reactivity interacted with maternal CR to shape infant EEG asymmetry at 10-months. Temperamental reactivity negatively associated with neural indices of social approach and prosocial behavior, but only for infants who experienced low levels of maternal CR. No such risk emerged for temperamentally reactive babies who experienced high levels of maternal CR. Similarly, maternal CR at 4-months positively associated with functional maturation of the infant brain at 10-months (r = .45, p < .001), as well as stronger infant neural responses to real-time contingent maternal behaviors (i.e., greater event-related alpha suppression to maternal imitation (r = -.70, p < .001). Finally, infants’ neural responses to real-time maternal imitation associated with increased prosocial behavior at 10-months (r = -.78, p < .001). Together, findings underscore the role of CR in shaping infants’ brain development to support emerging social behavior.
Attachment-based assessment and intervention: A move towards implementation

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Introduction: Led by theory, attachment research has uncovered and defined dimensions of caregiving behavior that contribute to children’s wellbeing and social and self-regulatory skills. Sensitive, predictable, and non-threatening caregiving has therefore become an important target for infant mental health practice. However, evidence-based practices would require assessment and intervention tools that are not only reliable and valid but also feasible outside their original research settings.

Material and Methods: This symposium brings together findings from three studies in which research-based assessment and intervention tools were adapted for the purpose of implementation in new settings.

Results: The first paper describes the development of the AMBIANCE-Brief, an abridged version of the Atypical Maternal Behavior Instrument for Assessment and Classification, an observer rating scale which predicts insecure and disorganized attachment. Evidence is presented on the reliability and validity of assessments made with the AMBIANCE-Brief. The second paper describes the development and psychometric properties of the OK! package, an e-learning tool and interactive decision tree provided through a mobile application for assessment of parental sensitivity in child welfare practice. The paper discusses how co-creation with stakeholders was important so that outcomes can more easily be discussed with parents. The third paper describes the outcomes of a mixed methods study to adapt the Attachment and Behavioral Catch-up intervention program to the context of families of children with intellectual disability in South-Africa.

Conclusions: Discussion will focus on the implications of these studies for broader implementation of insights and methods delivered through attachment theoretical research as well as the implications of implementation frictions for the scientific research agenda.
Exploring attachment style, reflective functioning and mental health for pregnant women with substance use disorder

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Introduction and Aims: Adult attachment style and parental reflective functioning (PRF) have been associated with substance use disorders (SUD) and mental health. Although studies have examined relationships among these constructs for parents, none have considered them in pregnant women with SUDs. This study explores relationships among attachment style, PRF, mental health, and substance use to suggest intervention targets for pregnant/postpartum women with SUDs and their infants.

Methods: Baseline data were used from an RCT of an attachment-focused parenting intervention for pregnant women with SUDs. Self-report measures assessed attachment style (Adult Attachment Scale), mental health (Brief Symptom Inventory), and trauma symptoms (PTSD Checklist). The Pregnancy Interview was coded for RF. Preliminary bivariate analyses examined relationships among key variables.

Participants were 57 pregnant women (M age = 30.6 years, SD = 4.5; M week of pregnancy = 31, SD = 4.5) with extensive trauma histories and symptoms (51% + for PTSD), previous child welfare involvement (64%), histories of polysubstance use (93%), and PRF in the prementalizing range (M = 3.2, SD = 1.3); 39 % endorsed a fearful and 35% a secure attachment style.

Both secure and fearful attachment styles were associated with trauma symptoms (r = -0.33, p = 0.02; r = -0.41, p = 0.004, respectively) mental health difficulties (r = -0.47, p = 0.00; r = -0.54, p = 0.00, respectively), and marginally or not at all with years of polysubstance use (r = -0.25, p = 0.09; r = -0.15, p = 0.30, respectively). Prenatal PRF was associated with maternal age (r = -0.58, p = 0.000), number of children (r = -0.73, p = 0.000), and polysubstance use (r = -0.36, p = 0.003), but not with trauma symptoms or mental health. Attachment style and parental RF were not associated.

Conclusion: Given the differential associations of attachment and PRF with mental health, trauma, and substance use, next research steps should include multivariate models to ascertain optimal targets for prenatal parenting interventions.
Global Child-Parent Attachment Science through the Lens of Meta-Analytic Research: Looking Back and Planning Ahead

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Introduction: Bowlby’s crucial insights regarding the evolutionary value of attachment have provided a powerful theoretical model for understanding the nature of infants’ ties to their caregivers. The observations of Ainsworth and colleagues (Ainsworth et al., 1978) put the study of attachment on sound empirical footing through the development of a reliable paradigm for measuring attachment behavior. Since these seminal contributions, attachment theory has been instrumental in building up a large corpus of coherent evidence regarding the prevalence, causes, and consequences of different patterns of attachment over many decades. It is, therefore, timely to take stock.

Materials and Methods: In each talk, meta-analyses will be described, followed by considerations for future research and clinical applications.

Results: The first paper is a traditional meta-analysis describing the distribution of the four attachment classifications (secure, avoidant, resistant, disorganized) in the thousands of infants who have been observed in the Strange Situation Procedure and also examines whether distributions differ across risk contexts and geographical locations. The second paper is a traditional meta-analysis that contributes a more nuanced understanding of the key factors that moderate the association between maternal and paternal sensitive caregiving behavior and secure child-caregiver attachment. The third paper uses meta-analytic structural equation modeling to examine direct and indirect effects between child-caregiver sensitivity, mother attachment security, and child cognitive development. The fourth paper uses Individual Participant Data meta-analysis within a novel multiple-caregiver framework to test whether the presence of two secure attachments (with fathers and mothers) versus just one secure attachment provides a developmental advantage to the child.

Conclusions. All talks in this symposium have the potential to advance scientific understanding and spur new and novel research directions in development science. Our clinician-scientist discussant, Dr. Kristin Bernard, will place a concerted focus on the clinical implications of the symposium findings.
Preliminary Effects of Modified Attachment Biobehavioral Catch-up on Sensitive Caregiving in Mothers with Opioid Dependence

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Introduction: Sensitive caregiving, which involves following infants’ cues, is critical to infants’ optimal biological and socioemotional development. Infants who experience intrusive, rather than sensitive, caregiving are at risk for adverse outcomes such as poor biological and behavioral regulation, as well as increased risk for psychopathology (Abraham et al., 2021; Wagner et al., 2016; Wu & Feng, 2020). Certain populations of parents are at risk for insensitive, intrusive caregiving behaviors (Salo et al., 2010), and as such, early parenting interventions have been developed to promote responsive caregiving early on (Deans, 2020). In response to the opioid epidemic, the Attachment and Biobehavioral Catch-up (ABC) intervention (Dozier & Bernard, 2019) has been modified for mothers who are dependent on opioids and their newborns, with the aim of increasing sensitivity and decreasing intrusiveness during mother-infant interactions as early as the first weeks of the infant’s life. Aim: The current study aims to explore preliminary effects of the modified ABC (mABC) intervention on maternal sensitivity to non-distress and intrusiveness during a semi-structured play interaction. Materials and Methods: Thirty-seven women who receive medication assisted treatment (MAT) for opioid-dependence were randomized to receive either the mABC intervention (n = 22) or an active control intervention (n = 15) and completed a dyadic semi-structured free-play assessment when their infants were 6 months old. The interactions were behaviorally coded for maternal sensitivity and intrusiveness. Mothers in the mABC group displayed significantly less intrusiveness (t(35) = -2.81, p = .004) and marginally greater sensitivity (t(35) = 1.32, p = .098) than those in the control group. Conclusions: These preliminary data suggest that mABC displays promise in promoting maternal sensitivity and reducing maternal intrusiveness in this vulnerable population. Further exploration will be conducted as the study continues.

*Full references available upon request.
Attachment Networks to Mother and Father Predict Child Behavioral Problems: An Individual Participant Data Meta-Analysis

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Introduction and Aim of the study: An unsettled question in attachment theory and research is the extent to which children’s attachment relationships with mothers and fathers jointly predict developmental outcomes (van IJzendoorn et al., 1992). In this study, we used individual participant data meta-analysis to assess whether early attachment networks with mothers and fathers are associated with children’s internalizing and externalizing behavioral problems.

Material and Methods: Following a pre-registered protocol, data from 9 studies and 1,097 children (mean age: 28.67 months) with attachment classifications to both mothers and fathers were included in analyses. We used a linear mixed effects analysis to assess differences in children’s internalizing and externalizing behavioral problems as assessed via the average of both maternal and paternal reports based on whether children had two, one, or no insecure (or disorganized) attachments.

Results: Children with an insecure attachment relationship with one or both parents were at higher risk for elevated internalizing behavioral problems compared with children who were securely attached to both parents. Children whose attachment relationships with both parents were classified as disorganized had more externalizing behavioral problems compared to children with either one or no disorganized attachment relationship with their parents.

Conclusions: Across attachment classification networks and behavioral problems, findings suggest (a) an increased vulnerability to behavioral problems when children have insecure or disorganized attachment to both parents, and (b) that mother-child and father-child attachment relationships may not differ in the roles they play in children’s development of internalizing and externalizing behavioral problems.

Maternal mental health, parenting, and early child development in Latinx families participating in Child-Parent Psychotherapy

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Introduction and Aims: Globally, immigration pressures such as fear of deportation, limited support, and trauma symptomatology contribute to cumulative strains on parenting practices and ultimately impact young children's development. This quasi-experimental study used evaluation data to examine one program designed to mitigate these challenges by offering adapted evidence-based Child-Parent Psychotherapy with bilingual clinicians to Latinx families in one U.S. city.

Methods: Baseline and discharge data were used for analysis. Measures included (in Spanish or English): Protective Factors Survey, (PFS), Parenting Stress Index (PSI), Parental Reflective Function Questionnaire (PRFQ), Brief Symptom Inventory (BSI), Posttraumatic Stress Checklist (PCL), Devereux Early Childhood Assessment (DECA), and Migration Grief and Loss Questionnaire (MGLQ). T-tests were run to assess change from baseline to discharge.

The sample consisted of 55 mothers (mean age=30.6 years, SD=5.87) and their young children (mean age=32.9 months, SD=22.1) primarily from Central America (81.8%). Approximately half (52.7%) were never married, had no high school degree (54.5%), with incomes less than $24,999 (USD, 43.6%). Average lifetime reported traumatic events reported by the mothers was nine for themselves and two for their children.

Results showed positive changes in PFS concrete support (t=2.93, p=.005), PSI parental distress (t=-2.06, p=.04), PRFQ prementalizing (t=-.2.90, p=.006), caregiver mental health (BSI/GSI t=-2.67, p=.01; PCL, t=-4.24, p<0.001), child’s developmental initiative (DECA subscale; t=2.16, p=.04), and identity discontinuity, or feelings of uncertainty and confusion about oneself of the MGLQ (t=-2.71, p=.01). Effect sizes for change were small to medium (Cohen’s d=.28-.58).

Conclusion: Results suggest that protective factors, maternal mental health, trauma symptoms, parenting stress, reflective functioning/prementalizing, migration-related identity confusion, and child social-emotional development may improve over the course of this dyadic trauma-focused intervention with immigrant Latinx families. They are particularly promising and important given increased fear and isolation in immigrant communities due to the socio-political climate in the U.S.
Mental Health Outcomes of Children Born to Opioid Dependent Mothers

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Introduction: Increasing evidence suggests that exposure to opioids during pregnancy may alter the developing fetal brain and increase the likelihood of child behavior problems. But little is known about children’s longer-term mental health risks or how these develop.

Aims: To 1) compare the mental health outcomes of children born to women with an opioid use disorder in pregnancy relative to a regionally representative sample of non-opioid exposed children at ages 4.5 and 9 years, and 2) assess the extent to which early onset disorder predicted poorer mental health outcomes at age 9.

Methods: A cohort of 100 infants born to opioid dependent mothers was recruited around birth and studied to age 9-years alongside a comparison group of 110 non-opioid exposed children (retention=88%). At age 4.5, parents completed the Development and Wellbeing Assessment (DAWBA) interview. At age 9, parents and teachers completed the Behavioral Assessment System for Children (BASC-2). Mental health outcomes included externalizing (ADHD, conduct) and internalizing (anxiety, depression) disorders.

Results: By 4.5-years, over a third (36% v. 12%) of opioid-exposed children met criteria for a DSM-IV disorder, predominantly oppositional defiant/conduct disorder (OR=24.4), and ADHD (OR=10.4). By age 9, rates of mental health problems had increased with over half of exposed children experiencing problems (52% v. 18%). Similar to age 4.5, these were mostly externalizing (conduct and/or hyperactivity, OR=8.2) and attention problems (OR=7.1). These outcomes were not accounted for by other confounding factors. Early onset mental health disorder was a significant independent predictor of later psychopathology risk and severity, even after controlling for family social risk (p=.004).

Conclusions: Children exposed prenatally to opioids are at very high risk of preschool-onset externalizing mental health problems that persist and worsen with age. Early interventions to support these children and families is critical to reduce long term mental health morbidities and intergenerational risks.
Early Parenting Experiences of Children Born to Mothers with an Opioid Use Disorder

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Introduction: Pregnant women with an opioid use disorder (OUD) are a high-risk mental health and obstetric population. Limited data exist on the quality of their parenting and the home environments experienced by their children.

Aim of the Study: 1) To describe the early care placements of children born to women with an OUD from birth to 18-months. 2) To examine the parenting and home-life experiences of prenatally exposed children being raised by a) their biological mother and b) alternative caregivers relative to c) comparison control children.

Materials and Methods: A regional cohort of 92 prenatally opioid-exposed children were followed prospectively from birth to 18-months alongside a comparison sample of 106 non-opioid-exposed children. At age 18-months, a home visit assessment was undertaken, including parent interview, structured- and free-play parent-infant interaction, and later completion of the HOME. Video-recorded parent-infant interactions were subsequently coded by blinded raters on measures of maternal/caregiver warmth, emotional support, cognitive support, passivity, criticism, intrusiveness and dyadic interactional synchrony.

Results: By 18-months, 20% of opioid-exposed children were in out-of-home care. Relative to comparison mothers, biological mothers and alternative caregivers of opioid-exposed children were less warm, and less emotionally and cognitively supportive when interacting with their children (p<.05). Interactions were also less synchronous and in tune (p<.01). Biological mothers of opioid-exposed children engaged in higher rates of negative (intrusive, critical) parenting behaviours than other groups (16% vs. 6% for both alternative caregivers and controls, p<.05). Whereas alternative caregivers had the lowest observed levels of warmth, support, and synchrony, and highest rates of passivity. Finally, the home environments of opioid-exposed children living with their biological parents were the least stimulating and enriched (p<.001).

Conclusions: Children born to mothers with an OUD experience less positive parenting and a less enriched home-life than their same-age peers'. Assisting parents/caregivers in providing supportive and stimulating environments could improve outcomes for opioid-exposed children.
Parental and Infant Risk: Contributions to Child Social Emotional Adaptation in Four Longitudinal Studies

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The studies in this symposium focus on unique ways of conceptualizing, measuring, and analyzing parent and infant risk factors in relation to child development in two countries. The parent risk factors of interest include maternal mental health (depression and anxiety), history of childhood adversity, and contexts that are currently considered as potentially adverse for children (e.g., parental substance use, parental incarceration, etc.). The infant risk factors include prematurity and sensitivity to environmental stimuli. Contextual factors are also considered across the studies, including the socioeconomic context and other social determinants of health.

Although all the studies are longitudinal, diverse methodologies are represented in samples assessed, measures used, and analytic methods. Three studies are based in the USA and one in Italy, and one of the studies analyzes data from a nationally representative sample. Two studies include longitudinal assessments of high risk infants and their families across multiple years. Measures include observations of infants and infant-mother interaction (microcoding of parent-child interactions during play and the Still Face Paradigm and global assessments of parent-child interaction), standardized direct assessment of children, parent-report questionnaires, and physiological data. The studies use different analytic approaches, including latent profile analysis, multiple linear regression, and time series analyses. Child outcomes include infant social emotional skills and interactional synchrony in the first year of life; internalizing and externalizing behavior problems at age 3; symptoms of anxiety and depression at age 5; and self-regulation skills and academic achievement at kindergarten (5-6 years).

The studies converge in their findings of the importance of multiple risk factors for young children’s social emotional outcomes, especially the accumulation of (or interaction of) adverse childhood experiences and anxiety/depression in mothers, and very preterm birth and environmental sensitivity in infants. The findings have implications for early screening and identification of infant-mother dyads who may benefit from intervention.
Introduction-
Interventions that address child behaviors and support foster caregivers are key to promoting stable foster placements. The most effective interventions for improving child behavior problems and supporting parents are parent management training programs (PMTs), which teach caregivers skills to better manage their children’s behaviors.

AIM of the Study-
Our aim is to investigate the effect of participating in Parent-Child Care (PC-CARE), a brief dyadic PMT on young children’s placement stability in new foster homes and examine mechanisms of change.

Material and Methods-
Participants include 156 foster caregivers (4% male) who agreed to participate in PC-CARE with their newly placed foster children (49% male); 61% completed services. Children averaged 27.36 months (SD = 10.2) and were ethnically diverse: 28.2% White, 38.5% Black, 21.2% Latinx. Children experienced at least one traumatic event; 42% experienced 3-5 events. Most caregivers were non-relative foster parents (85%) and averaged 47.4 years of age (SD = 13.2).

PC-CARE services consisted of a 1.5-hour pre-treatment session and six weekly one-hour intervention sessions, occurring in the caregiver’s home. Caregivers completed assessment measures and participated in a 12-minute observation of the caregiver-child interaction before and at the end of treatment. Therapists coded caregiver’s verbalizations according to the PC-CARE Coding Manual.

Child Protective Services provided children’s placement information six months after they terminated services.

Results of a stepwise binomial logistic regression examining effects of treatment-related gains, caregiver’s knowledge of child’s past routines and family completion of PC-CARE revealed that caregiver’s knowledge of the child’s family background and treatment completion significantly predicted placement stability.

Conclusions-
Results suggest that perhaps greater understanding of the child and their routines and participating in a parenting intervention may contribute to developing a commitment to keep a child in a foster home. Findings will be discussed with respect to their implications for developing children’s protective factors.
“A Window of Opportunity”: Implementation of Trauma-Informed Care in Pregnancy to Improve Child Health Outcomes

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Objectives: Adverse childhood experiences (ACEs) are known to increase the risk for poor maternal and child health outcomes. There is limited evidence on whether trauma-informed care (TIC) approaches are associated with improvements and/or detriments in maternal-infant health outcomes. The current study evaluated whether the implementation of a trauma-informed care (TIC) approach in a low-risk maternity clinic was associated with differences in pregnancy health risk and infant birth outcomes, as compared to standard care.

Method: Using retrospective chart review methodology, demographic and health data were extracted from the medical records of 601 women who received prenatal care at a low-risk maternity clinic prior to (N=263) and after (N=338) the implementation of a clinic-wide TIC initiative in July 2017. Cumulative risk scores for maternal health prior to pregnancy, maternal pregnancy health, and infant birth outcomes were calculated from patient medical records.

Results: There were no significant differences in maternal age, socioeconomic status, minority status, marital status, previous birth history, or financial stress for women in the TIC versus standard care group. Cumulative risk scores for maternal pregnancy health and infant birth outcomes were completed by health professionals. Results: Using independent chi-squared tests, the proportion of women without pregnancy health risks did not differ for women from before to after the implementation of TIC, $\chi^2(2, 601) = 3.75, p = 0.15$. Infants of mothers who received TIC were less likely to have a health risk at birth, $\chi^2(2, 519) = 6.17, p = 0.046$.

Conclusions: The implementation of a trauma-informed care approach, which included asking about maternal ACES, in the absence of intervention, was associated with modest changes in infant birth outcomes, but not maternal health outcomes. Future research that examines other potential benefits of TIC approaches and asking about maternal ACEs, such as improvements in maternal mental health, are needed.
Feasibility and Application of the AMBIANCE-Brief Measure in Community Settings

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INTRODUCTION: Disrupted caregiving behavior has been identified as the most salient indicator of children’s disorganized attachment. There has been a growing need for feasible observational tools of disrupted parenting that may be applied in clinical practice. However, disrupted behavior as assessed by the Atypical Maternal Behavior Instrument for Assessment and Classification (AMBIANCE; Bronfman, Madigan, & Lyons-Ruth, 2009) is time-consuming to learn and administer, as is often true of most empirically based observational tools. In an effort to bridge the research-to-practice gap, the AMBIANCE-Brief (Madigan, Bronfman, Haltigan, & Lyons-Ruth, 2018) was developed to provide a clinically useful, feasible, and psychometrically sound assessment of disrupted parenting behavior for practitioners. The AMBIANCE-brief has demonstrated reliability and validity in laboratory settings as well as feasibility for use in community settings.

AIM: AMBIANCE-brief trainings have been underway with clinicians and researchers across the globe; however, little is known about how it is being used in practice and perceptions of the measure among those using it. This study investigated the perceived acceptability, feasibility, usefulness, and sustainability of the AMBIANCE-brief among practitioners and researchers.

MEASURES AND METHODS: Clinicians and researchers (N = 81) who attended a virtual AMBIANCE-brief training from October 2020 to October 2021 completed an online survey.

RESULTS: Clinicians reported that they primarily used the AMBIANCE-Brief for case conceptualization (65%). Additionally, 94% of the clinicians agreed that the AMBIANCE-brief is relevant to their clinical practice, 97% agreed that it is useful for their clinical work, 75% agreed that the AMBIANCE-brief is feasible to implement into their clinical work, and 59% found it easy to incorporate into their treatment planning with clients.

CONCLUSIONS: Findings from this study suggest that the AMBIANCE-brief may be acceptable, feasible, and useful for practitioners and researchers. Barriers remain for the implementation of this assessment tool into practice, which will be discussed.
Behavioural adjustment of children exposed prenatally to methamphetamine: Impact of maternal distress and home environment

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Introduction: Maternal substance use during pregnancy and postnatally often co-occurs with mental distress, which can adversely impact the home environment and parenting experiences for children. There is limited research on the effects on children’s behaviour as they transition to school.

Aim: 1) To examine the extent of child behavioural problems at age 4.5 years in a large cohort of children exposed prenatally to methamphetamine and alcohol. 2) characterize their parenting and home environments, 3) assess the extent to which home environmental factors (maternal mental and parenting distress) explained child outcomes.

Methods: Data were collected from mothers enrolled in the prospective, longitudinal New Zealand Infant Development, Environment And Lifestyle Study (n=221), using Maternal Lifestyle Interview at birth. Families were followed-up at 1, 12, 24, 30, 36 and 54 months. Child behaviour was assessed using peer, conduct and total scores from parent-reports on the Strengths and Difficulties Questionnaire. Antecedent family environment measures spanned maternal mental health (Substance Use Inventory and Brief Symptom Inventory), parenting (Child Abuse Potential Inventory, Parenting Stress Index) and the caregiving environment (Home Observation Measurement of the Environment (HOME) scale).

Results: Children prenatally exposed to alcohol and methamphetamine had higher peer, conduct and total behavioural problem scores than non-exposed children (p=.02; p<.05; p=.03). Heavy alcohol use over time, child abuse potential, HOME environment, mothers’ mental health and parenting stress were significant predictors of higher total behavioural problems (R2=.39, p<.001). These factors fully mediated associations between prenatal drug exposure and outcome.

Conclusions: Children exposed to alcohol and methamphetamine during pregnancy are at increased risk of behavioural problems. This association is largely explained by post-natal maternal mental distress, parenting behaviour and the poorer quality of these children’s home environments. Early interventions to support parenting and mental health for families with substance use issues is critical to improving outcomes for these children.
Parent Sensitivity and Child Attachment: A Meta-Analysis Revisited

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INTRODUCTION: Sensitive caregiving behavior is considered to be a central determinant of secure child-caregiver attachment. However, significant heterogeneity in effect sizes exists across the literature, and sources of heterogeneity have yet to be explained.

AIM: Thus, it is timely to conduct a comprehensive meta-analysis of studies amassed to date, which is the focus of the current study.

METHODS: A total of 159 studies (202 effect sizes, N = 21,483) with mother-child dyads and 22 studies (23 effect sizes, N = 1,626) with father-child dyads were included in this meta-analysis.

RESULTS: A positive association between maternal sensitivity and child attachment security was observed (r = .26, 95% CI [.22, .29]), which was similar in magnitude to paternal sensitivity and child attachment security (r = .21, 95% CI [.14, .27]). Maternal sensitivity was also negatively associated with all three classifications of insecure attachment (avoidant: k = 43, r = -.24 [-.34, -.13]; resistant: k = 43, r = -.12 [-.19, -.06]; disorganized: k = 24, r = -.19 [-.27, -.11]). For maternal sensitivity, associations were larger for boys (vs girls) and in studies that used the Attachment Q-Sort (vs the Strange Situation), used the Maternal Behavior Q-Sort (vs Ainsworth or Emotional Availability Scales), had strong (vs poor) interrater measurement reliability, had a longer observation of sensitivity and had less time elapse between assessments. For paternal sensitivity, associations were stronger in older (vs younger) fathers and children.

CONCLUSIONS: These findings confirm the importance of both maternal and paternal sensitivity for the development of child attachment security and add understanding of the methodological and substantive factors that allow this effect to be observed.
Maternal Drug Use in Pregnancy: Impacts on Subsequent Parenting and Child Development

Professor Lianne Woodward, Dr Samantha Lee, Dr Carolien Konijnenberg, Dr Suzanne Stevens, Professor Trecia Wouldes

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Introduction: The World Drug Report 2022 reported that there were 284 million adults worldwide using illicit drugs in 2020 (UNODC, 2022). This represents a 26% increase in global drug use since 2010. As a result, increasing numbers of infants are now being exposed to drugs during pregnancy, raising serious concerns for foetal and child development, as well as the longer-term impacts of parental drug use on parenting and family functioning. Yet existing data is limited and largely confined to analyses of registry and short-term follow-up studies of neonatal and infant outcomes.

Aim: This symposium addresses this gap, sharing novel and important findings from three international longitudinal studies examining the family circumstances and longer-term developmental outcomes of children born to women with a substance use disorder during pregnancy. Studies include: 1) the New Zealand (NZ) Canterbury Methadone in Pregnancy study (Lianne Woodward, Samantha Lee); 2) the Norwegian Women in OMT and their Children (GOBLAR) study (Carolien Konijnenberg; and 3) the NZ-US Infant Development, Environment, and Lifestyle (IDEAL) study (Trecia Wouldes, Suzanne Stevens).

Methods: The symposium will consist of five oral presentations followed by a panel discussion and Q&A relating to study findings, methodological considerations and implications for the clinical management and care of these infants and their families beyond the neonatal period.

Results: Collectively these presentations will demonstrate the very high-risk nature of this obstetric and paediatric population. Also highlighted is the importance of considering not just the effects of adverse prenatal exposures but also the complex and often unstable caregiving environments experienced by these children. Adverse child outcomes span cognitive, executive functioning, conduct, ADHD and sensory processing.

Conclusions: Presentation findings will provide valuable information for researchers, practitioners and policy-makers seeking to better understand the complex needs of these infants and their families, and improve clinical efforts to support them.
The role of parental gender and caregiving involvement in different family contexts

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Recent evidence documented the influence of parental involvement in childcare on parenting sensitive responsiveness and quality of parent-child relationship. However, parenting research has been traditionally dominated by maternal role and heterosexual couples in which the gendered division of childcare make it difficult to disentangle the difference between the role of sex and involvement.

Thus, this symposium aimed at investigating the role of gender and involvement in childcare on parenting across different family contexts, including same-sex males and females couples and heterosexual couples with different degree of psychological wellbeing. We included five studies that cover different perspectives, from parental neurobiology and cognitive processing to parental behaviors and mental health. Methodologies encompasses fMRI, experimental tasks, standardized observations, and self-reported questionnaires, often with a multi-method approach.

In the first contribution, Gemignani et al., investigates the role of experience of care on attentional bias toward infant faces in families of same-sex mothers.

Next, Carone and Lingiardi use a longitudinal study design involving lesbian and gay parent families to examine the longitudinal associations between parental sensitivity and child attachment security, by parent gender and caregiving roles.

In the third study, Rigo et al., aim at evaluating the influence of quality of caregiving involvement on neurobiological correlates of responsiveness to infant vocalizations in same-sex mothers. The fourth contribution is a longitudinal study by Pinto et al., that emphasizes the contribution of division of labour (in terms of coparenting relationship) on maternal mental health and infant-self regulation.

The last presentation, a study by Perzolli et al., explores affective and cognitive aspects of parent-child interactions comparing mothers and fathers of preschoolers with autism.

These findings increase the knowledge on parental involvement in childcare, understood as a factor that, beyond gender role, may promote adaptive human caregiving and in turn child healthy development.
Associations between dyadic behavior and maternal mental disorders – a systematic review and meta-analysis

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Mental disorders constitute a risk factor for dysfunctional parenting. Developing effective support for parents with mental disorders is therefore highly relevant to empower this vulnerable group and prevent the transmission of mental disorders. Considering the variety of symptoms and potentially different effects of disorders on areas of social functioning, it seems reasonable to assume distinctive impacts on dyadic behavior domains. An improved understanding of specific impairments or strengths associated with specific mental disorder (groups) might thus help to tailor parent programs.

To our knowledge, a detailed investigation of the association between different mental disorders and dyadic behavior domains has not yet been conducted. To address this research gap, we performed a systematic review and included studies with at least a two-group-design, namely one mental disorder group and another group with a different mental disorder or a control group without any (current) mental disorder. A second criterion for inclusion was the use of behavioral observation. We compared groups of disorders regarding their observed dyadic behavior. We expect significant differences between mental disorder (groups) and control groups in terms of maternal dyadic behavior, and that specific mental disorders are associated with specific dyadic behaviors (e.g. intrusiveness or sensitivity). Furthermore, we hypothesize that symptom severity might have a greater influence on dyadic behavior than the type of mental disorder.

We will present the first results on the associations between specific mental disorders and dyadic behavior domains. We screened 3671 studies, conducted full text review of 988 studies and are currently in the process of data extraction.

Additional knowledge about (non-) significant associations between mental disorder types and dyadic behavior domains (e.g., intrusiveness or sensitivity) can help to decide if parenting programs for mothers with mental disorders may benefit either from a more disorder-specific tailoring or a more general approach.
Mother-infant bio-behavioural synchrony and risk: Maternal well-being, infant environmental sensitivity, and dyadic synchrony

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Introduction. Parent–child dyadic synchrony occurs at the behavioural, physiological, and neural levels and refers to a type of interaction that is mutually regulated and reciprocal. It is a fundamental experience for infants that promotes infant emotion regulation development. Several maternal and infant individual factors are hypothesized to affect the quality of dyadic synchrony, with cascading effects on infant development.

Aims. This study aimed to explore infant emotion regulation as related to bio-behavioural dyadic synchrony in Italian infant-mother dyads with highly/low stressed mothers and with highly/low sensitive infants.

Material and Methods. Infant and maternal (n=50) behavioural (affective behaviours) and physiological (RSA values) simultaneously functioning were collected at each 20sec interval during the Still-Face Paradigm when infants were 3 and 6 months. Behavioural and physiological synchrony and infant behavioural and physiological emotion regulation were computed. Mothers reported about their aversive childhood experiences (ACE scores) and levels of stress. The Highly Sensitive Infant rating system was administered to infants to evaluate environmental sensitivity.

High stress and high ACE scores were associated with low behavioural and physiological synchrony during the play and still-face phases, with cascading negative effects on infant’s emotion regulation abilities. Infants’ environmental sensitivity mediated the negative effect of maternal ACEs and stress on dyadic synchrony. Dyads with highly sensitive infants and highly stressed mothers showed the lowest synchrony values and the lowest infant emotion regulation abilities. These effects were present concurrently and longitudinally and were stronger for physiological outcomes than for behavioural ones.

Conclusions. Childhood adversity and co-occurring stress have detrimental effects on mothers’ abilities to attune with their infants both behaviourally and physiologically, with negative consequences for infant emotion regulation skills. These effects were stronger if the infant presented a potential vulnerability such as high sensitivity to environmental stimuli. Findings have implications for developmental research and for preventive clinical interventions.
Introduction: In heterosexual parent families maternal, but not paternal, sensitivity is a significant precursor of child attachment security. In this family type, however, parent gender and caregiving role likely conflate, with mothers usually being the primary caregivers. Sexual minority parent families offer the unique opportunity to disentangle the effect of caregiving role from parent gender on sensitivity. Yet, to date, no research on this issue has involved these families. Furthermore, given the belief that mothers are fundamentally better suited for parenting than fathers and that surrogacy conception is detrimental for child development, concerns have been expressed particularly against parenting by gay fathers and, as a result, the attachment security of their children.

Aim of the study: This study compared parental sensitivity and child attachment security in lesbian and gay parent families through assisted reproduction. Also, it investigated whether the longitudinal associations between parental sensitivity and child attachment security varied by parent gender and/or caregiving role.

Material and Methods: 34 Italian lesbian mother families through donor insemination and 31 Italian gay father families through surrogacy were assessed for caregiving roles, parental sensitivity, and child attachment using the Who Does What? Questionnaire, the Maternal Behavior Q-Set and the Attachment Q-Sort, respectively, during two home visits at each time point (t1: Mage = 3 years; t2: Mage = 4 years). In each family, both parents and their first-born preschool child participated (52% females).

Conclusions: Both parental sensitivity and child attachment security were similar to normative scores. However, both the primary caregiver showed greater sensitivity and children displayed greater attachment security to their primary caregiver. Finally, the strength of the association between sensitivity and attachment security by caregiving role was similar across family types. The results emphasize the importance to disentangle the caregiving role from parent gender while examining child-parent attachment across diverse families.
Do caregiving helplessness and reflective functioning predict parental embodied mentalization in low-SES Turkish mother-toddler dyads?

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INTRODUCTION: While caregiving helplessness, loss of control and helplessness in child care, may act as a risk factor for positive mother-child relationship (George & Solomon, 2011), reflective functioning or metallization (Bateman & Fonagy, 2010; Rutherford, 2013) can play a protective role. However, in the literature reflective functioning is mainly measured by either self-report measures or interviews. AIM OF THE STUDY: Thus, in the present study we aimed to reveal whether self-report maternal caregiving helplessness and reflective functioning can predict parental embodied mentalization (PEM; Shai & Belsky, 2011)), an observational coding scheme focusing on kinesthetic maternal behaviours in relation to their children, in a relatively high-risk sample of Turkish mother-toddler dyads. METHOD: One-hundred-fifteen mothers (MeanAge= 30.22; SD= 4.79) of toddlers (MAge= 23.27; SD= 6.79; AgeRange= 11-38 months; Girls= 51) filled out a pack of questionnaires including the Caregiving Helplessness Questionnaire (George & Solomon, 2011) and the Parental Reflective Functioning Questionnaire (Luyten, et al., 2009) before conducting home observations. Ten-minute free-play sessions during home observations were recorded and then coded for PEM (Inter-rater reliability coefficient > .80). CONCLUSIONS: Preliminary findings (n=30) showed that self-reported maternal certainty about child’s mental states in reflective functioning was positively associated with PEM (r= .59, p<.05). However, seeing the child as the caregiver, a subscale of caregiving helplessness questionnaire, was negatively associated with maternal PEM scores (r= -.33, p<.05). The preliminary findings demonstrated that having a clear understanding about child’s mind state can be helpful for mothers in reading children’s mind states and acting according during play. On the other hand, not knowing the child’s capacity and expecting different responsibilities can reflect on mothers’ interactions with their toddlers.
Interrupting the intergenerational transmission of risk: Initial results of a behavioral-psychotherapeutic, mindfulness-based intervention during pregnancy

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Introduction: Adverse prenatal environmental factors increase the risk of birth complications and postpartum child developmental problems. Maternal stress or depression and alcohol or tobacco use during pregnancy are associated with altered child emotional/behavioral outcomes and underlying neurobiological mechanisms (i.e., intrauterine fetal testosterone exposure, child cortisol-stress-system, immune disturbances). These findings highlight the need for low-threshold, tailored interventions supporting pregnant women to interrupt the intergenerational transmission of risks. To clarify the underlying mechanisms of action, appropriate biomarkers and adopting a longitudinal perspective of early child development are essential.

Aim: With this in mind, we examine whether a mindfulness-based and cognitive-behavioral therapy-based psychotherapeutic and mainly App-based intervention program in pregnant women, designed to reduce stress and substance use, affects second-to-fourth-digit-ratio (2D:4D; a biomarker for prenatal testosterone exposure) and mental health in infants.

Methods: In this monocentric, prospective, controlled and investigator-blinded MINDFUL/PMI study, part of the “IMAC-Mind” consortium (“IMAC-Mind: Improving Mental Health and Reducing Addiction in Childhood and Adolescence through Mindfulness”), 146 pregnant women are randomized to receive either a behavioral-therapeutic, mindfulness-based program (intervention-group) or general information about pregnancy (control-group) via App on their smartphone complemented by three personal contacts. Maternal stress and substance use are measured in standardized self-report questionnaires. At 11-12 months, child-related outcomes are assessed using a multi-level approach combining biomarkers (2D:4D), mother-report questionnaires (self-regulation; behavior problems), and developmental tests (cognition; language).

Results: Data collection is still ongoing. Initial results including adherence during the COVID-19 pandemic are reported alongside the presentation of the program.

Conclusion: Study results indicate the extent to which a mindfulness- and App-based intervention can be implemented during pregnancy and reduce prenatal risks as well as associated adverse effects on child development. Thus, the understanding of the importance of intrauterine environmental factors for early child development is expanded, and important approaches for prenatal prevention and intervention are identified.
Fathers’ depressive and anxiety symptoms at six months postpartum: prevalence, associated variables and risk factors

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Introduction: Childbirth represents a critical and potentially stressful experience not only for mothers, but also for fathers. Literature highlights that a relevant percentage of new fathers reports anxiety and depressive symptoms. Different factors can impact on their psychological status, representing risk or protective factors for fathers’ individual and relational wellbeing.

Aims: The aim of this contribution was to investigate fathers’ anxiety and depressive symptoms at 6 months postpartum, identifying their prevalence and associated variables, as well as the main risk and protective factors during pregnancy. Ninety-four primiparous fathers completed at two assessment points (third trimester of pregnancy and six months postpartum) a questionnaire composed of an anamnestic sheet (socio-demographic and medical-obstetric information) and the following scales: EPDS, STAI, MSPSS, DAS and PSI.

Results: Findings revealed that 3.9% of fathers report clinically significant depressive symptoms at six months post-partum, whereas 84% and 71% show respectively trait and state anxiety symptoms above 40 points. Furthermore, overall, post-partum fathers’ psychological anxiety and depressive symptoms were predicted non only by their own psychological status, and perceived support and couple adjustment during pregnancy, but also by their partners’ psychological wellbeing.

Conclusion: These results confirm the predictive role of pregnancy individual and relational variables on fathers’ postpartum well-being, also showing an interdependence between partners.
Attachment and social-emotional development in challenging caregiving contexts

Ms Julia Festini¹, Dr. Ina Bovenschen¹, Dr. phil. Sandra Gabler¹, Nino Jorjadze¹, Miss Raquel Corval¹, Professor Gottfried Spangler¹
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Disruptions in early caregiving and adverse childhood experiences are a substantial risk for attachment problems and maladaptive social-emotional development. In this symposium, we present findings from various samples with challenging caregiving conditions and focus on parental and child factors.

Firstly, Ina Bovenschen will report results from a longitudinal study of adopted children. The study examines the role of pre-adoptive adversity and post-adoption factors for symptoms of reactive attachment disorder (RAD) and disinhibited engagement disorder. Both early adversity and adoptive parents’ stress regulation predicted symptoms of disordered attachment.

Subsequently, Nino Jorjadze presents results regarding the prevalence of and determinants for attachment security and reactive attachment disorder symptoms in Georgian foster children. The study compared two groups of foster children (one with preceding institutional care, and one with preceding home care) and a control group. Findings from both foster care samples indicated a heightened prevalence of attachment disorder symptoms and lower attachment security.

Raquel Corval shows the contribution of genetic and environmental factors to RAD in institutionalized and family-reared preschool children. She investigated whether an oxytocin receptor (OXTR) moderated the effect of parental deprivation on attachment disorder symptoms.

Julia Festini and Sandra Gabler will show findings from an adolescent sample with early adverse childhood experiences (including caregiving disruptions). Youths in foster families report diminished social support and elevated strain in social relationships compared to adolescents living in their biological families.

Lastly, Gottfried Spangler reports results from longitudinal studies examining specific consequences of proximal and distal risk factors in biological families (such as social-economic hardship or family conflict) with a focus on parenting behavior as a mediator.

The discussion integrates the results and aims to highlight the crucial role of supportive caregiving environments in light of adverse childhood experiences. Potential implications for the promotion of resilience in adverse caregiving environments will be derived.
Becoming fathers: interplay among family-level risk and protective factors and implications for perinatal mental health

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Overall abstract of symposium content and list of suggested speakers - Transition to parenthood represents a complex and challenging process that can result in increased vulnerability to mental health problems, with consequences for couple relationship, quality of parenting, child development, and the family system. Although it seems evident that the entire family is involved, most of the research in the field has focused pre-eminently on mothers, neglecting fathers, and within a dyadic perspective. With these premises, the symposium aims to explore the dimensions of transition to fatherhood, considering its specificity by a multidimensional perspective, expanding the focus on family relations and well-being indicators during the perinatal period.

List and order of suggested speakers:
1 - Sechi, Vismara, Fadda, Lucarelli will examine the specific characteristics of fathers' and mothers' antenatal representations about parenthood, and their relation with couple adjustment during pregnancy until 3 months postpartum.
2 - Molgora, Bonazza, Fusar Poli, Saita will investigate primiparous fathers’ anxiety and depressive symptoms at 6 months postpartum, identifying the main risk and protective factors at individual, relational and psychosocial level during pregnancy.
3 - Rollè, Trombetta, Paradiso, Santoniccolo, Prino will investigate, in the context of twin pregnancy, the relation among paternal affective states, levels of parenting stress and twins’ negative affectivity, examining potential differences in the perception of infant temperament between fathers and mothers.
4 - Giannotti, Agostini, Terrone, Baldoni will present psychometric properties of the Perinatal Assessment of Paternal Affectivity (PAPA), an empirical tool specifically developed for screening perinatal depressive and affective disorder in fathers, also including preliminary findings on mothers.

This proposal is presented by 2 authors: Francesca Agostini, main presenter, will introduce each contribution underlining its relevance to the main topic; Laura Vismara, co-presenter/discussant, will reflect on the symposium's empirical and clinical implications, fostering exchanges among colleagues and participants.
Early caregiving disruption and relationship qualities: A comparison between adolescents in foster and biological families

Ms Julia Festini\textsuperscript{1}, Dr. phil. Sandra Gabler\textsuperscript{1}, Professor Gottfried Spangler\textsuperscript{1}
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Introduction: The placement in foster care in early childhood can result in a multitude of challenges for child development. Both adverse experiences in the birth family and multiple placement changes lead to increased social-emotional problems in foster children. Coincidentally, their ability to form and maintain new relationships can be impaired. To date, there is little research on the effects of early caregiving disruption on the mastery of developmental tasks in later life (i.e. adolescence).

Aims: This study investigates the influence of early disruption in the caregiving environment through a placement in foster care on family and peer relationship quality in adolescence.

Methods: The sample comprises 22 adolescents between 14 and 17 years of age. Half of them (n=11) were placed in foster care in early childhood. Adolescents reported experienced support and negative interactions in their relationship to parents, foster parents and peers in the Network of Relationships Inventory (NRI-BSV). The Adolescent Attachment Questionnaire (AAQ) measured attachment-adjacent qualities in adolescents’ relationships to caregivers.

Results: First analyses indicate that adolescents placed in foster care report diminished social support and elevated strain in social relationships compared to adolescents living in their biological families.

Conclusion: Results indicate that adolescents in foster care make detrimental experiences in their social life and are impaired in their ability to profit from social support. Hence, special attention to this developmental task should be paid in prevention and intervention for foster adolescents.
The role of parenting and culture in early development

Professor Maria-Pia Santelices\textsuperscript{1,2}, PhD Diana Gómez\textsuperscript{2}, María Josefina Escobar\textsuperscript{6}, Dr Francisca Sofía Pérez Cortés\textsuperscript{1,3}, PhD Cecil Mata\textsuperscript{2,4,5}, Mss Ana Maria Gallardo\textsuperscript{2}

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Introduction: Early interactions are considered fundamental not only for forecasting future developmental variables, but also as an opportunity for early detection and intervention. But caregiver-child interactions can only be understood by taking into account the contextual factors in which the relationship develops. This symposium will focus on five studies that evaluate how parenting is related to children's outcomes, and how different elements could influence the quality of significant caregiver-child interactions.

Methods: Presentation 1 describes a longitudinal assessment on the relevance of parental interactions and temperament on children's social-emotional development between 12 and 30 months of age. Presentation 2: analyzes the relationship between the chronic stress syndrome (parental burnout) experienced by parents of children aged 3 to 5 years, and its impact on parental competencies. Presentation 3: reports advances in the validation and dissemination of the perinatal version of the Perinatal Assessment of Paternal and Maternal Affectivity Scale (PAPA and PAMA) in the Chilean population. Presentation 4: presents a multimethod, cross-cultural study to assess self- and co-regulation in German and Chilean parent-child dyads during early childhood. Presentation 5: shares the results of a qualitative research study focused on parental distress, social support and self-efficacy perception in Latin American immigrant women.

Conclusions: The results show that both parental and child characteristics are relevant when assessing child development, and contextual variables such as stress, culture and migration processes could affect parenting skills and practices. Findings from the different presentations contribute to the discussion on the relevance of early interactions and the importance of addressing parenting from a culturally sensitive perspective.
Association between early and actual care experiences and attention to infant faces in same-sex mothers

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Introduction: A face of an infant constitutes a highly salient cue that captures the attention of mothers, eliciting nurturing behaviors which in turn promote the attachment development. However, maternal characteristics that modulate the attention to infant faces have not been fully clarified.

Aim of the study: We examined the attentional bias to infant and adult faces in a sample of same-sex mothers, and whether the attention bias varied in relation to both past experiences of care (mental representations of care built during childhood) and actual experiences with their baby.

Material and Methods: We implemented a modified Go/no-Go task to compare the effect of infant and adult faces in retaining attention in a sample of same-sex mothers (N=67). We measured mothers’ experiences of maternal and paternal care during childhood, and the actual engagement with childcare. Response times elapsing from stimulus display onset until the response on Go trials were transformed into logarithms and analyzed via linear mixed-effects models. Overall, infant faces recruited more attention compared to adult faces, eliciting slower response times (β = -0.01, SE = 0.002, t = -8.505, p < .01). The attentional prioritization of infant faces varied in relation to the amount of involvement in childcare, that is, more involved mothers allocated more attention (slower response times) toward infant compared to adult faces (β = -0.0005, SE = 0.00008, t = -6.021, p < .01). No effects of the early experiences of maternal and paternal care were found.

Conclusion: Extending previous results mostly confined to biological different-sex parents, we found that attention bias to infant faces in same-sex mothers may be associated with the actual experience of caregiving. As a final remark, the inclusion of different family forms is recommended, both methodologically and conceptually, to uncover potential factors contributing to individual variations in parents’ attention to infant cues.
Infant’s Regulatory Problems, Parental Perinatal Mental Health and the Quality of the Parent-Infant Relationship

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INTRODUCTION The prevailing emphasis on the importance of early intervention in improving both parental functioning and fostering secure attachment relationships in young children support the clinical need to detect very early risks for parents and babies. Attachment theory is the buzzword in parenting guides and professional publications, and risk to the child’s attachment development is widely used as the threshold for early intervention. Given the severe impact of inaccurately diagnosed attachment disturbances on the child’s wellbeing, the valid assessment of the quality of the early parent-infant relationship is crucial. This is particularly relevant during the ongoing pandemic which specifically burdens young families.

METHOD Based on the assessment of peripartal mental health based on self-report questionnaires such as EPDS, STAI, IES-R, ECR and PBQ this pilot study at the Baby Clinic in Hamburg, Germany - an outpatient early intervention service - evaluates parental postpartum depression, anxiety and traumatic experiences at birth, parental mentalizing capacities and their experience of bonding to their baby. The infant’s affective regulation capacities as well as its regulatory problems are evaluated. The impact of parental mental health and the infant’s capacity of state and affect regulation on the quality of the parent-infant relationship is evaluated based on a psychoanalytic understanding of the parent-infant relationship, its crucial importance for the infant’s emerging self, assessed by using the Parent-Infant Relational Assessment Tool (PIRAT) Global Scales (Broughton, Hommel, the Parent-Infant Project, 2016; Hommel, 2018), conceptualized at the Anna Freud Centre in London, the PIRAT was developed and validated by the first author.

CONCLUSIONS The data supports the relevance of a psychodynamic assessment of relational disturbance in the first year in combination with standard self-report questionnaires to screen for parental mental health in order to securing both parental functioning and fostering secure attachment relationships in young children by an early intervention.
Coparenting quality moderates the impact of mother’s prenatal depressive symptoms on infant self-regulation

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Introduction: Coparenting refers to the mutual support and engagement of both parents in child-rearing. It is a major family process associated with parental involvement and parenting. As a development-enhancing or a risk-promoting environment, coparenting may shape the impact of mother’s prenatal depressive symptoms on infant self-regulation.

Aim of the study: This study aimed to analyze the moderator role of positive and negative coparenting in the impact of mother’s prenatal depressive symptoms on infant self-regulation at 3 months.

Material and Methods: A sample of 103 primiparous couples (N = 206 parents) were recruited at the 1st trimester of pregnancy. Mothers reported on depressive symptoms at the 1st trimester of pregnancy, and both parents reported on depressive symptoms, coparenting, and infant self-regulation at 2 weeks and 3 months postpartum.

Conclusions: Results indicated that higher levels of mother’s prenatal depressive symptoms and higher levels of mother and father’s report of negative coparenting at 2 weeks postpartum predicted lower infant self-regulation at 3 months. Negative coparenting at 2 weeks postpartum accentuated the impact of mother’s prenatal depressive symptoms on infant self-regulation at 3 months. The results support a view of negative coparenting as a risk-promoting environment that can accentuate the adverse impact of mother’s prenatal depressive symptoms on infant self-regulation. Infants in families with mothers with elevated prenatal depressive symptoms and with high levels of negative coparenting may be at high risk of self-regulation problems.
How Do Fathers Interact and Talk with their Preschoolers with Autism?

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Introduction:
The contemporary view of fathers highlights the importance of their influence on children’s development. Given the paucity of studies considering the paternal role, especially in the context of Autism Spectrum Disorder (ASD), this study aimed to shed new light on some characteristics of fathers in interaction with their preschool children with ASD.

Aim of the study:
We investigated the affective and cognitive elements of father-child dyads compared to mother-child interactions.

Materials and Methods:
Participants are 45 children (41 males and 4 females) with ASD (chronological age: M = 40.86 months; SD = 11.87) in interaction with their fathers (M age = 41.98 years; SD = 6.997) and their mothers (M age = 37.39 years; SD = 5.38). The affective quality of interactions is measured through the Emotional Availability Scales (EAS). The parental language was verbatim transcribed using ELAN software (ELAN Version 6.4, 2022) and coded in terms of the primary function of each speech unit. Results revealed no differences between fathers and mothers considering the main scales and subscales. Considering language, mothers used more informative-salient statements compared to fathers (W = 1324; p = 0.012) and displayed higher levels of calling the child’s name (W = 1264.5; p = 0.042). Regarding referents of speech, we found a statistical difference in the number of referents considering the child’s internal state displayed by fathers (W = 762.0; p = 0.044) compared to mothers.

Conclusions:
Similarities in paternal and maternal affect might constitute a positive foundation for building early parent-child interventions with both parents' involvement. Further, exploring the specific features of parents in interaction with their children may help to better tailor the activities during interventions based on the interactive style of fathers and mothers. Our findings highlight the importance of treatment personalization that consider the child’s characteristics and dyadic features.
Researching the impact of the Newborn Behavioural Observations – reflections on methodological strengths and challenges.

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INTRODUCTION

The Newborn Behavioural Observations (NBO) system was developed as an infant-centred and family-focused relationship building tool, designed to sensitise parents to their infant’s competencies and capabilities, helping them to read their infant’s signals and understand their behaviour, thereby promoting positive interactions between parent and infant. The NBO is a flexible tool that can be applied to diverse populations, clinical settings, and cultures. Researchers are engaged in designing and conducting studies to understand the impact of the NBO in multiple different contexts. However, the methodological challenges in designing studies which effectively capture the outcomes of a relationship-based intervention require ongoing consideration.

AIM

This symposium aims to explore these challenges through presentations and reflections from three groups on their use of the NBO in research.

MATERIAL and METHOD

The symposium will feature three presentations, representing a range of international settings and clinical contexts researching the NBO as an intervention.

Dr Lise Johnson, (USA) will report on a randomised controlled trial of the NBO to support early parenting of preterm newborns.

Camilla Ejlertsen, (Denmark) will present results of a process evaluation and methodological reflections based on an intervention study that used the NBO to decrease prevalence of maternal postpartum depression.

Dr Susan Nicolson (Australia) will report on a randomised controlled trial of the NBO in a population of young infants and mothers with antenatal maternal distress and risk of postnatal depression.

A panel discussion will draw together conclusions regarding the evaluation of relationship-based interventions (and specifically the NBO) in complex research contexts where there may be multiple variables influencing the study results.

CONCLUSIONS

This symposium will provide learning and reflections from real-world studies to inform both interpretation of existing and design of future research focused on understanding the contribution of the NBO in supporting early parent-infant relationships.
Assessing parental sensitivity: Bridging science and child welfare practice

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Introduction
Providing practitioners with reliable and valid instruments that withstand the constraints of use in daily practice is of great importance to enhance needs assessment, intervention planning and decision making. However, most instruments have been developed for use in a research context or by highly trained professionals. Their design and detail require extensive training, which makes such instruments difficult to implement.

Aim of the study
In bridging the research-to-practice gap, we aimed to develop, in close collaboration with partners within the field of child welfare and child protection, a tool for observational assessment of parental sensitivity, suitable for practitioners working with parents.

Materials and methods
The OK! package includes an interactive, web-based decision tree with accompanying e-learning for assessment of parental sensitivity. Independent raters assessed parental sensitivity using the OK! package as well as the NICHD Parental Sensitivity rating scales on the basis of videotaped mother-child interactions at 10- or 12-months-old (N = 294) and at 24-months-old (N = 204), derived from the Dutch longitudinal cohort study Generation2. We will present data on reliability and validity of the OK! and discuss the goals and principles underlying the project, the collaborative efforts we undertook, and the data and input we gathered from practitioners and families to provide for an instrument that is not only reliable and valid, but also sustainably increases the quality of practice.

Conclusions
Results indicated excellent single interrater reliability for raters using the OK! package (mean ICC = .79), and strong evidence for convergent validity at 10- or 12-month-old (r = .57) and 24-month-old (r = .65). Evaluation of psychometric qualities as well as input from practitioners and families indicate that the OK! package provides a promising alternative for traditional instruments used in research context.
Transition From Nasogastric Tube to Oral Feeding: The Role of Parental Guided Responsive Feeding

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Introduction: The modern neonatal intensive care unit (NICU) is a double-edged sword: On the one hand it enables the survival of sick and preterm infants, yet on the other hand, heavy reliance on modern technology for basic caregiving within the NICU, commonly leads to the ignoring of infant cues and hampering of parental intuitive behavior. Taken together, NICU settings create an unnatural environment for the infant, his/her parents and the emerging dyadic relationship. Unnatural care is particularly evident in traditional feeding practices which typically entail protocols aimed at having the infant consume predetermined food volumes, regardless of infant cues. During the late 90-s, NICUs began to adopt the ‘Developmental Care’ (DC) approach which adapts the environment and care practices to the infants’ individual needs, under the assumption that individualized care will exert beneficial long-term outcomes. To date, decades of research have confirmed the importance of implementing DC in NICU’s to foster optimal infant brain development. While DC has been adopted by many NICU’s worldwide, it has yet to be implemented in the context of neonatal feeding.

Aim: The present study aims to implement DC in the context of feeding preterm infants in the NICU.

Materials and Methods: A DC-intervention was administered to the parents while transitioning their preterm infants from nasogastric tube to oral feeding. The intervention focused on enhancing parental responsive feeding guided by infant cues.

Conclusions: Parental responsive feeding of preterm infants resulted in more frequent attendance of parents during feedings, earlier achievement of infant oral feeding and shortened hospital stay without weight gain disadvantage. Future steps will promote direct breastfeeding among preterm infants, guided by infant cues. Findings demonstrate that responsive feeding is possible even in the context of preterm babies and underscore the clinical importance of following the infant’ feeding cues. Clinical implications are discussed.
Effect of caregiving involvement on responsiveness to children cues in same-sex families: an fMRI-EEG study

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Responding adequately to infant signals is vital for the child's proper development. So far, research has focused chiefly on primary caregiving mothers exposed to their infants' cues, highlighting regional patterns of brain activation related to attention, emotional processing, motivation, and social cognition (maternal parental brain model m-PBM). However, recent evidence showed that a caregiver's brain responsiveness to infant cues and the quality of adult-child interaction appears to be significantly influenced by the amount of involvement in childcare (primary vs. secondary caregiver) more than the gender role. While research mainly showed differences between father and mother, there is a lack of attention on how primary and secondary caregiving roles can shape the neurobiological bases and neurophysiological correlates of parenting and affect adaptive care behaviors.

Our study intends to extend the understanding of involvement in childcare in same-sex families with different amount of involvement in childcare. We expect that the parental role in terms of primary or secondary caregiver can better explain differences between subjects more than gender. Specifically, we hypothesized that primary caregiving mothers, more than secondary caregiver mothers, will show a brain activation consistent with m-PBM.

Twenty mothers (recruitment in progress) undergo an fMRI listening task of positive and negative infant vocalizations and control sounds to evaluate involved neural networks related to the m-PBM. Participants' psychological well-being and childcare involvement are assessed through self-report and parent-child interaction coding.

Our findings will contribute to filling the gap that clarifies caregivers' roles beyond the strict logic of gender differences and promote the identification of new perspectives for advanced screenings of parenting-at-risk and for advanced clinical treatments that can benefit from the specificity and complementarity of caregivers' contribution in the therapeutic process.
A pragmatic randomised controlled trial of a video-feedback intervention (VIPP-SD): Improving outcomes for young children

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Introduction

Behaviour problems are one of the most common mental health issues in childhood. These problems can place children at risk for later psychopathology. However, there are few effective interventions that target these issues at the very earliest signs of difficulties and that can be delivered through pragmatic healthcare services. Furthermore, we know little about the long-term effectiveness of these programmes on children’s development.

Aim of the study

The Healthy Start, Happy Start study aimed to test the effectiveness of a brief parenting intervention (Video-feedback Intervention to promote Positive Parenting and Sensitive Discipline; VIPP-SD). We hypothesised that the VIPP-SD intervention would reduce behaviour problems post-intervention in at-risk one- and two-year-olds. Secondary hypotheses also sought to investigate whether the intervention had positive effects on children’s long-term behaviour at a two- and five-year follow-up.

Materials and methods

Three hundred families of one- and two-year-old children who scored high for externalising behaviours were recruited through health visiting services in the UK. Primary caregivers were randomised to receive VIPP-SD (n = 151) or care as usual (n = 149). Research assessments, conducted at baseline (pre-randomisation), and five-month (post-intervention), two-year, and five-year follow up included a structured researcher-led interview of behaviour symptoms (PPACS). Assessments at follow-up also included measures of executive function, language development, and story stem narratives.

Conclusions

Participant retention was high (95% and 94% at 5-month and 24-month follow-up). There was a group difference on total PPACS scores (group difference: 2.03 [95% CI 0.06-4.01]; d=.20) at the post intervention assessment and at 24-month follow-up (group difference: 1.73 [95% CI -0.24-3.71]; d=.17), indicating a positive effect of VIPP-SD on children’s behaviour. Group differences were also detected in children’s story stems. Data for the five-year follow-up will be available by the time of presentation. Implications for future research (e.g., mechanisms) and practice will be discussed.
The longitudinal relations of antenatal paternal representations with romantic dyadic adjustment: comparisons with mothers.

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Within a multi-determined perspective, literature pointed out that antenatal parental representations are linked to the quality of caregiving and the child's development. In addition, it has been proven that the quality of marital relationships influences parenting behaviors and infants' functioning. Yet, no study has tested the association between these two variables. The present study aimed at examining the differences between fathers' and mothers' antenatal parental representations, and their relation with the perceptions of couple adjustment during pregnancy and at 3 months of the baby.

During the seventh month of pregnancy, the Parental Representations Interview During Pregnancy and the Dyadic Adjustment Scale were administered to 40 first-time parents' couples (mothers: \(\text{M} = 33.7\) years, \(\text{SD} = 5.1\) years; fathers: \(\text{M} = 37.4\) years, \(\text{SD} = 5.6\) years). The Dyadic Adjustment Scale was completed also at three months of the baby.

Results showed no statistically significant difference between mothers and fathers as regards the distribution of balanced versus unbalanced parental representations. However, independently of the quality of representation, mothers perceived less dyadic satisfaction than their partners. In general, both mothers and fathers who had an unbalanced parental representation perceived their couple adjustment as less cohesive.

The findings of the present study underscore the importance of antenatal parental representations on the perception of parents' romantic relationships. Thus, research and interventions should pay attention to the antenatal period to capture crucial factors that may enhance the efficacy of preventive interventions.
Infant eye gaze, emotion regulation and coparenting during triadic interactions of unmarried Black parents.

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Introduction
Historically, emotion-regulation has been understood within the context of dyadic interactions. More recent studies have examined infants' interactions with multiple coparents simultaneously.

Aim of the Study
This investigation examines a new concept, assisted emotion regulation in the Lausanne Trilogue Play (LTP) using an approach building on a mutual regulation model (MRM; Gianino & Tronick, 1988) and extending prior work by Fivaz-Depeursinge et al., 2005. Importantly, we pursued this work in a study of early family interactions within a historically understudied population: unmarried, largely non-co-residential African American families transitioning to new parenthood.

Material and Methods
Second-by-second coding was done for all four parts of the videotaped LTP. Infants’ gaze frequency, duration, and affect directed toward the parent (i.e., social engagement, social monitoring, tense monitoring, or active protest), along with multi-shift gaze patterns were coded in accordance with Fivaz-Depeursinge et al., 2005. In addition, parental affective response to child’s emotional bid and child’s subsequent reaction to parent’s feedback were coded. Each child affect - parent’s response - child’s reaction sequence was classified as one of four dyadic emotion regulation patterns: successful (matching positive affect or parent succeeded reducing child’s negative effect), unsuccessful (unmatching affect or worsening child’s emotional state), self-regulation (lack of attunement resulting in child’s utilizing self-regulatory skills to maintain emotional equilibrium), or triadic emotion regulation (child seeking the other parent’s attention following the parent’s response). Instances of successful assisted emotion regulation were viewed as evidence of parental sensitivity and capacity to accurately read and respond to child cues.

Conclusions
Multiple associations were found between observed coparenting and infant eye gaze during LTP interactions at 3 months, becoming stronger by 12 months. Observed family harmony was positively related both to triangular engagement at 12 months, and to successful assisted emotion regulation at both 3 and 12 months.
Can the NICU Play a Protective Role in Maternal Mental Health?

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INTRODUCTION
One in ten infants are born preterm in the U.S., with Black and Hispanic mothers disproportionately represented. Mothers of preterm infants are at high risk for mental health problems, which can compromise parenting quality and impede child development. Postnatal care can play a protective role by promoting maternal mental health.

AIMS
This study: (1) describes maternal mental health (stress, anxiety, depression, confidence) among new mothers of preterm infants; (2) tests predictors of maternal mental health (prior symptoms; discrimination; life stress); and (3) examines differences by neonatal care setting: NICU vs. nursery.

METHOD
A cohort of 196 moderate-late preterm infants and their mothers were recruited in the postpartum unit and NICU for an RCT of the Newborn Behavioral Observations at a large teaching hospital in the U.S. Northeast. Data were collected at birth, 4-6 weeks post-discharge, and 4 months corrected age. Measures included: Parenting Stress Index-SF; Karitane Parenting Confidence Scale; State-Trait Anxiety Inventory; Center for Epidemiological Studies Depression Scale-Rev; Everyday Discrimination Scale; medical records; and project-developed surveys. Regression analyses accounted for group assignment, sociodemographics, parity, 6-week outcomes, discrimination, infant/maternal morbidity, and trait anxiety.

RESULTS
Mothers averaged 33.1 years; 75% were White, 11% Black, 7% Asian, 7% other, and 10% Hispanic. Rates of maternal anxiety (31.6%) and depression (24.1%) were lower than typical preterm populations (~40%; 30%+); parenting confidence was high, increasing over time. First-time motherhood, trait anxiety, and maternal morbidity predicted state anxiety. Trait anxiety negatively predicted confidence. NICU care was negatively associated with state anxiety and positively associated with confidence, suggesting protective effects. Moderation analyses examining interactions (NICU X maternal sociodemographics) are underway.

CONCLUSIONS
NICU stays appeared to play a protective role by improving maternal mental health. Results may be partially explained by study context—a premier teaching hospital committed to family-centered care—but nonetheless highlight the importance of early support.
Preverbal Mental Representations of Attachment: Associations with Early Maternal Responsiveness and Infant Behavior toward Mother

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Introduction:
Attachment theory suggests that during the first year, infants form preverbal mental representations of attachment relationships, termed Internal Working Models (IWMs). IWMs are thought to reflect early experiences with attachment-figures and to shape infants’ social expectations, preferences, and behavior in novel interactions with attachment-figures, implicating long-term effects on social development and well-being.

While theory postulates existence of IWMs, methodological challenges entailed in their assessment afford scarce empirical evidence. Decades of attachment research demonstrate predictive links between early caregiving and infants’ behavioral attachment style, underscoring maternal responsiveness in fostering attachment security. Nonetheless, studies rarely attempted to directly assess infants’ underlying mental representations of the attachment figure. Research has yet to evaluate whether these are predicted by prior experience of maternal responsiveness, and whether these associate with infant behavior in novel interactions with attachment-figures.

Aims:
We aim to assess behavioral indices of infant’s mental representations of their attachment relationship (i.e. IWMs). We examine whether early maternal responsiveness predicts these indices across the first year of life, and whether IWMs associate with concurrent infant behavior while interacting with mother.

Methods:
Maternal responsiveness in mother-infant interactions was observed at 4-months. At 10-months, Infants’ IWMs were assessed using a puppet-show (N=72). Measures of looking-time and infant choice indexed infant social expectations and preferences. Infants’ behavior with mother was assessed at the same lab visit in free-play and Still-Face paradigms.

Results and Conclusions:
Infants’ social expectations significantly differed in accordance with their preferences (d=0.54), suggesting converging indices of IWMs. Maternal responsiveness at 4-months statistically predicted infant social expectations at 10-months (r=0.29, p=.025). Finally, infants’ initiation during free-play differed by infants’ preferences (d=0.784), as did infants’ signaling patterns toward mother during Still-Face. Findings provide empirical evidence for infants’ IWMs, suggesting these are shaped by maternal responsiveness and associate with infant behavior in novel interactions with attachment-figures.
Maternal postpartum mental health symptoms: Impact on maternal sensitivity and mother-child attachment

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Introduction: About 15% of mothers suffer from mental health problems after giving birth to a child. Various mental health symptoms with postpartum onset are specifically associated with the demands of caring for a child and handling motherhood. Previous research indicates that mothers with perinatal mood and anxiety disorders show deficits in mother-child interaction. However, longitudinal studies examining the consequences of postpartum mental health problems for maternal sensitivity and mother-child-attachment are missing.

Aim: The present study examines the longitudinal associations between postpartum mental health symptoms and maternal sensitivity as well as mother-child attachment.

Methods: Current data are part of a larger research-project in cooperation with a clinic of psychiatry and psychotherapy. The sample consists of 38 mother-child-dyads: 19 mothers with postpartum mental health problems and 19 healthy controls. At wave 1, maternal sensitivity was observed and rated using six scales (responsiveness, promptness, appropriateness, intrusiveness, positive and negative affect). In addition, the mothers reported their mental health symptoms on the Edinburgh Postnatal Depression Scale (EPDS) and the Brief Self Report Inventory (BSI). At wave 2, 6 to 12 months after diagnosis, sensitivity and mental health were assessed again. Furthermore, we observed mother-child-attachment using the strange situation procedure.

Results: The results from wave 1 indicate that mothers suffering from postpartum mental health symptoms displayed deficits in maternal sensitivity compared to healthy mothers. Ongoing analyses of wave 2 data explore the long-term effects of postpartum mental health problems on maternal sensitivity and on mother-child-attachment.

Conclusion: Findings will enlarge our knowledge about adequate support for mothers with postpartum mental health problems focusing on maternal sensitivity and mother-child-attachment.
How parental burnout affects parental competencies in Chilean parents of preschool children?

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Introduction: Parental burnout (PB) is a chronic stress syndrome experienced by parents that brings together four symptoms that occur simultaneously: physically and psychologically exhausted, loss of pleasure and enjoyment in the relationship with children, emotional distancing, and parental role inefficacy (Mikolajczak & Roskam, 2018). Specifically, we know that families with children under 4 years of age are more likely to develop PB (Pannesso, Santelices, Oyarce, Franco & Escobar, 2022). But we do not have data regarding how this syndrome interacts with parental competencies. The aim of this study is to see the impact of PB on the parental competencies of parents of preschool children.

Material and Method: A sample of 200 families (mother and father of each family) with children aged 3 to 5 years was assessed. Two self-report scales were used: the Parental Burnout Assessment (PBA) and the second version of the Positive Parenting Scale (E2P).

Conclusions: We found that within the four symptoms explored by the PBA, "emotional distancing" negatively impacts the performance of relational, formative, protective and reflective competencies, leading to a decrease in resources to cope with parenting. The relevance of considering these findings for the treatment of the syndrome will be discussed.

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How Do Maternal Sensitivity and Child-Mother Attachment Contribute to Children’s Cognitive and Language Outcomes?

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Introduction. Attachment theory has long posited that children’s early experiences with their caregivers shape their lifelong development (Bowlby, 1969). Recent meta-analyses have shown that maternal sensitivity and child-mother attachment security promote more positive social and emotional outcomes in children (Cooke et al., 2022; Groh et al., 2017). In contrast, the association with cognitive and language outcomes has received less attention. Some scholars have nonetheless suggested that attachment relationships provide a unique context for the development of cognitive and language skills, while others posit that associations are not direct, but rather, operate as a mediator in the association between maternal sensitivity and cognitive/language outcomes.

Aim of the Study. In this study, we explicitly test the mechanisms by which maternal sensitivity and child-mother attachment influence child development. Specifically, we test a mediation model of maternal sensitivity → attachment security → child cognitive/language outcomes in a meta-analytical framework through meta-analytical structural equation modeling (MASEM).

Materials and Method. We identified and extracted k = 111 studies (N = 9,155 children, M = 53% boys, Mage = 27.6 months at the attachment assessment) with associations between attachment security and cognitive/language outcomes. The samples were mostly from North America and Europe (85%), at low socio-economic risk (51%), and White (M = 76%).

Results and Conclusion. Maternal sensitivity was associated with higher child cognitive (r = .21 [.13, .29]) and language outcomes (r = .13 [.09, .17]). Child-mother attachment security was also associated with higher cognitive (r = .12 [.07, .15]) and language outcomes (r = .23 [.16, .29]). Mediation effects were significant, but very small. These findings shed light on the mechanisms by which that maternal sensitivity and child-mother attachment security influence children’s cognitive and language outcomes. Future prevention and intervention efforts should consider multiple levels of intervention.
How do parental-interactions and children's temperament influence their socio-emotional development between 12 and 30 months?

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Introduction: The prevalence of early childhood social, emotional, and behavioral problems ranges between 7% and 36% worldwide. Chile presents the worst indicators of infant mental health compared to other countries. It is essential to understand the factors that promote or hinder the DSE in early childhood so that a contribution can be made to prevention and intervention programs, thus avoiding the long-term adverse effects of a low DSE. The main objective was to analyze and predict the DSE of children between 12 and 30 months of age from the domains of parental interactions and consider the child’s characteristics as their temperament.

Method: A non-experimental study was conducted with 69 dyads assessed in two waves at 12 and 30 months of age. Observational measures were used to evaluate parental interactions (Parenting Interactions with children: checklist of observations linked to outcomes – PICCOLO) and socio-emotional development (Functional Emotional Assessment Scale - FEAS). A self-report from the caregiver was used to assess the children’s temperament.

Conclusions: Mothers’ affection behaviors and low children’s irritability were factors associated with an increase in socio-emotional skills at 12 months of age. At 30 months, parental behaviors such as teaching, responsiveness, and encouragement were associated with higher socioemotional skills. Children’s temperament at 12 months, particularly negative affection (irritability), can be considered a risk factor because it predicts lower socioemotional skills at 30 months. The clinical implications of these findings will be discussed.

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Screening for perinatal depressive and affective disorders in fathers: the Perinatal Assessment of Paternal Affectivity

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Previous studies suggested that perinatal psychological distress in men can be displayed through a wide array of signs and symptoms, including not only depression and anxiety, but also additional psychological, behavioral, and interpersonal problems. However, traditional questionnaires used for routine screening focused almost exclusively on standard depressive symptoms. Thus, we developed the Perinatal Assessment of Paternal Affectivity (PAPA), a new self-report tool for the screening of perinatal depressive and affective disorder. Initial findings revealed that PAPA demonstrated adequate validity and reliability in fathers. The aim of this study is to provide additional psychometric evidence, testing internal consistency and concurrent validity of the scale, also including a sample of mothers.

To this purpose, we collected data of 218 Italian heterosexual expectant couples at the third trimester of pregnancy. Both fathers and mothers filled out the PAPA or PAMA (Perinatal Assessment of Maternal Affectivity) respectively, and other standardize questionnaires concerning individual and couple adjustment. We also collected data on sociodemographic information and recent stressful life events.

Results suggest that the questionnaire revealed adequate internal consistency (p < .05) in both mothers and fathers. The PAMA/PAPA total scores significantly correlated with other measures such as depressive symptoms, psychological distress, perceived stress, and couple dyadic adjustment (p < .05). We also found a significant association between maternal and paternal PAMA/PAPA scores (p < .05).

These findings provide additional support for the validity and reliability of the scale suggesting its utility in identifying early signs and symptoms of perinatal psychological distress in both parents. Further studies should replicate and extend the study of the PAMA/PAPA psychometric properties in different cultural contexts.
PARENTAL MENTALIZATION MODERATES THE RELATIONSHIP BETWEEN PARENTAL STRESS AND ALLIANCE AND CHILD’S SOCIAL-EMOTIONAL COMPETENCIES

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Introduction: Several studies have explored the link between parental mentalization and child’s psychological outcomes. However, there is a paucity of studies that have addressed the role of these processes on the experience of parental stress and alliance also exploring their impact on the child. In addition, few studies have explored these themes within middle childhood, a crucial period of significant changes in both the child and the family.

Aim of the study: For these reasons, the present study aims to explore: (1) the association between parental stress and alliance and child’s psychological outcomes; (2) the role of parental mentalization as a moderator within the link between parental stress and alliance and child’s psychological outcomes during middle childhood.

Material and Methods: 86 parents and their 50 school-age children (M=10.10, SD=1.13, 60% males) were involved. Parenting Stress Index Short-Form and Parental Alliance Measure were used to assess parental stress and alliance while Insightfulness Assessment Procedure and the Parental Reflective Functioning Questionnaire were used to assess parental mentalization. Finally, child’s psychological outcomes were measured as psychological difficulties – both internalizing and externalizing problems – and social-emotional competencies through the parent-report questionnaires Child Behavior Check List and Devereux Student Strengths Assessment.

Conclusions: Our results firstly showed that parental stress and alliance were significantly linked with both child’s psychological difficulties and social-emotional competencies. Secondly, regression analyses showed that mother’s pre-mentalingizing modes have a moderating role on the link between both maternal perceptions of stress and alliance and child’s social-emotional competencies. As the overall result of research indicates, parental mentalization difficulties may play an important role in the subjective experience that parents feel within both parental and parent-child dyads. Clinical implications of parenting and family processes are discussed.
Enhancing Emotional Availability and Rf Among Parents With Substance Addiction in the Holding Tight® -Treatment

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Introduction
Parents with substance addiction have multiple risk factors affecting their early parenting. An intensive treatment program, the Holding Tight®-treatment, has been developed over the past decades in Finland for parents with SUD.

Aims of the Study
The aims of the present study presents results from a sample of 82 parents entering the treatment program with regards to their pre-treatment levels and interrelations of variables associated with parenting difficulties among parents with SUD, including socio-demographic background variables, adverse childhood experiences (ACEs), depressive symptoms, psychiatric problems, emotion regulation, adult attachment, romantic relationship satisfaction, and parenting alliance as well as parental reflective functioning (PRF) and emotional availability (EA). Furthermore, we present preliminary findings on post-treatment outcomes regarding EA and PRF.

Materials and Methods
Participants were 82 Finnish parents entering the treatment (46.2% entered prenatally, while the rest with children aged $M = 5.43$ mo., $SD=10.02$) who filled standardized self-report questionnaires at each entry phase.

Results
The results show that there are multiple social as well as mental health, emotional/relational, and trauma-related issues to be addressed during the treatment upcoming treatment.

Conclusions
We discuss how these results may bear significance in the implementation of the reflective work conducted in everyday encounters with the parents.
The International Guide for Monitoring Child Development (GMCD) by front line health workers in Guatemala

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Introduction:
The international Guide for Monitoring Child Development (GMCD) is a leading comprehensive strengths-based approach for monitoring and supporting child development in collaboration with families and caregivers. Although used in numerous settings around the world, its use by frontline health workers and in rural and Indigenous communities is less well described.

Guatemala is a majority Indigenous Maya country. There are more than 20 distinct Mayan languages spoken in Guatemala, and many children and caregivers are monolingual in a Mayan language or bilingual in Spanish. Rural Indigenous communities in Guatemala also suffer from extreme disparities in healthcare, economic opportunity, and access to early education. Indigenous children in Guatemala have among the highest rates of stunting in the world.

As part of a recent randomized effectiveness trial, we have adapted and implemented the GMCD for rural Indigenous communities in Guatemala.

Purpose:
The aim is to discuss key steps and lessons learned when adapting and implementing an IPMH intervention for use by frontline health workers and within an Indigenous language/cultural context.

Description:
Videos of GMCD administrations in rural Guatemala with Indigenous caregivers and children will be presented and used to highlight key points about effective adaptation of the tool to the skill level of a frontline worker and to the unique cultural and linguistic context.

Conclusion:
Participants will gain knowledge on the use of the GMCD as an exemplary IPMH intervention in a setting where most historical interventions have been stigmatizing to and dismissive of Indigenous caregivers and their unique perspectives. Family-centered, strengths-based, collaborative approaches like the GMCD can help to overcome the legacy of racism, discrimination, and colonialism in such settings.
A feasibility study of a remote intervention for adolescent mothers and their families

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Introduction: Adverse childhood experiences negatively impact health across the life course. When adolescents become parents, in many cases, they have already experienced childhood adversity. Childhood abuse and intimate partner violence are both risk factors for depression during and after pregnancy. Depressed mothers have difficulty bonding with their babies, which is associated with attachment problems and increased risk that offspring will experience abuse. Maternal trauma has also been associated with children’s behavioral problems. Thus, child abuse is a cyclical problem that is repeated in families over generations. Due to the COVID-19 pandemic, significant progress has been made in developing technology-mediated interventions. This has created opportunities to leverage the advantages of technology, including cost savings, convenience, and collaboration, in new ways.

Purpose: We will present findings from a feasibility study of a remote intervention for adolescent mothers and their families in Lima, Peru.

Description: The intervention is a 10-visit home visiting intervention for families that begins during pregnancy and continues through six months postpartum. Originally planned as an in-person intervention, it was adapted to be delivered remotely due to the COVID-19 pandemic. A total of 67 adolescents were enrolled in the pilot trial; 34 were randomized to receive the intervention and 33 received usual care. To assess acceptability and feasibility, data were collected on retention and participant satisfaction. Adherence and competence were assessed, and qualitative data were collected from the home visitors. While the study was not powered to detect significance, data on caregiver mental health and caregiving sensitivity were collected to identify trends.

Conclusion: This study demonstrated the acceptability and feasibility of remote intervention for adolescent parents in Peru. These findings will inform the development of low-cost interventions that are accessible in LMIC settings, which is needed to close the global mental health gap.
Anxiety/Depressive Symptomatology, Parenting-Stress, Perception of Infant Temperament in twins’ fathers from pregnancy to 3 months.

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Transition to parenthood is a complex process for all parents and somehow more critical for couples expecting twins. The present study investigated whether mothers’ and fathers’ anxiety and depressive symptomatology, assessed during pregnancy and at 3 months after delivery, were associated with twins’ negative affectivity and parenting stress, and if there was a discrepancy in the degrees of parental stress experienced by both parents and in their perceptions of the twins’ temperament. The participants of our study were 29 heterosexual couples with their healthy 58 twin babies (48.3% girls and 51.7% boys). The parents filled out the State-Trait Anxiety Inventory, the Edinburgh Postnatal Depression Scale, and the Dyadic Adjustment Scale both during pregnancy and at 3 months after delivery. They also filled the IBQ-R at 3 months of children’ age. The data underline correlations between parental anxiety, depression symptomatology, infants’ negative affectivity and parenting stress. Fathers’ anxiety as depressive symptomatology is positively correlated with parental stress. Only for fathers, the DAS is negatively correlated with parenting stress. The study emphasizes the uniqueness of twin motherhood and fatherhood from pregnancy to the first trimester after birth. For clinician and perinatal experts, the disparities in twins’ parents could be very important to take into account and it will be interesting to investigate the long term consequences of parents’ varied perspectives of their two children.
Infant Parent Intervention Research in Non-WEIRD Countries

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Introduction:
A strong infant-caregiver relationship has been shown to buffer the developing child against environmental stressors that negatively affect health outcome. Yet, although high risk populations have the greatest need for this buffering, most infant-parent mental health (IPMH) interventions have been tested in Western high income (WEIRD) countries. The lack of necessary institutional infrastructure, a knowledge gap regarding IPMH, cultural differences, and few trained personnel to carry out the intervention may in part explain this deficit in critical scientific information.

Aim:
The aim is to offer examples of IPMH interventions in non-WEIRD countries and studies testing their efficacy, to demonstrate the importance of these interventions, and to encourage future research in this area so vital to global mental health. We propose to describe five IPMH interventions in Peru, Pakistan, El Salvador, India, and Guatemala.

Methods:
A panel of researchers working in non-WEIRD countries will describe their interventions and present studies, offering videotape illustrations. The panelists will discuss salient issues they have encountered doing their research, including those of language and location, research infrastructure, scientific knowledge gap, and cultural beliefs and values not encountered in the West. Then, using the presentations as a springboard, participants will engage in an in-depth discussion to consider insights gained through studying IPMH interventions in socio-economically stressed and culturally diverse populations in all locations, and how to encourage future investigation.

Conclusion:
Cost-effective IPMH interventions are greatly needed in high-risk, low-resource populations. A consideration of IPMH interventions and studies of their efficacy in non-WEIRD countries offers important insights into how to close a critical knowledge gap and improve health outcome in the world’s most vulnerable children in all countries.
The International Guide for Monitoring Child Development (GMCD).

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Introduction:
The international Guide for Monitoring Child Development (GMCD) is a comprehensive package theoretically based in bioecological, family-centered and strengths-based conceptualizations, and the World Health Organization (WHO) International Classification of Functioning Disability and Health (ICF) and Nurturing Care frameworks. Service providers trained in the GMCD apply key concepts of infant parent mental health including developing trusting partnership, supporting the “holding environment” and “being held in mind.” The GMCD uses an open-ended interview to assess children’s development in multiple domains, to identify developmental risk factors and to seamlessly deliver individualized support for development and early intervention. The GMCD has been standardized internationally and can be applied for all children aged 0-42 months without re-standardization or re-validation. Service providers in over 30 countries have been trained in its use and GMCD trainers have been trained in Argentina, Azerbaijan, China, Croatia, Guatemala, India, Italy, Kyrgyzstan, Rwanda, Serbia, South Africa, Tajikistan, Turkey, and Turkmenistan. South-to-south collaborations and partnerships between GMCD teams have enabled meticulous cultural adaptations of the GMCD to multiple contexts including rural impoverished and indigenous sites.

Purpose:
The aim is to familiarize participants with the GMCD and to share experiences from its use in diverse countries.

Materials and Methods:
The developer of the GMCD will present its content and experiences from multiple sites using case examples and videos.

Conclusion:
Participants will gain knowledge on the GMCD as an exemplary non-WEIRD model to disseminate training related to monitoring, support for the development of all children as well as individualized interventions for addressing developmental risks and difficulties.
Infant Regulatory Problems and Maternal Mental Health at 7 Months Postpartum under COVID conditions

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Introduction: The SARS-COVID-19 pandemic and its associated disease control restrictions have in multiple ways affected families with children. However, the influence of the pandemic on infants and their development is still understudied. Understanding influences of the current pandemic-related conditions on parent and infant mental health is crucial for health care providers developing supportive and preventive strategies. Infant regulatory problems (RPs) have generally been identified as early indicators of child socio-emotional development, strongly associated with maternal mental health and the parent–infant interaction.

Aim of the study: Our study investigates whether early parenthood under COVID-19 is associated with more maternal depressive symptoms and with a perception of their infants as having more RPs regarding crying/fussing, sleeping, or eating, compared to mothers assessed before the pandemic.

Material and Methods: As part of a longitudinal study, 65 women who had given birth during the first nationwide disease control restrictions in Northern Germany, were surveyed at 7 months postpartum and compared to 97 women assessed pre-pandemic. RPs and maternal depressive symptoms were assessed by maternal report. Number of previous children, infant negative emotionality, and perceived social support were assessed as control variables.

Results: Compared to the control cohort, infants born during COVID-19 and those of mothers with higher depressive symptoms were perceived as having more sleeping and crying, but not more eating problems. Regression-based analyses showed no moderating effect of parenthood under COVID-19 on the association of depressive symptoms with RPs. Infant negative emotionality was positively, and number of previous children was negatively associated with RPs.

Conclusion: Pandemic conditions affecting everyday life may have a long-term influence on impaired infant self- and maternal co-regulation and on maternal mental health. This should be addressed in peripartum and pediatric care. Qualitative and longitudinal studies focusing on long-term parental and infant outcomes under ongoing pandemic conditions are encouraged.
Family and Community-Based Interventions for Autism Spectrum Disorder (ASD) Children

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Introduction

Popular interest in autism as well as expanded diagnostic criteria has led to a proliferation of services for ASD children. Most interventions in high income countries are expensive, requiring high frequency visits with professionals. Innovative, cost-effective approaches are needed, especially for low resource communities. In addition, understanding the mechanisms of capacity-building in these children are important for designing and evaluating interventions. Long-term studies suggest that early intervention and family involvement are critical factors in good outcome for ASD children. Effective use of families and communities in ASD treatment must be investigated.

Aim

To explore the effective use of families and communities in developing cost-effective treatments for ASD.

Materials and Methods

We will present two low-cost interventions for ASD and three approaches to study the therapeutic effect of family-focused treatments. Studies of parent-mediated interventions in South Asia, PASS and PACT, demonstrate the feasibility and effectiveness of task-shifting of interventions used in high income countries to LMICs. A study of a short-term intervention for Brazilian mother-infant dyads at high risk for autism to support the development of the capacity to tolerate anxiety and facilitate the processing and integrating of emotional experience is explained. A U.S. video demonstrating the DIR model illustrates a method to support ASD children in developing the capacity for social engagement with family and peers. A video presentation of mother-child dyads in Argentina relates research linking parental reflective function and interactive style with the child’s developing capacity for symbolic function. Finally, the microanalysis of videotapes of adult-child interaction offers techniques derived from infant research that can be introduced into existing interventions to enhance their effectiveness. Following the presentations, discussion from symposium participants will be facilitated.

Conclusion:

Studies of innovative cost-effective interventions for ASD are critically important and can be enhanced by explorations of developmentally-facilitating factors in caregiver-child interactions.
Timing is critical: Postpartum depression and child behavior at 3 years in children born preterm

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**Introduction:** Mothers of children born preterm (<37 weeks gestation) are at heightened risk for stress and mental health difficulties, including higher rates of postpartum depressive symptoms (PPD), which are associated with later child behavior problems. However, there is inconsistency in the timing and environment when measuring PPD, and these distinct environments may have different risk factors that account for symptomatology and different predictive value for child outcomes.

**Aim:** The first aim examines whether known risk and protective factors for PPD are consistent or unique when measured before hospital discharge (HD) and 4 months at home. The second examines how PPD at HD, 4, and 36 months relates to child behavior problems at 36 months.

**Materials and Methods:** 173 children born preterm and their mothers from the midwestern US were followed from HD through 36 months. Mothers completed depression questionnaires at HD, 4, and 36 months. Maternal-reported internalizing and externalizing behavior problems and observed child behavior were measured at 36 months. Structural equation modeling examined child medical risk, maternal sociodemographic factors (SES), and emotional support as risk and protective factors.

SES assets, multiple birth, and emotional support from parents were associated with less PPD at HD. Child medical risk, being in a relationship, and SES assets were associated with less PPD at 4 months. PPD at HD did not predict 36 month behavior problems beyond concurrent depression. However, PPD at 4 months was associated with later externalizing behaviors. Maternal depression at 36 months significantly mediated between 4-month PPD and internalizing behaviors and externalizing behaviors.

**Conclusions:** There may be different risk factors for PPD depending on environment and timing, with PPD at 4 months associated with later behavior problems. Findings speak to needing continued mental health screening for women after they leave the hospital, and for tailoring family-based interventions to the environment.
Addressing the Needs of Families of Young Children with Autism in Resource Settings

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Introduction: Assuming a prevalence of 1% there is are an estimated 78 million individuals living across the world with autism. Outside urban areas in most countries, the majority of families have virtually no access to either assessments or evidence-based interventions. The assessment and intervention gap seen across the world is compounded by a knowledge gap in low-resource settings. 95% of all children under the age of 5 years with developmental disabilities (including autism) live in low and middle-income country settings, resulting in an urgent need to address the needs of this population with scalable solutions.

Aim: To describe the development of a scalable low intensity intervention for families of young children with autism in low resource settings

Material and Methods: This presentation will describe the systematic process of adaptation and evaluation of a mechanistically informed evidence based intervention from a high-income setting into three settings in India. The process followed included an acceptability feasibility study along with an iterative expansion of the intervention based on parent concerns and a definitive effectiveness, cost effectiveness trial.

Conclusion: The Preschool Autism Communication Therapy (PACT) developed in the UK, was subjected to a rigorous and sustained adaption process considering barriers and facilitators in South Asia, where there are limited evidence based services for young children with autism. The adapted and expanded Parent-mediated Autism Social Communication Intervention for non-Specialists Plus (PASS Plus) can be delivered by non-specialist providers under supervision. The package of care includes digital training materials as well as linked competency assessments to ensure the quality of the intervention delivered to families.
Clinical trial of scalable cost-effective psychoanalytically oriented intervention with mothers and siblings of autistic children

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Introduction
Worldwide, there is a concern regarding psychic and developmental conditions of families of autistic people, since their siblings show increased chance to have autism or another developmental disorder and their mothers have higher prevalence of depression, anxiety and stress. Providing such families with cost-effective early intervention is key, notably in low and middle-income countries.

Material and Methods
We will bring results of a two waves clinical trial of a scalable cost-effective short psychoanalytically oriented intervention:
A. 22 high risk (HR) mother-infant dyads in which an older sibling has autism were treated for 12 sessions. Results were compared with HR dyads who weren’t treated;
B. follow up after 4 years of treatment: treated HR dyads (n=14), non-treated HR dyads (n=18).

Conclusion
All assessments were done blindly to group pertinence.
A. Treated dyads had greater increase in their reciprocity (p = 0.002);
   Treated mothers had:
   (1) a two-fold reduction in their mean of intrusiveness (es = 0.57, p = 0.048);
   (2) a greater reduction in their mean of mother-led interactions (p = 0.048);
   (3) greater increase in maternal sensitivity (p = 0.019).
   Treated babies had greater increase in their involvement (p = 0.001) and cooperation (p = 0.003).
   Results show positive effects of the intervention, increasing the maternal capacity for the receptivity to the emotional experience with the baby and for the reduction of their negative affection and anxiety.
B. In the follow up:
   Treated dyads had less anxiety, depression and affective dysregulation (significantly); were less intrusive.
   Treated babies performed better in cognitive test and tended to play more with mothers instead of alone, to explore toys more creatively instead of mechanically and to display more symbolic play.
Parental Reflective Function and Parental Styles in a Mother-Child Play Interactive Situation

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Introduction:
Currently, Autistic spectrum disorders (ASD) are considered among the most serious childhood psychopathologies, particularly because of their impact on development that can cause qualitative impairment of social interaction and communication. The heterogeneity of ASD individuals, and the accumulating scientific information about developmental processes, introduces a degree of complexity that requires a multifactorial model. This multifactorial model includes features of the parents’ developmental maturity and its effect on their ability to scaffold symbolic play in the child. This is especially true in the case of ASD children, whose capacity for self-regulation and social engagement is typically compromised, interfering with the development of symbolic play and other symbolic activities such as language. Understanding the link between parental reflective function and interactive styles and their capacity to support their infants’ social emotional development and symbolic function can allow us to create and refine interventions for young ASD children.

Aim: To demonstrate the relationship between intersubjective aspects of a mother and young child play interaction with reference to maternal variables studied

Methods: Videotapes of a mother and a 4-5-yo child with ASD will be shown and discussed from the point of view of research into the effect of maternal interactive styles and parental reflective functioning on a child’s developing complex symbolic play. The effects of clinical work with ASD children will be discussed.

Conclusion: Research offering information about parental reflective function and interactive styles can enhance interventions for young children with ASD.
Coaching Parents to engage affectively with their toddlers at-risk for ASD

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Introduction RCT studies of DIR-based intervention during the last two decades has demonstrated the efficacy of enlisting parents as primary providers of intervention with their toddlers who have been identified as at risk for ASDs. Intervention outcome effect size and long-term outcome data indicate that parent-facilitated intervention permanently changes the developmental trajectories of children at risk for ASDs to move beyond developmental delays in communication, relating, and socializing with other children.

Description: Using video, this presentation will illustrate two short clinical vignettes demonstrating that--for the child identified as at risk for an ASD--the use of parent coaching is an effective means of supporting their child’s developmental process. One case example will show the use of coaching a parent to entice a preschooler to engage in play within a playgroup setting. The other vignette will illustrate the use of parent involvement to modulate and regulate sensory hypersensitivity within a sensorily “quiet”, dyadic play exchange, enabling the child to initiate verbal language to express satisfaction in play.

Conclusion: Regardless of whether DIR intervention is dyadic in context, or in a playgroup context, the common thread of effective and permanent developmental intervention is successfully supporting parents’ emotional involvement, and communicative responsiveness to their children’s expression of affect and actions. Parent-coaching, informed by psychoanalytic theory of development has the potential to positively and permanently influence the developmental trajectories of children at risk for ASDs.
Techniques Derived from Infant Research to Enhance Existing Interactive Interventions for Young ASD Children.

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Introduction
The increasing incidence of autism spectrum disorders (ASD) worldwide requires us to seek innovative and cost-effective treatments. Long-term studies emphasize both the advantage of early intervention, and the benefit of relationships, in the life of ASD individuals. Whether interventions focus primarily on behavior or on developmental scaffolding, relationships play a central role in good outcome. It is therefore critical to thoroughly investigate factors in the ASD child’s relationships that are salient in scaffolding development. A major feature of ASD is vulnerability in self-regulation and an associated hypersensitivity to novelty, leading to repetitive behaviors and difficulty negotiating social engagement which is highly stimulating and variable. Most nonverbal behaviors in human interactions are out of awareness. However, some techniques derived from infant research that emphasize repetition, rhythm, and timing can be consciously learned. They could be introduced into existing interventions and taught to parents and other supportive people in the ASD child’s community. These techniques could serve to enhance the effectiveness of other interventions.

Aim
To explore the effect of introducing techniques derived from infant research into existing interventions for ASD children.

Methods
We use videotaped sequences of parent-child and therapist-child interactions in which repetition, rhythm, and timing are used to create psychological safety and thus facilitate taking risks in 1) experiencing affective and arousal states and 2) working to develop symbolic function in play. We discuss ways of designing future studies to test the effect of teaching these techniques to parents and family members in family and community-based interventions.

Conclusion
Techniques derived from infant research could be introduced into existing interventions for ASD children to enhance their effectiveness.
House of Life and Light: A Perinatal Intervention for Pregnant Teens in El Salvador

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Introduction:
Children of parents who have been neglected and abused are at increased risk of maltreating their own children. Risks are even greater when pregnancy occurs in adolescence. Intervention in the perinatal period has significant potential for improving health outcome through interrupting the intergenerational transmission of adolescent pregnancy and maltreatment. In El Salvador, typically high rates of adolescent pregnancies have increased during the pandemic. There is a great need for a physically and psychologically safe place for these traumatized girls during this critical time of their lives.

Aim:
To describe a plan for a residential treatment program for young pregnant teens in El Salvador designed to heal the pregnant adolescents’ trauma, prepare them for childbirth and motherhood or planning for adoption, and facilitate their reengagement in school and with their families and communities.

Materials and Methods:
We will describe a treatment program for young pregnant teens (HOLL) that includes caregivers with specialized training – Building Baby Brains (BBB). BBB is a manualized infant mental health training with information about perinatal mental health, early development, and a practical intervention to support the infant-parent relationship, the Thula Sana. In preparation for HOLL, we will 1) conduct a feasibility and acceptability study of pregnant teens in local perinatal clinics and 2) a plan for a small qualitative outcome study of the HOLL. Depending on the results of the study, a larger RCT will be designed in which a control group and a larger sample size can be included.

Conclusion: A plan for a residential treatment program that creates a physically and psychologically safe place for traumatized pregnant teens in El Salvador is presented. The presentation includes the description of a specialized training for the caregivers and two qualitative studies to prepare for the program and to assess its effectiveness.
Gestational Age, Early Adversity, and Kindergarten Academic and Behavioral Outcomes: Testing the Cumulative Risk Hypothesis

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Background: The cumulative risk hypothesis posits that more risks have a deleterious impact on child development. However, the cumulative effect of adverse childhood experiences and premature birth on learning and self-regulation has not been examined.

Objective: To examine whether the association between adverse child experiences (ACEs) and kindergarten outcomes is magnified in infants born at earlier gestational ages compared to infants born less preterm or full-term on academic achievement and self-regulation.

Methods: The sample included 5800 infants (24-41 weeks gestation) from the US study Early Childhood Longitudinal Study, Birth Cohort. Kindergarten outcomes included academic achievement (reading and math) and parent-reported effortful control to indicate child self-regulation. Gestational age groups were very preterm: < 32 weeks; moderate/late preterm: 32-36 weeks; and full term: 37-41 weeks. Parents reported on seven ACEs for the children. Multiple linear regression examined the main and interactive associations between gestational age groups, ACE scores, and reading and math scores and effortful control at kindergarten.

Results: In adjusted models, lower gestational age predicted lower reading, math, and effortful control, with the greatest effects in infants born very preterm (VPT) (Breading= -0.16 p= .02; Bmath= -0.27, p< .001; Beeffortful control= -0.22, p= .006). More child ACEs also related to lower reading, math, and effortful control. Interactive effects of gestational age and ACE scores were significant for effortful control (p=.049), with the lowest effortful control in children born VPT who had more ACEs (B= - 0.15, p= .04).

Conclusions: Analyses support the cumulative risk hypothesis wherein a combination of early adversity and lower gestational age predicted lower self-regulation skills (but not academic achievement) at kindergarten. Identifying the cumulative risk of ACEs and VPT birth can help clinicians distinguish among preterm infants who may benefit from trauma-informed interventions and other resources to foster self-regulation skills, which are important for future development.
Attachment security and reactive attachment disorder symptoms in Georgian foster children: Prevalence and determinants

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Introduction: Foster children are considered as a high-risk group due to experiences of abuse, neglect, and early deprivation. Studies show heightened attachment disorganization and symptoms of reactive attachment disorder (RAD), especially in late-placed children. Building of a secure attachment is a significant developmental milestone, which also can buffer against aversive factors. Therefore, investigating factors, which might affect the development of secure attachment in high-risk children is important.

Aim of the study: To examine attachment security and reactive attachment disorder symptoms in foster children with different pre-placement backgrounds and their relation to associated factors: pre-placement experiences, parenting behaviour of foster parents and family characteristics.

Material and Methods: The study sample consisted of two groups of foster children, one with preceding institutional care (n = 30), one with preceding home care (n = 31), and a control group of children from their biological families (n = 30). Data assessment included measures of attachment security (AQS), reactive attachment disorder symptoms (DAI) and quality of caregiving behaviour (NICHD scales), as well as additional risk factors.

Conclusion: Findings from both foster care samples indicated a heightened prevalence of attachment disorder symptoms and lower attachment security scores. Attachment security was found to be associated with higher sensitivity of foster parents. Moreover, foster mothers of children with marked symptoms of RAD showed lower supportive presence and higher hostility in dyadic play situations.
The impacts of mothers’ smartphone use on children’s affect regulation

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Introduction
In infancy, children’s affective states are predominantly regulated by a primary caregiver, usually a mother. Whether this regulation succeeds is influenced, among other factors, by maternal emotional availability. Nowadays, many people are constantly connected to others via smart devices. Therefore, it has been assumed that mother-child interactions would frequently be disrupted, with potentially negative consequences for child regulation. However, few studies examined children’s affective responses to caregiver usage in a controlled setting, especially in the first year of life.

Aim of the study
Our aim was to experimentally investigate how mothers’ smartphone use affects infants’ affective states and the emotional availability in the dyad.

Material and Methods
The sample comprised 52 mother-child dyads with infants aged 5-6 months. The experiment consisted of two counterbalanced phases (each 8 minutes long): 1) the free-play phase and 2) the interruption phase, in which the mothers responded to standardised text messages via smartphone. We used the Infant Affect Codes to code the infants’ affects and the Emotional Availability Scales, 4th edition for coding emotional availability in the dyad during the experiment. In addition, we developed a scale to measure maternal multitasking behaviour. Questionnaires were used to assess mothers’ everyday use of smart devices.

Conclusions
Overall, children expressed significantly more negative affects in the interruption phase than in the free-play phase. No difference in the expressed affects occurred when the interruption phase preceded the free-play phase. Moreover, children of mothers who reported more everyday problematic use of smartphones/tablets during interactions with them showed more negative emotions in the free-play phase and reportedly more negative affectivity in everyday life. Further analyses will be presented.

The findings suggest prolonged maternal texting negatively impacts infant’s affective states. In addition, habitual maternal use of portable digital devices might have a lasting negative influence on the infant’s affect regulation.
A Meta-Analysis of the First 20,000 Strange Situation Procedures

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**INTRODUCTION:** The Strange Situation Procedure (SSP) was developed five decades ago to assess infant-parent attachment relationships. While the procedure itself has remained relatively constant in studies conducted to date, there have been vast sociological changes during this time, and research foci shifts to studying diverse populations. Since its inception, the SSP has also been adopted in over 20 countries. **AIM:** In this meta-analysis we collate this large body of work, with the objectives of producing reliable estimates of the distribution of the four SSP attachment classifications, assessing temporal trends and geographical differences, and determining if and when distributions are different across various populations. **METHODS:** Our synthesis includes 285 studies and over 20,720 parent-child dyads with data on all four attachment classifications. **RESULTS:** Results revealed that the global distribution of SSP attachment was 51.6% secure, 14.7% avoidant, 10.2% resistant, and 23.5% disorganized. There were no differences in the distribution among mothers and fathers, and no child age or sex differences. We found a temporal trend in which there was less avoidant attachment over time and there were attachment distribution differences between samples from North America versus other regions of the world, particularly Asia, Australia/New Zealand, and South America. Compared to secure attachment, we found higher rates of avoidant and disorganized attachment in populations with socio-demographic risks and in child maltreatment samples, higher rates of disorganized attachment in samples where parents had psychopathology and when the child was in foster care or adopted from foster or institutional care. **CONCLUSIONS:** This meta-analysis suggests that 1 in every 2 infants develop a secure attachment relationship with their caregiver. Secure attachment is more likely to develop when fewer stressors are imposed on the infant-parent dyad.
Validation of Parenting Interactions with Children: Checklist of Observations Linked to Outcomes Chinese Cultural Adaptation.

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INTRODUCTION: China’s early intervention programs are expanding to address developmental delays 0-3 years and to support parent-child relationships, but practical, valid, reliable, and easy to learn measures of parent-child interactions are lacking. AIM. To test the psychometric properties of the Parenting Interactions with Children: Checklist of Observations Linked to Outcomes (PICCOLO, Roggman et al., 2013) observational tool that was culturally adapted to Chinese. MATERIALS & METHODS: Three unique samples from Shaanxi, Zhejiang, and Hunan Provinces in China (child n = approximately 100 each) were recruited to study the psychometric properties of the culturally adapted Chinese PICCOLO with mothers, fathers, and grandmothers in urban and rural families. Caregiver play interactions with 1-3 year-old children using the Three Bag Task (Fuligni & Brooks-Gunn, 2013) were video recorded and then coded using PICCOLO (0.93 correlation agreement, 0.69 ICC). Child outcome measures included ASQ-3, ASQ:SE-2, PPVT, CBCL, and Chinese early literacy assessments. Findings: Preliminary results across all three samples showed that the PICCOLO total score predicted ASQ-3 (β = 1.30, p < .05), and ASQ:SE-2 (β = -0.04, p < .01). Out of the four PICCOLO domains, mother’s affection predicted Chinese character reading (β = 2.61, SE=1.36, p<.05) and encouragement predicted morphological awareness (β = 0.69, p < .05). Fathers’ responsiveness predicted Pinyin skill (β = 0.78, p < .001), encouragement predicted language skills β = 3.16, p < .001), and teaching predicted name writing skill (β = 0.07, p < .05). CONCLUSIONS: The culturally adapted Chinese PICCOLO showed strong psychometric properties among the urban and rural, low and high SES populations, with mothers, fathers, and grandmothers as caregivers, predicting significant social-emotional, cognitive, and communicative outcomes. These findings provide a foundation for expanding the approaches and tools that may be used to support relationship-based early intervention programs in China.
Symptoms of RAD and DSED in adopted children: the role of pre- and post-adoption factors

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Introduction: Due to early adversity and disruptions in caregiving, adopted children are at risk for developing disordered attachment. Emerging evidence indicates that the quality of caregiving conditions in adoptive families represents a protective factor that may buffer the negative effect of preadoptive adversity.

Aim of the study: Recent studies have been investigating mainly intercountry adoptees, and the present study is the first study investigating symptoms of Reactive Attachment Disorder (RAD) and disinhibited social engagement disorder (DSED) in both domestic and intercountry adoptions longitudinally.

Material and Methods: The sample comprises 118 adopted children between 0 and 104 months at placement and their main caregiver. Data assessments took place at around 29 months (wave 1) and 72 months (wave 2) after placement, respectively. Symptoms of RAD and DSED were measured using the Relationships Problem Questionnaire. Prenatal risk, pre-adoptive adversity as well as current relational experiences in the adoptive family were included as potential predictors of children’s symptoms.

Conclusions: The results show that 17.8% (wave 1) and 25.4% (wave 2) of adopted children had clinical scores of RAD and/or DSED indicating a significant increase from wave 1 to wave 2. Multiple regression analyses revealed that both early adversity and adoptive parents’ stress regulation predict symptoms of disordered attachment at wave 1. Results also reveal a moderating effect of adoptive parents’ stress regulation in that especially children who experienced early adversity and whose parents have difficulties in stress regulation are at risk. However, neither pre-adoptive adversity nor parental characteristics predicted the slope of RAD / DSED symptoms over time.

The present study confirms the results of international studies as early adversity was found to predict the occurrence of RAD and DSED symptoms. Moreover, our findings provide new insight into adopted children’s development by highlighting the interaction between early adversity and family-related factors.
Elements and settings associated to the quality of mother-infant interaction

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Early relationships matter and mother/father-infant interaction is a leading condition to establish early relationships. Therefore, the quality of the mother/father-infant interaction (e.g., eye-contact, affective touch, synchrony, turn-taking) interfere in the quality of the infant early relationships, scaffolding social-emotional interactions from the beginning of lives and promote development and mental health of the infant. To better known the elements and settings associated to the quality of mother-infant interaction, namely at different ages, as presented in the studies of this symposium, is important. These elements and conditions are positively associated to the quality of mother-infant interaction and may contribute to promote a better context to the infant development; namely, in infants with specific difficulties as in premature infants.
Latent Profiles of Maternal Distress in the NICU: Associations with Child Mental Health at 5

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Introduction: This study examined profiles of distress in mothers of preterm infants in a Neonatal Intensive Care Unit (NICU) in the United States and their association with maternal and child outcomes when children were 5 years of age.

Aim of the Study: Ninety-four racially and economically diverse mothers of preterm infants (≤30 weeks gestation) from the midwestern United States completed questionnaires assessing depression, state and trait anxiety, and NICU and life stress at their infant’s NICU discharge. When children were 5 years of age, mothers reported on their own and their children’s symptomatology—specifically socioemotional factors like symptoms of anxiety and depression. A latent profile analysis (LPA) was conducted to categorize maternal symptomatology.

Material and Methods: The LPA yielded four distinct profiles of impacted mothers: (1) Low Symptomatology, (2) High NICU Stress, (3) High Depression and Anxiety, and (4) High State Anxiety. Multiple social determinants of health were examined in relation to these profiles. Age, education, neighborhood deprivation, and infant clinical risk distinguished among the profiles. In addition, children of mothers in the High Depression/Anxiety profile experienced greater anxious and depressed symptoms than other groups at age 5.

Conclusions: This study addresses the importance of examining multiple dimensions of NICU distress to understand how patterns of mood/affective symptoms, life stressors, and Social Determinants of Health factors vary across mothers and impact children. Profiles of maternal NICU distress demonstrated enduring risks for poorer maternal and child mental health outcomes. This new knowledge underscores sources of disparate health outcomes for mothers of preterm infants and the infants themselves. Universal screening of preterm infants and their mothers is needed to identify at-risk dyads for poor health outcomes and those in need of individualized interventions that address both maternal and child well-being.
Comparing mental health in mother/infant dyads between responsive to extinction sleep interventions: a pilot study

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1
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Background
Methods to improve sleep in infants commonly involves some ignoring (extinction) but these are often unpopular with mothers stressed about their infant's distress when left to cry alone. Responsive methods are increasingly available but randomised control trials (RCT) have not been undertaken.

Aims
This pilot study aimed to compare stress, maternal depression and sleep in mother/infant dyads, in Responsive, Controlled Crying and control groups during a bedtime stressor (maternal-infant separation at bedtime).

Description
Maternal self-reported depression (Edinburgh Post natal Depression Scale – EPND), maternal perceptions of stress (Subjective Units of Distress - SUDS), their infant’s infant stress (visible stress - MPI-S, presence of crying, and intensity of crying) infant physiological stress (cortisol) and infant sleep (sleep diaries) were compared four times across eight weeks in 32 randomly allocated maternal-infant dyads (infants aged 6-12 months) - Responsive (RG, n= 15), Controlled Crying (CCG, n = 18) or Controls (Treatment as Usual -TAUG, n=8). Sleep duration was not different between groups but RG infants woke less (p= .008). There were no differences in cortisol between groups across time points. Maternal SUDS was positively correlated with infant Cortisol and MPI-S (p<0.05) and mothers in the RG were significantly less stressed (p=0.02) and depressed (p<0.05). A trend was observed that may support the hypothesis that maternal stress would be synchronised with maternal perceptions of infant stress, however, these findings were not statistically significant and require cautious interpretation.

Conclusion
Both CCG crying and RG improved sleep in infants. However, RG Mothers were less stressed and less depressed. When mothers believe their infants are distressed during a bedtime stressor, they tend to be stressed themselves. Findings support the efficacy and acceptability of responsive methods compared to control crying and offer families more choices to improve the infant sleep
Advances in the validation of the PAPA and PAMA in Chilean population

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Introduction: Despite the evidence that indicates that during the perinatal period the emotional state of mothers and fathers mutually influence each other, showing a significant correlation between depressive disorders (Baldoni & Ceccarelli, 2010; Paulson & Bazemore, 2010; Musser et al., 2013), in most countries screening during this period is aimed at women. Considering the particularities in the expression of paternal depression at this stage, Baldoni and his team (2022) developed a special instrument to detect affective alterations in this population.

Aim of the study: The following research contributes to the validation and dissemination of the Perinatal Evaluation Scale of Paternal and Maternal Affectivity (PAPA and PAMA), in its prenatal version, to be used in the Chilean population.

Method: A sample of 100 men and women who were expecting a baby were contacted through different channels and they were asked to answer the PAPA and the PAMA through google forms along with other instruments that evaluate similar symptoms.

Conclusions: Preliminary results do not show significant differences between the results of women and men, a good internal consistency and concurrent validity. This validation could mean starting screening in the primary health system for the male population during the prenatal period, emphasizing the need to have a systemic look at the perinatal stage in which care and upbringing are thought of in a co-responsible way.

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Exploring Embodied Trauma through the lens of Parental Embodied Mentalizing: Clinical, empirical and conceptual aspects

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Thanks to rigorous interdisciplinary scientific efforts, there is today little argument that early interpersonal relationships have long-lasting imprints on the infant’s body, mind, and cognitive, social, mental, and physical capacities. Given the first year of life is heavily rooted in nonverbal exchanges, and that the infant’s primary experience of the self, of the other and of the world is primarily nonverbal and body-based, there is merit in directing focused attention to the exploration and understanding of the embodied interaction between parents and their infants to identify both protective and risk factors. More specifically, it is possible to identify processes of embodied trauma. Broadly speaking, these can take place in two forms: the first manifestation is when the parent’s trauma is carried through in their body and movement which shapes the interaction with the child. This repeated embodied relational experience with the parent, in turn, becomes ingrained in the infant’s embodied self, such that it is possible to identify intergenerational transmission of trauma. In other words, parents’ trauma (physical, emotional, or often sexual) reverberates into the dyadic realm and impacts the parent’s ability to be attentive and sensitive to the infant’s emotional and mental needs. The complementary form of embodied trauma is examining how parent-infant dynamics, and the parent’s difficulty to keep in mind the infant’s mind, might create in the infant embodied trauma. The present symposium will present and address these two types of embodied trauma using both empirical data and clinical cases.

The first presentation is of research conducted on 115 mothers (MeanAge= 30.22; SD= 4.79) of toddlers (MAge= 23.27; SD= 6.79; AgeRange= 11-38 months; Girls= 51) explored associations between parental states of mind and psychopathology and parental embodied mentalizing. Preliminary findings (n=30) showed that self-reported maternal certainty about child’s mental states in reflective functioning was positively associated with PEM (r= .59, p<.05). However, seeing the child as the caregiver, a subscale of caregiving helplessness questionnaire, was negatively associated with maternal PEM scores (r= -.33, p<.05). these findings demonstrate the importance of parental states of mind in shaping—for better and for worse—the embodied interaction with the toddler.

The second presentation presents a video-recorded clinical case in which the clinical model of parental embodied mentalizing (PEMA) is applied to disentangle embodied trauma and its impact on the high-risk mother-infant interaction and relationship. PEMA provided a tool to address the unconscious, non-verbal and implicit processes manifesting in the mother-infant interactions and helped the mother to promote her mentalizing capacity and beginning to address early trauma. The third presentation describes research with 107 mother-infant dyads at moderate psychosocial risk aimed to investigate the associations between PEM and mind-mindedness in relation to a wide spectrum of maternal characteristics and within different mother-infant contexts (toys and no toys). Findings indicted distinctive associations between PEM and mind-mindedness with certain aspects of mothers’ characteristics and highlight that the mother-infant interaction context may play an important role in the expression of maternal mentalizing capacity.
Supporting infant relationships and reducing maternal distress with the Newborn Behavioral Observations: A randomized trial.

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Introduction
Research points to the significant impact of maternal distress on the parent-infant relationship and infant development. The Newborn Behavioral Observations (NBO) is a brief intervention supporting the infant, the parent and their relationship. An RCT examined the effectiveness of the NBO in a population of young infants and mothers with antenatal maternal distress and risk of postnatal depression (Nicolson, Carron and Paul, IMHJ, 2022).

Aims
Presentation of both published and unpublished data from the RCT to prompt discussion in the symposium of methodological strengths and limitations and research questions arising.

Methods
Pregnant, first-time mothers with current anxiety or depression symptoms or past mental illness were recruited from two Australian hospitals. Participants received three NBO sessions in the first month of life plus treatment as usual (TAU), or, TAU-only. Outcomes assessed at infant age 4 months included mother-infant interaction quality; maternal anxiety and depression symptoms; and depression diagnosis.

Results
Of 111 pregnant individuals randomized, 90 remained eligible and 74 completed the trial (82.2% retention). There were intervention effects on emotional availability F(6, 67)=2.52, p=.049, Cohen’s d=.90, with higher sensitivity and non-intrusiveness in the intervention group (n=40) than the comparison group (n=34). There was an intervention effect approaching significance for anxiety symptoms at 4 months (p=.06), and a significant effect over time (p=.014), but not for depression symptoms. Anxiety and depression symptoms significantly reduced to sub-clinical levels within the intervention group only. There were fewer depression diagnoses (n=6) than expected across groups, with no observed intervention effect. No adverse intervention effects were seen.

Conclusions
The NBO was accepted and exerted meaningful effects on relationship quality and distress; and may enhance the infant’s interaction experience and maternal emotional adjustment in at-risk populations. The study offers learnings for future research in brief infant mental health interventions.
As part of the RiPoD study, a large cohort (n = 700) of new mothers were recruited 1-6 days postpartum at the university hospital in Aachen and were observed for a period of 12 weeks. While 9% of them were found to develop postpartum depression (PPD), 13% developed postpartum adjustment disorder (AD). The PD and AD cases were accurately identified by means of a combination of clinical and remote assessment tools (Hahn et al., 2021). In the exploration cohort, a balanced accuracy of 87% was achieved in week 3 postpartum using a combination of baseline and follow-up depression EPDS scores and mood scores (online mood assessment) for the differentiation between PPD and ND. The results were confirmed in the independent replication cohort. Within the first 6 weeks postpartum, the clinical manifestation of AD and PPD resembled each other based on personal and family history of depression, stressful life events, depressive symptoms, and attachment to the child. Being unmarried, having a lower household income and less support at home were found to contribute to the development of PPD, whereas birth- and child-related complications appeared to trigger AD. A comparison between cumulative hair cortisol and cortisone levels in the third trimester of pregnancy and the first 12 weeks postpartum revealed that only ND and AD (and not PPD) had pregnancy-related physiological adaptation in cortisol/cortisone levels, which reverted to the pre-pregnancy baseline following delivery (Stickel et al., 2021). Using magnetic resonance imaging approximately 2 days after delivery, we also found that women who developed either AD or PPD within 12 weeks did not differ from ND immediately after delivery on the basis of structural and functional neuroimaging data (Schnakenberg et al., 2021). In the very early postpartum period, the mothers showed a significant reduction in gray matter volume in brain areas related to socio-cognitive and emotional processes compared to their nulliparous counterparts, indicating an effect of pregnancy on brain structure (Chechko et al, 2022).
Intimate Partner Violence and Maternal Supportive Behaviors in the Ecuadorian Amazon

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Introduction: Infants rely on caregivers to help them regulate their stress and provide cues of safety or fear to guide their exploration. When caregivers experience high levels of stress, intimate partner violence, and mental health challenges, they may be less available to provide needed supports. While child development research conducted in Low- and Middle-Income Countries (LMIC) has increased, the vast majority of infant mental health research in general, and related to interventions specifically, has been conducted in High Income Countries (HIC).

Aim of the Study: The current study, conducted in the Ecuadorian Amazon, extends the research in LMICs. This study examines the role of maternal mental health and intimate partner violence in relation to supportive caregiving behaviors.

Methods: A sample of 50 mother-child dyads living in two communities in the Amazon region of Ecuador participated in the study. Children’s average age was 26.6 months. Interviews included surveys of maternal depression, domestic violence and caregiving practices. The vast majority (82%) of mothers’ scores indicated the presence of domestic violence. Children’s language and cognitive development was assessed and a parent-child interaction was recorded and coded using the PICCOLO.

Findings: Domestic violence was positively correlated with maternal depression (r = .58, p < .01), use of harsh discipline (r = .40, p < .01) and negatively correlated with the PICCOLO total (r = -.40, p < .01). Domestic violence scores were negatively correlated with children’s language (r = -.35, p < .05). None of the remaining correlations between the child outcomes (language and cognitive) were statistically significantly related to maternal risk or protective factors. Regression models predicting language outcomes from maternal risk and protective factors will be presented.

Conclusions: Identifying specific family risk and protective factors within cultures and contexts may inform prevention and intervention efforts to support infant mental health.
Psychosocial and biological risk factors of peripartal depression and bonding difficulties in mothers and fathers

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Introduction: Mental disorders in pregnancy and postpartum period are common worldwide, if not treated sufficiently they might negatively affect not only the mother and father but also the child and the whole family in the long term. Even today, only a minority of postnatally depressed mothers are diagnosed and treated, even less the postnatally depressed fathers. Aim of the Study: Investigating prevalences and risk factors of perinatal depression in mothers and fathers. Furthermore we wanted to assess the impact of parental mental health on bonding to the infant. Material and Methods: N=81 couples were recruited and assessed in pregnancy, 3, 6 and 12 months postpartum. Conclusions: About 25% of the mothers and 17% of the fathers were at least once in this period above the cut-off for at least a mild depressive episode (using the MADRS interview without the sleep item). Risk factors for depressive symptoms in the peripartal period in both parents were previous depressive episodes (especially fathers), lower income, unemployment, impaired quality of marriage, depressive symptoms of the partner and a history of abuse in childhood. Anxious and depressive symptoms were correlated with impaired bonding to the child. Lower BDNF blood levels were associated with increased depressive symptoms in mothers 3 months postpartum. In fathers, increased postpartum depressive symptoms were correlated with lower levels of testosterone and testosterone precursors. Increased testosterone precursors and corticosone levels were correlated with more feeling of rejection and anger toward the child in the fathers. In the whole male sample, androstendione, DHEA and DHEAS as testosterone precursors were higher in pregnancy than after 3 and 6 months postpartum. Our first results hint at a complex interaction of psychosocial and biological factors in both parents in the peripartum period that could influence peripartal mental health and bonding to the child.
Evaluation: ‘Look- your baby is talking to you’ intervention to reduce depression in vulnerable mothers

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Introduction
Maternal anxiety or depression threaten the health of early parent-infant relationships. Healthcare professionals (HCPs) in the obstetric department are in a unique position to initiate early intervention to improve outcomes for both mother and infant. It is well-documented that early intervention and short-term programs consisting of a limited number of sessions aimed at improving mother-infant interaction are especially effective.

Aim
The intervention ‘Look- your baby is talking to you’ hypothesized that, by upskilling HCP’s competencies and knowledge related to early relationship formation, family focused approach, and enhanced collaboration and transition to the primary healthcare sector, maternal depressive symptoms would decrease 3-months post-partum.

Methods
The intervention ‘Look- your baby is talking to you’ included components of Family Focused Nursing and the Newborn Behavioral Observation. A total of 100 mothers with former or ongoing depression and/or anxiety were enrolled after delivery and randomized, 49 to the intervention group and 51 to the control group. The intervention included 3 NBO sessions and 3 family conversations. A process evaluation using the MRC Framework for evaluating complex interventions has been applied. This included data on HCPs before and after NBO training and case reports on components used showing that the intervention was implemented and puts mechanism of impact into perspective. Thus, when interpreting intervention effect attention should be drawn to organizational and interpersonal factors.

Conclusion
Within effect and evaluation research it is not enough to investigate whether the intervention works. One must examine why and for whom the effort works and on what. Interventions that aim to promote parenting skills are complex and it’s important to know how they are delivered, how they work, and for whom they do and don’t work. A key to doing so is applying comprehensive process evaluation and continuously reflect on how to capture effect and impact.
Randomized Controlled Trial of the NBO to Support Mothers of Moderate and Late Preterm Newborns

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Introduction
Mothers of preterm infants are at high risk for postpartum stress, anxiety, and depression, which may compromise parenting, impeding healthy child development. The Newborn Behavioral Observations System (NBO) aims to enhance the parent-infant relationship by strengthening parents’ confidence, observation skills, and understanding of their baby’s strengths/challenges.

Aims
The BabyAMOR Study is a randomized controlled trial of the NBO targeting maternal mental health and early parenting of moderate/late preterm newborns.

Methods
Mothers and newborns (32 to <37 weeks gestation) were enrolled shortly after birth. These included 105 intervention and 101 control dyads. Retention was 88%. Intervention dyads received three NBOs over the first six weeks after discharge, a parenting self-reflection guide, weekly emails, and a telehealth visit during this time. Key outcomes included maternal ratings of parental distress, confidence, anxiety, and depressive symptoms measured at baseline, six weeks post-discharge and four months corrected gestational age. A videotaped play session was analyzed for maternal sensitivity. After completing all other study tasks, intervention mothers participated in a mixed methods interview about their subjective experiences of the intervention.

Results
Missing data were minimal. Groups were equivalent except intervention mothers were more likely to have college/graduate degrees and control group mothers had higher cumulative life stressors. There were no significant differences between intervention and control groups on key outcome measures. Of 77 mothers interviewed, 92.2% reported the NBO was helpful. Mothers described the NBO as informative, reassuring, validating, supportive of their confidence and emotional wellbeing, and helpful in negotiating the challenges of prematurity.

Conclusions
This short term intervention using the NBO to support preterm mothers did not demonstrate impact on maternal mental health or parenting sensitivity. Subjectively, mothers reported the NBO as acceptable and supportive. Study limitations included a predominantly White sample with few mental health challenges, limiting sample heterogeneity prior to randomization.
Perinatal Mental Health, Dysregulated Babies and Early Intervention

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(Overall Symposia Abstract)

In study 1, the RIPOD (or risk of postpartum depression) study by Chechko and colleagues, postpartum follow-ups, risk factors and multimodal neuroimaging data were used for prediction of clinical cases. Cases of Postpartum Depression and Anxiety Disorders were accurately identified by means of a combination of clinical and remote assessment tools.

The impact of perinatal mental health on the infant’s development is well known. However, most studies focus on maternal mental health and mother-baby-bonding and interaction. More recently, the importance of fathers for the child’s development and father’s perinatal mental health is taken into consideration. Therefore, study 2 presents scientific knowledge and novel data on biological and psychosocial risk factors of maternal as well as paternal perinatal depression and the impact on bonding to the child.

The prevailing emphasis on the importance of early intervention improving both parental functioning and fostering secure attachment relationships in infants support the clinical need to detect very early risks for parents and babies. Study 3 evaluates the impact of parental mental health and the infant’s capacity of state and affect regulation on the quality of the parent-infant relationship assessed by the PIRAT Global Scales. The data supports the relevance of a systematic assessment of relational disturbance and infant’s regulatory problems in combination with standard self-report questionnaires to screen for parental mental health.

The PAULINE-study 4 investigated the relationship between postpartum maternal depression and infant regulatory problems in a sample of mothers and their infants born during the first nationwide lockdown, in comparison to mother-infant dyads assessed before the worldwide pandemic. Particularly, maternal depression revealed to be associated with infant sleeping and crying problems at 7 months in both groups as well as infant’s negative emotionality and maternal parity. Parenthood under COVID-19 showed no significant additional effect on infants’ regulatory problems.
Social touch is a prevalent and essential modality in mother-infant social exchanges (Hertenstein, 2002; Stack & Muir, 1990). Touch also plays an important role in the infant’s early social, emotional, and physical well-being (Field, 2019). Nonetheless, studies of how mothers actually use touch, in tasks representative of the infant’s life, are still limited. This is the case, particularly during the second half of the first year of life, and in non-clinical populations. We analyzed maternal touch behavior, in non-object-oriented and object-oriented play interactions.

Mother-infant dyads were observed at 7 and 12 months during a structured social interaction design with three play tasks: (1) play with objects, (2) play without objects, and (3) difficult object play (above the infant’s developmental level). Social touch was coded using an adapted version of the Mother Touch Scale (Beebe et al., 2010; Serra et al., 2020). Every maternal touch event was coded and categorized into twenty-one types of touch behaviors; each touch was further ordinalized in eight categories, from affectionate touch to intrusive touch (categorization was labeled OMTS). Bayesian beta regression with mixed effects was used to assess the effect of infant’s age and play tasks on the proportion of time mothers touch their infants considering the total amount and the OMTS categories. Results showed that: (1) the total frequency of maternal touch decreases from 7 to 12 months in all play tasks; (2) this decline is mainly explained by the decrease in static and object-mediated touch at 12 months; (3) mothers touch more often in dyadic than in triadic play tasks; (4) object-mediated touch is lower in play with objects than in difficult play task.

Our findings add further evidence regarding the decrease of maternal touch in the first year. Of relevance, our study suggests that the developmental trajectory of maternal touch behavior is modulated by infant’s evolving needs, and by the different challenges in object vs non-object play tasks.
First steps together: Screening tools and care pathways for infant and early childhood mental health

Dr Purnima Sundar

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This session will present recent research on care pathways and the clinical process to support service provision in Ontario, Canada for children under 6 years old. For the first presentation, we will share findings from a scoping review of available clinician-administered mental health and developmental screening tools that contributed to the development of a new measure. We will introduce this newly developed communimetric mental health screening tool called the HEADS-ED under 6. For the second and third presentations, we will present utility and decision validity results based on intake workers' use of the HEADS-ED under 6 at two pilot implementation study sites. The first pilot site includes a community mental health agency that provides mental health and developmental services for children under 6 years. The second pilot site includes a regional, hospital-based coordinated access and navigation service for mental health and addictions care for all children and youth up to 21 years of age. During the fourth session we will share the process and findings from a pilot study that engaged three communities to strengthen collaboration across sectors to develop efficient care pathways that support pregnant people, infants, children under 6 and their families. Each community developed care pathways that considered the unique geographical and regional nuances of the counties, and identified pathways that better attended to the unique and specialized needs of Indigenous clients. The findings from Ontario can be used as a model for other communities to increase capacity, improve identification of need, and access to appropriate intensity of services. The implementation of screening tools and integrated care pathways helps families and care providers by taking the guesswork out of what services are available and when, where and how to access them and ensure families get the help they need and when they need it.
Introduction: The COVID-19 pandemic has highlighted the extent to which infants, young children and their families are impacted by the lack of accessible mental health services, supports and programs in their communities. Families and care providers must be equipped with the right knowledge to recognize and respond to social, emotional and behavioural challenges in the early years.

Aim: The Knowledge Institute on Child and Youth Mental Health and Addictions and Infant and Early Mental Health Promotion partnered to engage three communities in Ontario, Canada to strengthen collaboration across sectors and develop efficient care pathways that support pregnant people, infants, children under 6 and their families.

Methods: We meaningfully engaged with care providers across education, primary care, early learning and care, child welfare, child and youth mental health and addictions sectors to create intersectoral care ensuring that families and children they are matched with the best service, at the right time and in the most appropriate modality to meet their needs.

Results: In each community we identified the knowledge and resource gaps in their community, developed care pathways and worked to improve equitable access to mental health services and programs. We provided training to over 600 service providers on foundational concepts in infant and early mental health, standardized assessment tools and a developmental support plan program to equip service providers with the knowledge and skills they need to identify the early signs of mental health challenges.

Conclusions: Investment in early intervention prevents the development of more complex mental health issues and sets children up for long-term success at home, at school and in life. This pilot project identified the various mechanisms intended to strengthen partnerships, accountability, and communications across sectors to develop efficient community care pathways that support pregnant people, infants, children under the age of 6 and their families.
Addressing Mental Health Needs of Young Children Through a Novel Coordinated Access and Navigation Program

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Introduction: To provide the best mental health and addiction services, it is critical that mental health and addiction systems be able to adapt to fluctuating needs, resources, capacity, and environmental circumstances. To address this gap, 1Call1Click.ca was established to ensure that every child/family in Eastern Ontario has faster access to high-quality, connected, mental health and addiction services. Its goal is to solve challenges such as: siloed care, navigating program eligibility, systematic measurement of outcomes, and inequitable delivery of/access to care.

Aim: 1) briefly describe the 1Call1Click coordinated access and navigation program, 2) characterize the demographic and clinical presentations and service needs, of children under 6 contacting 1Call1Click.ca, 3) evaluate if the level of recommended care aligns with identified MHA needs on the HEADS-ED under 6 screening tool.

Methods: All children (birth to 5.99 years) whose caregivers have contacted 1Call1Click.ca between June 2021 to August 2022 were included. Descriptive statistics were used to characterize service users in terms of demographic, clinical and health service variables. Correlations were used to examine the association between total HEADS-ED scores and level of recommended care.

Results: 245 children (Mean Age: 4.00 years, 59.6% male) accessed the service. The main presenting complaints included aggression (51.5%), parent-child relationship issues (41.6%), ADHD (30.6%) and anxiety (29.8%). 28.1% of HEADS-ED ratings indicated a need for immediate action and most triggered one (47.4%) or two (33.9%) MHA service referrals. The correlation between total HEADS-ED score and ranking of stepped care needs was significant (r=.57, p<.001).

Conclusions: 1Call1Click.ca provides a platform for an integrated access and navigation service for identifying, tracking, and matching client/patient needs to services across the healthcare system. Based on the 1Call1Click.ca utilization data, tools such as the HEADS-ED under 6 can help identify patient needs and determine level of care.
Scoping Review of Clinician-Administered Mental Health and Developmental Screening Tools for Children Under Six

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Introduction: Approximately 10-25% of infants and young children (up to 6 years of age) have a mental health (MH) and/or developmental problem; however, most are undetected or untreated. Recognizing and intervening before children reach school age is important for their academic, developmental and MH outcomes. Through routine health visits, clinicians have the opportunity to promptly identify children at risk of, or currently have, a MH or developmental concern. However, clinicians often report that a lack of time, training, clinical guidelines, and knowledge of specialized services impede screening. Although screening tools for young children exist, many are time consuming, assess one area of development, or rely solely on parent, not provider, involvement, thereby limiting their use.

Aim: To enhance clinicians’ awareness of available screening tools that meet their needs (e.g., brief, easy to use) as a first step to improving early identification of MH and developmental problems in young children.

Methods: We conducted a scoping review to identify and describe existing brief, multidimensional MH and developmental screening tools for children up to 6 years that are administered by clinicians.

Results: A search of electronic databases and relevant reference lists yielded 10 eligible screening tools. Most tools (n=7) assessed MH and development using checklists and behavioral milestones, while fewer used open-ended questions (n=3). When reported, training was minimal, and cost was free. Tools varied in administrators (e.g., nurse, physician), number of items (7-110) and developmental areas assessed (2-10), associated scores and cut-offs. Most tools underwent psychometric or usability testing and demonstrated good comparability with other standardized measures. One tool provided recommendations for monitoring and support, but none provided information on specialized services.

Conclusion: Although brief, valid and reliable, multidimensional screening tools for infants and children exist, a tool that guides service planning could improve access to specialized care for those in need.
Targeting protective factors to facilitate positive outcomes for young children: 4 diverse interventions

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Introduction: Caring adults are critical for young children’s well-being. However, parenting is difficult in the best of times and sometimes dangerous to children in the worst of times. Early intervention to support parent and child well-being can be critical protective factors when parents or children are struggling.

Aim: This symposium will present the results of four diverse programs to promote protective factors that support positive functioning: in the NICU; with Latino immigrant families with high stress levels; in a community sample of “typical” families; and with children involved in the child welfare system.

Methods: The first study compared mental health outcomes for mothers of preterm infants in the NICU vs. nursery and found the NICU protected against maternal mental health problems. The other studies focused on intervention outcome using evidence-based strategies ranging from an adapted Child-Parent Psychotherapy (CPP) to Parent-Child Care (PC-CARE) to the Better Together intervention. All studies assessed infants/parents over two or more time points; one study assessed follow-up data one year post-intervention. Measures included the Parenting Stress Index, Protective Factors Survey, DECA, and other parental mental health and child well-being measures.

Conclusions: Each intervention was effective in promoting protective factors for young children and their parents. NICU stays reduced maternal anxiety and increased parental confidence, contradicting other evidence. CPP in immigrant families was associated with improved parental concrete support, PSI parental distress, caregiver mental health, migration grief, and children’s initiative. Children whose foster parents completed the PC-CARE program were four times more likely to maintain placement stability six months later. Better Together found parents and children improved nurturing and attachment, parental mental health, and decreased hostility long-term. As parents improve their skills and mental health, children’s caregiving environments and outcomes improved. Small changes may lead to strong protective effects that support thriving in young children.
Increasing protective factors and positive parenting interactions for young children in a community-based intervention

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Introduction: Parenting in the 21st century has a plethora of challenges associated with it, including a high percentage of parents working, unresolved trauma hindering parenting efforts, and a desire for knowledge about developmentally appropriate practices. We know that children thrive when they experience safe, stable, and nurturing relationships with their caregivers. We need inexpensive, high impact community-based programs to support parents and facilitate connecting activities between parents and their children.

Aims: To understand the impact of a 12-week program developed to support positive parenting, promote protective factors, and improve the parent-child relationship through meaningful and fun bonding activities for the whole family as well as age-appropriate child development knowledge for parents.

Materials and Methods: Data were collected at pretest, posttest, and 3 and 12 months after the end of the 12-week intervention. Attendance was 88%. Measures included the Protective Factors Survey, the Outcome Questionnaire 45 (OQ 45), the Emotional Availability measure, and the DECA.

Results: Paired t-tests confirmed a strong increase in nurturing and attachment from pretest to posttest (t=4.39; p<.001); 3 months (t=4.95; p<.001); and 12 months (t=1.74; p=.12 due to low sample size). Results also indicated a decrease in parental hostility toward their children from pretest to the 3 month follow-up (t=2.24; p<.05) and 12 month follow-up (t=3.67; p<.01). Parental social role scores improved from the pretest to the 3 month (t=2.21; p<.05) and 12 month (t=1.96, p=.09 due to low sample size).

Conclusions: Focusing on building positive childhood experiences between parents and their children while providing information about development appears to positively impact the parent-child relationship, decrease hostility toward children, and improve parental social roles immediately as well as long-term in a community sample.
Mother-infant interaction in the first 48 hours of life during the feeding situation

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From the first hours of the baby's life, feeding is an experience of great psychological relevance both for the mother and the newborn. Feeding ensures growth and development and provides an opportunity for mother-baby interaction and intimacy. In addition, while feeding, the mother activates an important maternal function to sustain the baby's life and help him regulate his physiological and emotional state.

The present exploratory study describes the quality of mother-infant interaction in a sample of mothers who decided to breastfeed (15 dyads) and mothers who chose formula-feed (15 dyads). The study involved 30 mother-baby dyads admitted to the University Hospital of Tarragona maternity clinic in 2017. Healthy babies were included, receiving early contact with their mothers and aged between 24 and 48 hours. The quality of mother-newborn interaction was assessed using the self-developed Mother-Newborn Interaction Observation Scale in the First 48 Hours of Life (EOI-48h), composed of dimensions of a) maternal interaction behaviours, b) newborn behaviours, and c) dyadic functioning. The Newborn Feeding Questionnaire assesses maternal feeding decisions.

Mother-baby interactions in breastfeeding dyads were characterized by increased eye contact, physical contact, enjoyment, positive emotionality and communicative receptivity, with more positive rates of rhythm and synchrony in the interaction.

The study highlights the emotional and communicative benefits of breastfeeding for mothers and babies in the first hours of the postnatal stage. In addition, breastfeeding creates the opportunity for developing parenting skills that enhance the quality of mother-baby interaction and positive patterns of dyadic regulation between mother and baby.
Maternal psychopathology as a risk for parenting and child development: Findings from two longitudinal studies

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Parental mental health is regarded as an essential risk factor for dysfunctional parent-child-interaction and child development. Findings from two different longitudinal samples will be presented, in which the influence of parental mental health problems on the development of attachment and emotional regulation was investigated.

In a short-term-longitudinal study in early childhood we found that high cumulative family risk predicted child lower maternal sensitivity towards the child as well as the child’s attachment security. Analyses showed that maternal sensitivity mediated the effect of family risk on attachment security as which in turn predicted attachment security attachment insecurity, and that the effect on attachment security was mediated by maternal sensitivity and moderated and that this effect was mediated by maternal sensitivity and was suspended when maternal sensitivity was heightened. Results from further analyses will be presented regarding the specific contribution of risk factors concerning parental mental health problems to the cumulative risk score and the mediator and moderator effects.

In a long-term longitudinal study, we investigated long-term effects of maternal alcohol consumption during pregnancy and maternal depression around the child’s birth on maternal sensitivity in middle childhood. The findings indicate an indirect effect, as maternal sensitivity during middle childhood was mostly predicted by contemporary maternal depression which however, was associated by earlier maternal mental health problems. Further analyses will refer to the consequences of maternal mental health problems on child development (attachment, emotional regulation, behavior problems) in middle childhood via maternal behavior. The findings will be discussed from an attachment theory perspective and within the theoretical framework of risk-protection model.
High-risk caregiving environments: Longitudinal studies examining risk factors, parenting behavior and child socio-emotional competences.

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Modern developmental psychopathology proposes risk-protection-models to explain maladaptive psychological development or the development of children growing up under adverse circumstances. While a high-risk environment will heighten the risk for maladaptive development, protective factors may moderate this influence and support adaptive development. Findings from two different longitudinal studies with biological families will be presented, in which the influence of cumulative or specific risk factors on the development of attachment and emotional regulation was investigated with simultaneous examination of the role of parental behavior as a mediating or moderating factor.

In a short-term-longitudinal study in early childhood we found that high family risk in biological families predicted child attachment insecurity and that this effect was mediated by maternal sensitivity which was also affected by family load. However, the effect was not detectable in families in which the mother was able to respond sensitively despite family load. Still running analyses will show whether we can find similar effects for other child characteristics, e.g. the child’s problems in emotional regulation.

In a long-term longitudinal study we investigated effects of maternal psychopathological risk around the child’s birth on attachment, emotional regulation and behavior problems in middle childhood. The findings show that child socio-emotional competences at school age can be predicted by prepartum maternal depression. The effects, however, were moderated by postpartum and current depression, current maternal sensitivity and the child’s gender. Still running analyses will include maternal alcohol consumption as an additional risk factor.

The findings will be discussed from an attachment theory perspective and within the theoretical framework of risk-protection model.
Parents under Pressure – Challenges and needs of families with young children during COVID-19

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INTRODUCTION: Changes in intrafamilial roles and family forms as well as raised parenting expectations reflect profound societal changes during the past decades. Moreover, continued social inequalities have increased stress on mothers and fathers, particularly in vulnerable families experiencing psychosocial burdens like single parenthood in the context of socioeconomic disadvantage, child’s mental health problems or other increased care needs of children (Ulrich et al., 2021). Accordingly, research shows a higher risk of poverty and parenting stress among single parents, and parenting stress to be positively associated with impairments in parent-child relationships due to compromised emotional availability (e.g., Menon et al., 2020, Mills-Koonce et al., 2011). It is also a well-documented risk factor for infants’ mental health problems (e.g., Olsen et al., 2019), even though associations are not unidirectional. The consequences of the COVID-19 pandemic have further exacerbated such problems, putting parents under additional pressure. Studies show that COVID-19 restrictions themselves were particularly burdensome for parents of young children (e.g., Buechel et al., 2022). Yet, developmental psychology still lacks a focus on the needs of parents, which is a key intervention point, particularly in early childhood.

AIM: Thus, the aim of the current symposium is to shed light on the needs of parents of young children during the pandemic.

MATERIAL: The symposium comprises three presentations on the challenges of families with higher child- or family-related burden, e.g., children with (mental) health impairments or families following a recent relationship dissolution.

CONCLUSIONS: The contributions will highlight results on psychosocial burden, needs and service use in families during the pandemic from a clinical, a population-based and a family-systems point of view, and discuss implications for clinical practice.
Single parent families of young children in light of the COVID-19 pandemic: Challenges and needs

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INTRODUCTION: Single parenthood has become an important context for child development, even in young age. Despite considerable variability across studies and countries, on average meta-analyses point to poorer outcomes for children of divorced parents than for children of married parents (e.g., Swartz-den Hollander, 2017). Likewise, single parents, particularly those of young children, are at higher risk for mental health impairments or parenting stress, and additional stressors like coparenting conflict exacerbate emotional strain (e.g., Liang et al., 2019). During the pandemic, separated parents were forced to re-organize parenting plans, due to contact restrictions or COVID-19 infections with potential of heightened coparenting conflict and stress.

AIM: The current study aims to shed light on the particular challenges single parent families with young children faced during the pandemic, and the needs they report.

METHODS: Data stem from a diary study of N=201 parents (26.4 % with children under 4 years of age) who separated within the last 5 years. Besides other information, family well-being (e.g., WHO-5), social support (OSSS-3), coparenting and needs for support were assessed. Most of the parents had joint legal custody, and 51.7% were in a previous or current legal dispute with the other parent.

RESULTS: Analyses show that parents’ well-being is only mid-range (M=11.32; SD=5.44), and many parents experience coparenting problems. Parents of young children report higher social support ($t$=-2.24; $p<.05$) and parenting quality than parents of older children, but they also more often experience ruminating regarding the separation. Needs include how to get more emotional distance (58.7%) or protect children from conflict (58.2%). Further analyses will examine resources and needs of parents with young children as well as daily coparenting in the face of the COVID-19 pandemic.

CONCLUSIONS: Findings of this study will be discussed regarding implications for prevention efforts for parents in the course of (conflictual) separation.
Parenting stress and pandemic burden in families with infant crying/sleeping/feeding problems vs. a non-clinical sample

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INTRODUCTION: The COVID-19 restrictions have been a burden for parents, e.g., resulting in parenting stress. Parenting stress can have a negative impact on parent-child-relationship and infant mental health. High levels of parenting stress in families with infant crying/sleeping/feeding problems were already evident before the pandemic. Still, little is known about their situation during the pandemic and additional burden related to the implemented restrictions and changed living conditions.

AIM OF THE STUDY: We investigated whether parenting stress during the pandemic was higher in families with children with crying/sleeping/feeding problems than in a non-clinical sample (1), if the overall pandemic burden differed between both groups (2), and how specific pandemic restrictions/changed living conditions related to parenting stress (3).

MATERIAL AND METHODS: N= 148 parents (Mage= 34.05 (SD = 4,88) years, 94.6% mothers, 89.2% German native speakers; 68.9% with high school degree) of infants (Mage = 10.39 (SD = 6,52) months; 54% boys) were cross-sectionally surveyed using standardized questionnaires. The clinical sample (n=74) was recruited in a German cry baby outpatient clinic and matched with a non-clinical comparison group (n=74).

RESULTS: Parenting stress (p < .001, d=.79) and overall pandemic burden (p = .023; d = .36) in the clinical sample were higher than in the non-clinical group. Parenting stress correlated with the overall pandemic burden in the clinical group (r= .32, p=.01). In both groups, parenting stress and increased family conflicts during the pandemic were related (clinical: r = .27, p =.02; non-clinical: r = .39, p= .01).

CONCLUSIONS: Parenting stress continues to be a major concern in parents of infants with crying/sleeping/feeding problems also during the pandemic. In addition, they seem to be especially burdened by the pandemic itself. Affected families are a double-risk group during the pandemic which needs to be addressed in prevention and intervention efforts.
Mixed methods examination of reflective functioning of mothers in substance use treatment

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Mothers with substance use disorders (SUDs) are often described as experiencing challenges in caregiving. Parental reflective functioning (PRF) is one important domain underlying these challenges. However, we know very little about the variability in skill within this population and the factors impacting it, thus limiting specificity in assessment and treatment.

This study will present baseline data compiled from 194 mothers recruited across three randomized controlled trials of Mothering from the Inside Out. Mothers were recruited from community-based outpatient substance use treatment clinics in the Northeastern United States. Mothers ranged in age from 19-45 years (M=30.20, SD=5.10) and had children ranging in age from 9-59 months (M=29.46, SD=14.24).

Mothers completed the Parent Development Interview (PDI) as a measure of PRF. Mothers’ responses were transcribed verbatim and coded on a scale of -1 to 9, with higher scores representing higher PRF. We categorized each item on the PDI as being either positively valenced (e.g., Describe a time in the last week when you and your child were really ‘clicking’) or negatively valenced (Have you ever felt annoyed or angry as a mother?). Mothers also completed the Beck Depression Inventory-II and a trauma exposure checklist.

Paired-samples t-tests will examine differences in mothers’ PRF on positive versus negative caregiving experiences. Given their links with PRF, depression and trauma will then be included as covariates. Inductive coding and qualitative thematic analysis will elucidate themes associated with mothers’ positive and negative caregiving experiences in the context of addiction.

Our findings will highlight the nuances and variability in mothers’ reflective functioning depending on the valence of the caregiving experiences being discussed, with potential influence from exposure to trauma and current depressive symptoms. We will discuss the clinical relevance of these findings and how they may apply to working with mothers in treatment for a SUD.
Parenting in Substance Use Disorder: how do different mechanisms and interventions affect quality of care?

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The symposium aims to integrate different perspectives on parental substance use disorder (SUD), providing an overview on how the quality of care in these families is affected by different behavioral, affective and cognitive mechanisms and supported through specific interventions. Despite the knowledge about the harmful associations between substance misuse, parental and child wellbeing, there are still several gaps in the extant literature that will be explored thought the contributions presented.

Specifically, the work of Hyysalo and colleagues will consider the role of unpredictability of maternal sensory signals during mother-toddler interaction on child cognitive development. They will also explore the structure of maternal sensory signals in mothers with and without substance misuse. The work of Lowell and colleagues will describe a study of reflective functioning in a sample of mothers attending outpatient SUD treatment. They will explore differences in reflective capacity based on the positive or negative emotional valence on Parent Development Interview items, as well as how the experience of trauma may play a role.

The work of Porreca and colleagues will explore associations between parental cognitive functioning, psychopathological symptoms, and quality of parenting behaviors during separation-reunion contexts in mothers attending residential treatment.

Finally, the work of Salo and colleagues will report on the quality of parenting after intervention, exploring changes in maternal emotional availability and reflective functioning after the administration of the Holding Tight® treatment, an intensive program developed in Finland for parents with SUD.

The collection of findings from these diverse backgrounds has significant implications for timely and tailored interventions. Marjo Flykt will be the discussant and will consider the four research studies, focusing on the impact that these different mechanisms and interventions could have on quality of care in the context of maternal SUD.
Maternal substance use and parenting behaviors in stressful situations: which role of cognitive mechanisms and psychopathology?

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Introduction: Parents with substance use disorder (SUD) are at increased risk for dysfunctional parenting practices and undesired developmental outcomes in offspring. Recent neurobiological models highlight a complex interaction between substance use and stress circuits, which can be linked both to the condition of SUD and to parental responses. Parents with SUD are at higher risk to experience heightened levels of stress during caregiving practices, which can be linked to less optimal behavioral responses during mother-child interactions and to an increased risk of relapses. Notably, stressful experiences have been previously linked to the presence of neuropsychological deficits and psychological distress, two aspects that often co-occur with SUD and that might partially account for quality of parenting. Despite this, no study investigated associations between cognitive functioning, psychopathology, and parenting behaviors during stressful situations in mothers with SUD.

Aim of the study: The study aimed to investigate cognitive functioning, psychopathology, and quality of parenting behaviors in mothers with SUD during stressful a context.

Material and methods: 30 mothers with children aged 1-5 years old in residential treatment for SUD were assessed with respect to cognitive functioning, psychopathology, and quality of parenting. Measures were carried out at treatment admission. Cognitive functioning was assessed through neuropsychological tasks (ENB-2; Mondini et al., 2003), psychopathology through self-report measures (SCL-90-R; Derogatis, 1975), quality of parenting behaviors and of mother-child interactions during videotaped episodes of separations and reunions (EAS; Biringen, 2008).

Conclusions: The management of stressful contexts might represent a particular challenge for parenting in the context of SUD. Cognitive functioning and levels of psychopathology might account for quality of parental responses during these situations. These results could orient and inform assessment and treatment. Clinical implications of the findings are addressed.
EARLY INTERVENTION WITH BABIES AT RISK FOR AUTISM:
MICROANALYSIS OF FILMED SESSIONS OF PSYCHOTHERAPY

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INTRODUCTION:
Currently it is possible to identify babies at risk for autism at four and nine months with the PREAUT-Olliac Grid (Olliac et al., 2017). It is necessary to consider brain and genetic plasticity for the treatment of these babies. This plasticity is higher in the first year of life.

AIM:
To evaluate a method of early intervention with babies at risk of autism and their parents.

MATERIAL and METHOD:
37 babies defined with autistic disorders’ risk was included in our research after the PREAUT-Olliac grid administration. The centers of psychotherapy provided us all the weekly sessions filmed with the parents’ agreement. In team, we developed a coding system for our microanalysis method. The aim is to observe and analyze in detail the various behaviors and reactions of each actor present during the session (ELAN software). ELAN is an annotation tool that allows to create and edit annotations on video and audio data. Each session is coded by two members of the team (double-blind cross-coding). Finally, statistical analysis and linking with the hypotheses are made. In this presentation we present a clinical case and show the statistical results of our analysis of gaze and motherese and their utility in the early intervention.

CONCLUSIONS:
The microanalysis can highlight the efficacity of this type of early intervention for the babies at risk for autism.
Mother-infant breastfeeding and bottle-feeding interactions

Mother-infant breastfeeding and bottle-feeding interactions Bárbara Costa¹, Dr. Raquel Costa², Professor Barbara Figueiredo¹
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INTRODUCTION
Although the association between the mother feeding method and/or depression and the quality of mother-infant interaction was already been addressed in the literature, inconsistent data were presented regarding the mother-infant interaction during breastfeeding and bottle-feeding, namely in mothers with or without depression.

AIMs of the study
The main objectives of this study are to analyze (1) the differences in the quality of mother-infant interaction during breastfeeding versus bottle-feeding, (2) the differences in the quality of mother-infant interaction between depressed and non-depressed mothers and (3) the moderating role of the feeding method on the association of the mother depression on the mother-infant interaction.

MATERIAL and METHODS
A sample of 55 primiparous mothers and their 3-month-old infants were videotaped during breastfeeding or bottle-feeding, and the mother-infant interaction was assessed using the Interaction Rating Scales (IRS). The mothers were recruited at the 3rst trimester of pregnancy, accessed with the Edinburgh Postnatal Depression Scale (EPDS) and the Structured Clinical Inventory for DSM-IV Diagnoses, at the 3rst trimester of pregnancy and 3 months postpartum.

RESULTS
Infants showed worse interactive behaviors during bottle-feeding compared to infants during breastfeed. Depressed mothers showed worse interactive behaviors than non-depressed mothers during feeding. Nonetheless during breastfeeding depressed mothers and infants showed better mother-infant interaction compared to depressed mothers and infants during bottle-feeding. No significant differences were found on the mother-infant interaction between depressed mothers and infants during breastfeeding or non-depressed mothers and infants during breastfeeding or bottle-feeding.

CONCLUSION
This study results emphasizes the contributes of breastfeeding on the quality of mother-infant feeding interaction.
Cries of Silence

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INTRODUCTION On February 24, Russia started the war in Ukraine and our world has completely changed. 500 surrogate mothers, whose deliveries are approaching, find themselves under the continuous bombardments of the Russian army, 21 children born to surrogate mothers are in the basements of maternity wards accompanied by nannies-nurses, whose number is much lower than the number of children. The further fate of newborns is not assured. Most biological parents cannot come to Ukraine because of the war. This situation is absolutely horrifying and dehumanizing for the departure of their lives. AIM The objective is to describe the supervision work of a team of professionals in the Kiev maternity hospital in order to provide conditions to ensure the beginning of the psychic life of babies born by surrogacy during the war. MATERIAL and METHOD Weekly online supervisions lasting two hours for a team made up of 16 different professionals who take care of 24 babies. RESULTS The group supervisions favored the work with the babies, as well as the evaluation of these babies through observation scales. It was possible to verify that although the babies share the same traumatic situation, each one in their own way can overcome it, mainly through the adults' speech directed to the babies. CONCLUSIONS This presentation will have the particularity of describing the importance of a job during a traumatic situation. The results presented allow us to affirm that despite sharing the same traumatic situation, each baby can build their future in their own way, with the support of the team of professionals.
Prenatal methamphetamine exposure and executive function in children prior to school entry.

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Introduction: Higher order cognitive processes collectively referred to as executive function (EF) develop rapidly during the preschool years and are considered a precursor to life-long academic, social and behavioural outcomes. Yet little is known about the effects of prenatal exposure to methamphetamine and alcohol on EF processes prior to school entry.

Aims: 1) To investigate whether prenatal exposure to methamphetamine and alcohol are associated with poorer executive functions prior to formal school entry (age 4 1/2).
2) To determine whether neonatal, caregiver and environmental characteristics since birth explain these associations.

Methods: Infant clinical outcomes at birth and prenatal substance exposure were obtained from 221 mothers enrolled in the New Zealand Infant Development, Environment and Lifestyle Study. Primary caregivers were interviewed at 1, 12, 24, 30, 36 and 54 months to obtain infant, maternal and family characteristics (Maternal Lifestyle Interview). The Brief Symptom Inventory, Substance Use Inventory, and the Home Observation for the Measurement of the Environment measured maternal mental illness, continued substance use and the home environment, respectively. EF outcomes were obtained from the Parent Report of the Behavior Rating Inventory of Executive Function-Preschool Version (BRIEF-P) including 5 clinical scales (Inhibition, Shifting, Emotional Control (EC), Working Memory (WM), and Plan Organize PO), 3 indices (Flexibility, Inhibitory Self-control (ISCI), and Emergent Metacognition EM), and a Global Executive Composite (GEC). Higher T-scores are less optimal.

Results: In adjusted analyses, prenatal exposure to methamphetamine plus alcohol was associated with the clinical scales of Shifting (r²=.19) and EC (r²=.17), indices of ISCI (r²=.17) and Flexibility (r²=.22), and the GEC (r²=.24). Males had significantly higher scores on EC than girls (Mean T-score=58.89 vs 53.90).

Conclusions: Methamphetamine plus alcohol exposure along with the home environment and continued heavy use of tobacco (>10 cigarettes/day) was associated with deficits in higher order cognitive processes prior to school entry.
COVID19 lockdown: impact on maternal psychological status, couple and mother child interaction: a prospective study

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Background: To compare the rate of postpartum depression (PPD) during the first COVID-19 lockdown with the rate observed prior to the pandemic, and to examine factors associated with PPD.

Methods: This was a prospective study. Women who gave birth during the first COVID-19 lockdown (spring 2020) were offered call-interviews at 10 days and 6–8 weeks postpartum to assess PPD using the Edinburgh Postnatal Depression Scale (EPDS). Post-traumatic symptoms (Perinatal Post-traumatic Stress Disorder Questionnaire, PPQ), couple adjustment, and interaction and mother-to-infant bonding were also evaluated. The observed PPD rate was compared to the one reported before the pandemic. Factors associated with an increased risk of PPD were studied. The main outcome measures were comparison of the observed PPD rate (EPDS score>12) to pre-pandemic rate. Results: Of the 164 women included, 27 (16.5% [95%CI: 11.14–23.04]) presented an EPDS score>12 either at 10 days or 6–8 weeks postpartum. This rate was similar to the one of 15% reported prior to the pandemic (p=0.6). Combined EPDS>12 or PPQ>6 scores were observed in 20.7% of the mothers [95%CI: 14.8–0.28]. Maternal hypertension/preeclampsia (p=0.007), emergency cesarean section (p=0.03), partner not present at delivery (p=0.05), and neonatal complications (p=0.008) were significantly associated with an EPDS>12 both in univariate and multivariate analysis (OR=10 [95%CI: 1.5–68.7], OR=4.09[95%CI: 1.2–14], OR=4.02[95%CI: 1.4–11.6], respectively).

Conclusions: The rate of major PPD in our population did not increase during the first lockdown period. However, 20.7% of the women presented with post-traumatic/depressive symptoms and being separated from partner at delivery was a factor of PPD.
Maternal Singing in Mother-Baby Interaction: Study carried out with premature babies

Elements and settings associated to the quality of mother-infant interaction Eduarda Carvalho², Fernanda Guimarães¹,², Professor Barbara Figueiredo¹
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INTRODUCTION
The quality of mother-baby interaction is extremely important and interferes with the child development and mental health. The mother-infant interaction is more difficult with the preterm infant, namely due to the lower reciprocity of the infant. However, the maternal singing directed to preterm infant, during the kangaroo care, has been highlighted as a beneficial strategy for the mother-infant interaction.

AIMs of the study
The present study with preterm mother-infant dyads during the kangaroo care, aims to evaluate (1) the differences in the quality of mother-infant interaction, in the speech condition and in the singing condition and (2) the association between the quality of the mother-infant interaction - in the condition of speech and in the condition of singing.

MATERIAL and METHODS
The study involved 36 dyads of mothers and their preterm newborns (25-34 weeks of gestational age at delivery), recruited from the Neonatal Intensive Care Unit of a Lisbon Hospital. Each of the mothers was invited to speak and sing to their infants at different times during the kangaroo-supported diagonal flexion positioning. The quality of the dyad interaction was assessed using the Mother-Infant Interaction Rating Scale (IRS).

RESULTS
Previous studies carried out with this sample showed that singing is a more favorable condition for overlapping vocalizations, while speech is a more favorable condition for mother-infant turn-taking.

CONCLUSION
The present study contributes to a better understanding of which parameters of mother-infant interaction in the condition of singing during the kangaroo method are more favorable for the quality of mother- preterm newborn interaction.
Father involvement in the context of shared parental leave in Sweden

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INTRODUCTION
Parents’ opportunities to spend time with their infant vary depending on social and cultural contexts. In Sweden both parents have the same right to parental leave. This social policy enables fathers to establish close relationships to their infant.

AIM of the study To explore parental roles and responsibilities from a psychological perspective focussing on how parents’ division of parental leave influences family life and interaction within the family.

MATERIAL and METHODS Father involvement in terms of parental roles and responsibilities in the context of parental leave in Sweden, was investigated by Lidbeck’s thesis (2020) which includes four studies.

Semistructured interviews were conducted with 24 parents of 12 infants. Parents’ experiences of equally shared parental leave were explored, with a focus on the shift when mothers on parental leave returned to work and fathers took over the primary caregiving responsibility. 280 parents answered a questionnaire at six and 18 months after their child was born. How parents’ division of leave influences perceived parenting stress, coparenting quality, work-family balance, and the couple relationship was studied.

CONCLUSION
Parents’ experiences of shared parental leave include consequences of increased father involvement. Spending time with the infant and sharing caregiving responsibilities makes a difference for parental roles and relationships within the family, especially for fathers. Fathers who shared parental leave equally reported positive wellbeing in terms of less parenting stress and higher perceived couple relationship quality, in comparison with fathers who shared parental leave unequally. Parents who shared equally also perceived higher coparenting quality. The main findings indicate that parents’ shared experiences increased their understanding for each other.

THE BABY IN SEARCH OF CONNECTION: PARENTAL MOOD DISORDERS AND THE CARE PATHWAY DURING COVID19

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Introduction: The health crisis we are going through highlights the fragilities and vulnerabilities of the construction of the early bond by exacerbating the challenge of this critical period with the isolation of families.

Aims: Do the constraints imposed by Covid-19 can have an impact on parents, and to what extent their baby would also be likely to be impacted?

Methods: 20 mothers were tested positive during pregnancy or during the delivery phase were interviewed. They answered an EPDS questionnaire on post-natal depression, a MIBS on the quality of attachment and a PP-Q questionnaire on post-delivery stress.

At one and three months, the questionnaires were offered again.

Results: The prevalence of depressive symptoms was 35%. Our results are similar to the study by OSTACOLI (2021).

Definitely, mothers were attentive to their baby in order to detect the slightest sign related to Covid-19. This may be a sign of mother-infant attunement. Even if this mother-child attunement seems reassuring, we observe that most of the mothers note that their babies are rather quiet.

The MIBS test shows that 2 out of 15 mothers, the 12% of the cases contacted, would have difficulties bonding. During the interviews, they showed attached and sensitive to their child, mother-child bonds’ seemed constructed. Concerning the PP-Q, only 3 mothers of the sample were positive which may show that they may find a protected environment "like in a bubble" in the hospital.

Conclusions: Children are born in an environment that is seen as "abnormal" for adults, but perhaps quite "normal" for babies. So, the impact of the pandemic may well be hidden behind these multiple eventualities surrounding the child.
The Quality of Mother/Father-Child Interaction and the Development of Children Born Preterm

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Introduction.
According to the World Health Organization, every year, 15 million babies are estimated to be born preterm worldwide (<37 weeks of gestation), and this number is rising. With an increased survival rate comes important, yet problematic, developmental sequelae. For instance, preterm children seem to be particularly at risk for elevated difficulties in self-regulation, including in cortisol and emotion regulation, as well as impairments in executive functioning. Despite this evidence, the fact remains that not all such children exhibit poor self-regulation. This heterogeneity remains poorly understood.

Aims.
The present longitudinal project aimed to investigate the role of mother-child and father-child quality of interaction on the development of preterm children’s self-regulation during the first 3 years post-partum.

Method and Materials.
The sample included 150 preterm children and their parents, assessed at 12 months of corrected age (T1), 2 years of corrected age (T2), and 3½ years of chronological age (T3). The assessment protocol included tasks with the child, to assess self-regulation. The mother-child and father-child dyads were observed during different structured interactive tasks, allowing the assessment of the caregivers and the child’s interactive behaviours. Saliva samples were collected during those tasks to assess child cortisol reactivity. Mothers and fathers also completed a set of questionnaires.

Conclusions.
Overall, results indicated that the quality of parent-child interaction predicted preterm children’s self-regulation, even after controlling for neonatal adversities, parents’ psychological distress, SES, and child mental development. Maternal intrusiveness was found to be a significant (and unique) predictor of observed infant emotion regulation ($\beta=-.46, p=.03$), but not cortisol regulation, at T1. Both mothers’ ($\beta=-.27, p=.04$) and fathers’ ($\beta=-.29, p=.04$) controlling behaviors were associated with worse child executive functioning performance at T3. These findings highlight the importance of primary relational experiences on early regulatory competencies in preterm children.
On gender and cultural differences in parental embodied mentalizing

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The study of Parental Embodied Mentalizing (PEM; Shai, 2011) affords us to study the intricate nonverbal exchanges between caregivers and infants. This is an additional layer of human connectivity that has been shown to uniquely add to understanding of how the quality of the caregiver-infant relationship shapes and predicts the child’s social, emotional, and cognitive developmental trajectories. However, bodies are, and always have been, shaped according to the cultural moment (Orbach, 2019). Orbach argues that there has never been a “natural” body: a time when bodies were untainted by cultural practices. She draws her attention to the fact that how we move our hands as we speak, the way we walk, our table manners, our gait, the food we eat, whether we mark babies at birth via circumcision or later with facial markings: all these tell us that bodies belong to a specific time and place (Orbach, 2019). Orbach sums it up poignantly by saying that there is no such thing as a body, only a body within a culture.

In this symposium, we will explore—conceptually, clinically, and empirically—if and how sex and cultural differences may impact and contribute to individual differences in the quality and phenomenology of parental embodied mentalizing.

The first presentation will briefly introduce the approach and measurement of PEM (Shai, 2018), and then demonstrate—through video vignettes and empirical data—similarities and differences in embodied interactions that fathers and mothers have with their infants, and how these uniquely predict children’s different developmental trajectories. The second presentation will elaborate on this topic to examine if and how fathers’ interpersonal history and psychological representation of the fetus may be associated with fathers’ Parental Embodied Mentalizing capacities at 12 months of age. The third presentation will expand this topic to examine possible differences between rural and urban societies in Norway in terms of self-expression in language and in embodied communication. These possible differences will then be related to the literature, art, and architecture.

Paper 1: The Paternal nonverbal Dance: Similarities and Differences in fathers and mothers’ Parental Embodied Mentalizing when interacting with their Infant – Dana Shai

Paper 2: The Infant – Father Relationship: Does fathers’ Attachment Security and Prenatal Representations of the unborn baby predict Fathers’ Embodied Mentalizing at Infant age 12 months? – Hedvig Svendsrud, University of Oslo; Eivor Fredriksen, University of Oslo; Vibeke Moe, University of Oslo; Dana Shai, The Academic College of Tel Aviv Yaffo; Rose Spencer, CNWL NHS Perinatal Mental Health Services, London; Mona BekkhusUniversity of Oslo

Paper 3: On embodiment, culture, and life preferences - Brynulf Bakkenget, Norway
Intergenerational transmission of maternal childhood maltreatment: DNA methylation pattern of the dopamine receptor D2 gene in mother-child dyads and associations with child developmental outcomes

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Introduction and Aim of the study: Childhood maltreatment (CM) is a developmental risk factor which may have implications that extend into the next generation. Dopamine receptors, including the dopamine receptor D2 (DRD2), are involved in stress-regulatory and cognitive, motoric and emotional developmental trajectories. In the present study we investigated whether maternal experiences of CM were related to changes in DNA methylation of the DRD2 gene in mothers-child dyads. Additionally, in infants, associations between DRD2 gene DNA methylation and child developmental measures were studied.

Materials and Methods: A total of N = 102 mother-child dyads participated in the study shortly after parturition (t0) and were followed-up longitudinally over a period of 12 months. DNA methylation status of a selected region of the DRD2 gene was measured using mass array spectrometry in immune cells isolated from maternal blood and neonatal umbilical cord blood at t0. Maternal CM was assessed with the Child Trauma Questionnaire (CTQ) at t0 and child development was assessed using the Bayley’s Scale of Infant Development at 12 months.

Results: Both mothers and children exposed to maternal CM showed increased levels of mean DRD2 gene DNA methylation compared to non-exposed dyads. In addition, mean DRD2 gene DNA methylation levels in infants were associated with cognitive and motoric development assessed 12 months later.

Conclusions: These findings support the hypothesis of an intergenerational effect of CM on the epigenetic regulation of the DRD2 gene and suggest that alterations in DRD2 gene DNA methylation are related to child developmental outcomes.
INTRODUCTION: Increased care needs (ICN) of children, e.g., chronic illness, disability, or premature birth or low birthweight pose particular challenges to families with young children. Psychosocial stressors caused by the pandemic have likely added to their burden. Since parents of children with ICN strongly depend on support services, COVID-19 restrictions presumably were particularly burdensome. However, recent research on this vulnerable group is scarce.

AIM: We examined psychosocial burden and prevention service use in families with children with and without ICN during the pandemic.

METHODS: Data originates from the representative study "Kinder in Deutschland – KiD 0-3 2022" ("Children in Germany") conducted in the context of routine pediatric check-ups. The study is still ongoing (current sample size N = 4,700). Up to 7,000 parents and their pediatricians, with a subsample of children with ICN (approx. 20%), will report on child-, parent, and family-related characteristics like child’s regulatory problems, parenting stress or socioeconomic burden. Information will also comprise the need and use of various prevention support services. Results will be compared to data from the preceding study KiD 0-3 2015.

RESULTS: Results from 2015 show, that families with a child with ICN face more psychosocial burden (e.g., poverty, heightened levels of parents’ depression/anxiety symptoms). They used universal prevention services less frequently, and selective services more often compared to families without a child with ICN. For 2022, we expect that, similarly to 2015, families with children with ICN also experience higher psychosocial burden. Whether the more frequent use of selective prevention services can be replicated, is to be shown, since measures to contain the pandemic might have restricted access.

CONCLUSIONS: Whether families with a child with ICN receive the support they need, and how support services might have to adapt to meet the needs of these families, will be discussed.
Assessment of change during early interventions in infants with autism by Single Case Experimental Design

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Introduction
Early intervention in young children with Autism Spectrum Disorder have recently changed. We have moved from models of intensive interventions, in ecologically irrelevant situations, centered on childrens’ autistic behaviors, to less intensive interventions, within the dyad, in ecological contexts. They target parent / child interaction, including synchrony, parental sensitivity, language skills and child social communication. Various video feed-back techniques, particularly relevant in autistic children, have been developed: VIPP, PACT and Interactive Guidance Therapy (IGT). The challenge is to develop these techniques in a reproducible and measurable way, while respecting the specificity of each dyad.

Aim of the study
To meet these challenges, we propose to develop the single-case experimental design (SCED) in order to assess the effects of early interventions in children with autism. SCED focus on the process of change, allows descriptive clinical quantitative assessments that reflect the core processes of change. Material and Methods

We will present the design of a SCED research assessing IGT in children with Autism Spectrum Disorder, less than 3 years. The child is its own control. The design will be described (6 groups of 4 patients = 24 patients). The principal criteria is the joint attention during the 10 min infant/parent play. The secondary criteria are the symptomatic changes assessed by ADOS, ADI R, CARS, and the developmental course assessed by VABS, IDE, MSEL.

Conclusions
The SCED method is a new and interesting way which principal advantage is to diminish the number of children necessary to show effects, in replacing the number of inter-assessment by intra-assessments. New ways to organize designs offer a feasibility of clinical trials in manageable settings.
Learning to cooperate: Do mothers’ and fathers’ interactions with toddlers predict children’s unfamiliar peer interactions?

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INTRODUCTION. Engaging in positive interactions with peers is a key developmental challenge for preschoolers. Positive parent-infant interactions are known to support children’s social competencies, but few studies have addressed this topic in the context of children’s early interactions with peers (rather than friends).

AIM. Previously (Hughes et al, 2022), we have reported that executive function at 14 months predicts emotion regulation at 24 months in toddlers’ interactions with mothers but not fathers (assessed via a ‘Don’t Touch + Free Play’ paradigm at each timepoint). Here we assess: (a) across-timepoint contrasts in parent-toddler interactions and (b) whether there are parallel contrasts in maternal versus paternal links with children’s preschool interactions with unfamiliar peers.

MATERIALS AND METHODS. The Parent Child Interaction Coding Scheme (Deater-Deckard et al, 1997) was used to code both mother-toddler and father-toddler interactions for dyadic mutuality, parental positive control / affect and child affect and autonomy at 14 and 24 months. At 48 months, 96 study children were observed with an unfamiliar peer in semi-structured play, and interactions were coded for verbal and behavioural cooperation and conflict. We will use dyadic longitudinal models to examine the stability of parent-child interactions in toddlerhood and explore predictive associations with children’s later peer interactions.

CONCLUSIONS: We expect marked contrasts in the quality of parent-infant interactions, both across time and by parent gender. Thus, while both maternal and paternal influences on children’s preschool social competencies are expected, these may differ in both nature and magnitude.
Very early signs of autism in infants: from detection, to interventions assessment. Which new tools?

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Early detection is one of the key for effective taking care in children with ASD. The challenge is to detect as early as possible, in order to intervene before the installation of interactive vicious circle, leading to the aggravation of autistic behavior. Many tools have been developed, allowing early interventions, most of them after 12 months of age. But we know that the more early the intervention, better is the prognosis.

This symposium aims 1) to propose new tools to detect very early signs in at riks infants, in order to allow as early interventions as possible, 2) to propose new kind of assessments, focusing on the core of change processes in parent/child interaction, and respecting the uniqueness of each infant/parent dyad.

The research symposium will be organized in four steps:

- To propose a very early tool to detect early first signs of interactive disengagement: The PREAUT (PREvention of AUTism) aims to identify first signs at 4 and 9 months of age.
- The early detection of Autism spectrum Disorder in China
- New tools to assess the process of change during very early interventions: the microanalysis of parent/infant interactions
- Assessment of change during early interventions by Single Case Experimental design: control groups are replaced by the subject as its own control, which allows to avoid the problem of the heterogeneity of assessed group
Mechanisms in the intergenerational transmission of the adverse consequences of childhood maltreatment

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Introduction: Exposure to adverse childhood experiences (ACE) is a developmental risk factor which may have implications that extend into the next generation.

Aim of the study: The symposium focuses on the consequences of maternal Childhood maltreatment (CM) and the effects of psychosocial and biological resilience factors on child attachment and stress-regulatory development using prospective trans-disciplinary approaches.

Materials and Methods: Studies assessed developmental and attachment measures, physiological parameters like heart rate variability, diurnal salivary cortisol during pregnancy and DNA methylation pattern of the dopamine receptor 2 gene.

Conclusions: Studies replicated and extended existing CM and attachment models by co-examining maternal attachment, social support, and child genetic susceptibility on child attachment and cardiovascular stress regulation. Exposure to maltreatment in childhood (CM) is associated with variation in the regulation of the hypothalamic-pituitary-adrenal (HPA) axis. Dopamine receptors, including the dopamine receptor 2 (DR2), are involved in stress-regulatory and cognitive, motoric and emotional developmental trajectories.
Effects of maternal attachment and social support on child attachment and cardiovascular stress physiology

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Introduction and Aim of the study: This study examined the consequences of maternal Childhood maltreatment (CM) and the effects of psychosocial and biological resilience factors on child attachment and stress-regulatory development using a prospective trans-disciplinary approach.

Materials and Methods: Mother-child dyads (N=158) participated shortly after parturition (t0), after 3 months (t1), and 12 months later (t2). Mothers’ CM experiences were assessed at t0, attachment representation at t1 and psychosocial risk and social support were assessed at t1 and t2. At t2, dyads participated in the Strange Situation Procedure (SSP). Heart rate (HR) and respiratory sinus arrhythmia (RSA) were recorded as stress response measures of the autonomic nervous system.

Child’s single nucleotide polymorphisms (SNP) rs2254298 within the oxytocin receptor (OXTR) and rs2740210 of the oxytocin gene (OXT) were genotyped using DNA isolated from cord blood.

Results: Maternal CM experiences (CM+) was significantly associated with an unresolved attachment status, higher perceived stress and more psychological symptoms. These negative effects of CM were attenuated by social support. As expected, maternal unresolved attachment and child disorganized attachment were significantly associated. Maternal caregiving did not mediate the relationship between maternal and child attachment but influenced children’s HR and RSA response and disorganized behavior. Moreover, the rs2254298 genotype of the OXTR gene moderated the stress response of children from mothers with CM. Children carrying the rs2740210 risk allele of the OXT gene showed more disorganized behavior independent from maternal CM experiences.

Conclusions: We replicated and extended existing CM and attachment models by co-examining maternal attachment, social support, and child genetic susceptibility on child attachment and cardiovascular stress regulation. The findings contribute to an extended understanding of risk and resilience factors and enable professionals to target adequate services to parents and children at risk.
Diurnal cortisol during pregnancy as a potential mechanism in the intergenerational transmission of childhood maltreatment

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Introduction: Exposure to childhood maltreatment (CM) is associated with variation in hypothalamic-pituitary-adrenal (HPA) axis regulation. During pregnancy, CM-associated dysregulation of the HPA axis may have consequences for the development of the offspring, potentially resulting in intergenerational continuity of the adverse sequelae of CM.

Aim of the study: To investigate whether CM was associated with diurnal cortisol concentrations across pregnancy and whether this hypothesized association was moderated by depressive symptoms.

Materials and Methods: In a sample of 265 healthy pregnant women, exposure to CM was assessed with the Childhood Trauma Questionnaire. In early (Mean=13.7±1.3 weeks gestation) and late gestation (Mean=31.5±1.4 weeks gestation), participants collected five saliva samples per day across four days. Area under the curve (AUC) for the entire day (AUC-day) and for the Cortisol Awakening Response (AUC-CAR) were computed. Depressive symptoms were assessed at both time points with the Center for Epidemiologic Studies – Depression scale. Linear mixed effects models were conducted for hypothesis testing.

Results: CM was not significantly associated with AUC-day across pregnancy; however, higher CM severity was significantly associated with overall lower AUC-CAR. Furthermore, we observed a significant interaction effect between gestational time point and CM on AUC-day and AUC-CAR. Specifically, higher CM severity was associated with lower cortisol concentrations across the day and in response to waking primarily in early pregnancy, but not later pregnancy. Furthermore, depressive symptoms moderated the interaction between CM and gestational time point, such that in early pregnancy, AUC-day and AUC-CAR decreased with increasing CM severity and depressive symptoms, whereas the opposite pattern was observed in late pregnancy.

Conclusions: The present findings suggest that in women exposed to CM, dysregulation of the HPA axis persists during pregnancy and may constitute a mechanism in the intergenerational transmission of CM. These results highlight the importance of considering experiences of CM in prenatal care.
Psychotherapeutic interventions after Post Natal Post traumatic stress syndrome, results of a french survey

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Introduction
Postnatal post traumatic stress concerns 1 to 7% of women with childbirth without major complications and can rise to 30% for populations at risk. Although preventive factors have been identified, the unforeseen events of pregnancy or childbirth can lead to loss or the woman's anguish of losing the baby or dying. The consequences for the woman and for the relationship with her child deserve longer-term studies, but we already know that the repercussions are significant, so initial treatment is required.

Aim of the study
After a review on the treatments, we wanted to describe the usual psychotherapeutic methods use in France.

Material and Methods
We set a focus group with a panel of 12 psychologists and psychiatrists concerned by this subject, in order to determine the usual practices. Then we listed items raised by this focus group and enriched it with data from the literature. This list was submitted to 64 professionals by self-questionnaires so that they could validate whether it corresponded to their practices.

Conclusions: It appears that more than half of the professionals feel insufficiently trained on this subject. During the therapeutic interviews conducted by the professionals, the 5 main themes explored with the patient are: legitimizing the maternal experience, supporting the narration of the experience of childbirth and the associated emotions, elaboration of experiences and negative emotions, progressive elaboration of fear of dying or fear of losing the baby, and taking into account the socio-cultural factors in which the patient evolves. The therapists note that the baby's demands often generate anxiety in the mother and a weakening of her maternal sensitivity.
Beyond maternal sensitivity: Shedding light on different facets of parent-child interaction quality

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Parent-child interactions in the first years of life form the foundation of child social-emotional development. Among the most investigated constructs in this area is that of maternal sensitivity. High maternal sensitivity has been linked to positive child outcomes, such as secure attachment, good emotion regulation, and lower rates of behavior problems. However, the so-called “transmission gap” refers to the aspect that attachment transmission from parent to child cannot be fully explained by maternal sensitivity. The concept of “mind-mindedness”, defined as parents’ proclivity to treat their child as an individual with an autonomous mind, has been shown to explain additional variance in the intergenerational transmission of attachment. Other measures of mentalizing (e.g., parental reflective functioning, insightfulness) have also been investigated regarding effects on the parent-child interaction quality and the transmission gap. Moreover, the symposium aims to extend the debate beyond constructs such as maternal sensitivity or mind-mindedness to interactive behaviors of both parents as well as other measures of parent-child interaction quality, e.g., “synchrony”, targeting the process of coregulation. Finally, the quality of the parent-child interaction can be compromised not only by insecure/disorganized attachment representation of the parent, but also by mental disorders of both the parent (e.g., depression) and the child (e.g., excessive crying).

In light of those findings, the current symposium seeks to shed light on novel facets of parent-child interaction quality and their effects on the child. It comprises presentations on effects of the parent-child interaction quality on child development, including sub-samples of fathers. Moreover, it will highlight the role of parental and child mental disorders with regard to parental mentalizing and parent-child interaction quality. Together, we will discuss the implications of research on these new constructs.
Mind-mindedness in mothers of infants with excessive crying/sleeping/eating disorders

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INTRODUCTION/BACKGROUND: Excessive crying, sleeping, and eating disorders are among the most prevalent mental health diagnoses in the first 3 years of life, and involve significant health service use. Parents of infants with excessive crying/sleeping/eating disorders report high levels of stress, since they feel incapable to soothe and/or to nurture their baby. Infants’ distress can lead to a breakdown in parents’ mentalizing abilities, and more specifically parental mind-mindedness in the parent-child interaction. Moreover, the signals of infants with excessive crying/sleeping/eating disorders tend to be equivocal and difficult to read, which might also contribute to lower parent-child interaction quality. Until now, parental mind-mindedness, which is regarded as a prerequisite for sensitivity, has not been investigated yet in mothers of infants with excessive crying/sleeping/eating disorders.

AIM: We aim to investigate whether mind-mindedness in mothers of infants with excessive crying, sleeping and/or eating disorders differs from a healthy control group. We suppose that mothers of infants with excessive crying/sleeping/eating disorders use 1) less appropriate mind-related comments, and 2) more non-attuned mind-related comments than mothers in the control group.

METHODS: Our sample consists of N = 50 mothers and their infants, who were patients in a socio-paediatric clinic in Germany and were diagnosed with excessive crying, sleeping and/or eating disorders (= clinical group), and N = 64 healthy controls. Child mental disorders in the clinical group are assessed according to DC:0-5. Maternal mind-mindedness is coded via a free-play interaction. As control variables, maternal education, child gender and age are included.

RESULTS/CONCLUSIONS: Due to ongoing data collection in the clinical group, results cannot be reported yet. Our findings will be discussed in terms of implications for interventions (e.g., enhancing mind-mindedness trough video-feedback).
The Relation Between Parental Depression and Measures of Parental Mentalizing: A Systematic Review and Meta-Analysis

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INTRODUCTION: The capacity and proclivity of parents to understand and acknowledge mental states in the context of the parent–child dyad is a key factor contributing to high-quality parent–child relationships.

AIM: The present systematic review and meta-analysis aimed to summarize and compare the state of research on the relation between parental depression and different measures of parental mentalizing. We targeted studies that assessed parental reflective functioning (PRF) via interview or questionnaire, mind-mindedness (MM) via observation or interview, and insightfulness (IN).

MATERIAL AND METHODS: A literature search was conducted in electronic databases up to September 12, 2022. Based on three-level meta-analytic modeling, we analyzed a total of 188 effect sizes from 59 studies comprising 11,109 participants.

RESULTS: Pooled results revealed that parents with higher depression scored lower on the questionnaire measure of PRF (16 studies; r = −.11; p < .001). No significant correlations were found for the interview measure of PRF (18 studies; r = .04; p = .298), the observational and interview measure of MM (17 and 11 studies; rs = −.05 and −.07; ps = .088 and .087), and IN (4 studies; r = −.09; p = .680). All five data sets showed significant heterogeneity. The mean correlation for prementalizing modes was significantly stronger as compared with other questionnaire dimensions. Regarding the MM observational measure and IN, there was limited evidence for a larger negative correlation for case–control studies.

CONCLUSION: To conclude about the relation between parental depression and parental mentalizing, more research is needed in parents with a depression. We conclude with a critical discussion of causal processes as well as bidirectional influences in the parent–child relationship more generally.
Father-child and mother-child transmission of internal representations: Overlapping vs. distinct ingredients of parent-child interactions

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Introduction: Whereas intergenerational transmission of attachment representations from primary caregivers to young children is well-documented, fathers are thought to play a subsidiary role in this process unless they hold full child custody.

Aim of the study: We aimed to (1) compare contributions of maternal and paternal attachment representations to preschoolers’ attachment representations and (2) examine parent-child interactions to identify behavioral mediators of intergenerational transmission.

Material and Methods: Participants were 105 5-year-olds (53 girls) and one of their respective parents (53 mothers, 52 fathers), with 92% of fathers living in shared households. We collected the Adult Attachment Interview (AAI) and a novel adaptation of the story-completion method (Picture-based Story-Stem Battery; PSSB) which foregrounded mother or father story-stem characters within respective subsamples. Parent and child narratives were scored from transcripts by blind trained and reliable raters using coding systems by Main and Goldwyn for AAI s and by Hill and Robinson and colleagues for PSSBs. A joint puzzle task was conducted and scored using the NICHD scales (e.g., supportive presence) to assess interaction quality. Brain activation of parents and children was collected during and after the task to assess neural correlates of synchrony and co-regulation.

Conclusions: Controlling for child age and gender, parental AAI coherence of transcript predicted child PSSB coherence in the full sample (β = .281, p = .002), as well as the subsamples of mothers (β = .252, p = .032) and fathers (β = .355, p = .005). Supportive presence during the interaction task mediated the effect of parental Insecure/ Dismissing AAI-classification on child PSSB avoidance, independent of parent gender (CI: .02 to .66). Analyses of neural data are still ongoing, but will form part of the presentation. We conclude that fathers play a comparable role in intergenerational transmission of attachment representations that deserves further attention in future research.
Early Parent-Infant Emotional Synchrony as Predictor of Infants' Expressions of Shyness

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Early parent-infant interactions form the foundation of social-emotional development. During these interactions, parents and infants share positive and negative affectivity, mirroring each other. Early synchrony experience might impact infants' emotional reactions during social situations with novel persons in terms of emotional regulation and social engagement. In these situations, the most typical emotional reaction is shyness, activated by others' attention or perceived evaluations. Infants and young children express shyness in both positive (socially adaptive) and negative (socially maladaptive) ways. This study investigated the extent to which early parent-infant emotional synchrony predicts positive and negative expressions of shyness at the age of 12 months.

Fifty-one infants and their parents participated in the study. Mother-infant and father-infant emotional synchrony were measured during separate 2-minute home-based face-to-face interactions at 4 and 8 months. Gaze and facial expressions (positive, neutral, negative) were micro-coded. Positive and negative emotional synchrony was computed by examining the temporal co-occurrence of infant positive + adult positive expressions and infant negative + adult neutral/negative expressions, respectively. Expressions of shyness were observed during a lab-based social exposure task at 12 months. Positive expressions of shyness (gaze/head aversions during positive facial expressions) and negative expressions of shyness (gaze/head aversions during neutral/negative facial expressions) were also micro-coded.

Preliminary results obtained with regression models indicated that higher levels of mother-infant negative synchrony at 4 months predicted higher levels of positive shyness at 12 months, while lower levels of mother-infant positive and negative synchrony at 4 months predicted higher levels of negative shyness. No significant results were found for father-infant synchrony as a predictor of shyness. Results will be discussed in terms of the impact of early parent-infant synchrony on the child’s social-emotional development.
Expectant Mothers’ and Fathers’ Mentalising and Autonomy Support in Toddlerhood

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¹University Of Edinburgh, Edinburgh, United Kingdom, ²University of Birmingham, Birmingham, United Kingdom, ³University of Cambridge, Cambridge, United Kingdom

Introduction. Autonomy support refers to caregiver behaviours that support children’s goals, interests and choices and benefit children’s learning and adjustment. Existing research in this field is limited by a narrow focus on mothers.

Aim. Previously we have reported that, compared with mothers, fathers show reduced autonomy support at 14-months, especially towards sons (Hughes et al, 2018). Here, we assess whether these contrasts persist at 24-months and examine pre/postnatal mentalizing as predictors of variation in parental autonomy support.

Method and Materials. Our sample included 197 predominantly well-educated heterosexual couples expecting their first child. These families were seen at home at four time-points: late pregnancy and 4, 14 and 24 months postpartum. Parental mind-mindedness (Meins & Fernyhough, 2015) was coded from transcripts of five-minute speech samples gathered at each timepoint. Autonomy support (Whipple et al., 2011) was coded from structured play observations of mother-infant and father-infant dyads at 14 and 24 months, with the conceptual equivalence of this measure across parent gender and timepoints tested via confirmatory factor analyses. We will use a dyadic structural equation model to test whether prenatal mentalising predicts autonomy support in both mothers and fathers.

Conclusion. While maternal and paternal autonomy support show more similarities than differences in early toddlerhood, preliminary analyses suggest expectant fathers’ proclivity to think of their future infant as a sentient agent is a unique predictor of their later autonomy support. Findings will be discussed in relation to the universality of parenting models, as well as exciting avenues for intervention.

THE EARLY DETECTION OF THE RISK OF AUTISM SPECTRUM DISORDER IN CHINA

Dr Erika Parlato-Oliveira, Mme Jing AN, Mr Fei Ju
Universidade Federal De Minas Gerais, Belo Horizonte, Brazil

Introduction
China has about 22% of the world's population. The recent national study reported an estimated autism prevalence of 0.70% (Zhou, H. et al., 2020). Early detection of autism risks plays an important role in making parent-baby care possible, in the hope of upsetting the prognosis. The literature about ASD detection in China mainly focuses on the introduction and comparison of screening tools. Among the 44 articles published in China in the last 10 years, children aged 2 to 6 years is the most mentioned, only 4 studies are focused on infants under 2 years. The most frequently used scales are CARS, ABC, Gesell and M-CHAT.

Aims of the Study
The implementation the early screening (PREAUT-Olliac grid) in Health Public Chinese.

Material and Methods
In partnership with Tongji University, the Mental Health Center of Zhejiang University, and several PMIs in Beijing, Shanghai and Hangzhou, a large-scale, prospective and multicenter study will be launched. The PREAUT-OLLIAC grid will be administered with Chinese babies, hypothesizing early positive screening at 4, 9 months would predict positive screening at 18 months.

Results and Prospects
The training of 500 early childhood professionals to evaluate the signs risk of autism from the fourth month.

Conclusions
A study on early detection of autism risk in the first year of life seems essential in China, but training of early childhood professionals is also necessary.
Trauma in perinatality: clinical researchs about parents-child dyads and professionals.

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Traumatism during perinatal period impact as well as mother, couple, children and early mother-child relationship and professionals that take care of them. Covid Pandemia with lockdown and war in Ukraine are currently acute trauma factors but more usually traumatic delivery is a common post partum post traumatism factor. In this symposium based on scientific interventions and clinical studies, we would like to highlight different level of theses impacts and proposition of intervention for mother-child dyads and professionals.

Methods: This Symposium will present clinical prospective studies and interventions in different type of trauma with a Chair, past president of WAIMH, who are clinical researcher experienced with high-risk populations to animate the discussion and bridge the translation of the research presented to clinical implications.

Results: Erika Parlato (Brazil) and Natalia Zahorodniuk (Ukraine) will discuss how they are supervising work of a team of professionals in the Kiev maternity hospital where 21 babies where born by surrogacy during the war.

Berengere Beauquier (France) will describe the state of psychotherapeutic methods for postnatal post traumatic stress in maternity.

Sylvie Viaux Savelon (France) will present a prospective study of mothers who gave birth during the first COVID Pandemic lockdown and the impact on their psychological status, their couple and their bonding.

Trinidad URQUIAGA LUJAN (Chili) and Claire SQUIRES (France) will present their prospective study on mothers tested positives during their pregnancy.

Conclusion: Miri Keren (Israel) will chair the discussion and discuss the implications of these researchs and interventions.
Newborn Behavioral Observations system with at-risk families: a randomized controlled trial

Mrs Stefania Arnardottir¹, Dr Kari Slinning², Lisbeth Valla³
¹Primary Care of the Capital Area, Reykjavik, Iceland, ²Centre for Child and Adolescent Mental Health, Eastern and Southern Norway, Oslo, Norway, ³Department of Nursing and Health Promotion, Faculty of Health Sciences, Metropolitan University, Oslo, Norway

Newborn Behavioral Observations system with at-risk families: a randomized controlled trial

Introduction: Early support for the parent-infant relationship is recommended to ensure the infant’s future health and development, especially in at-risk populations. The Newborn Behavioral Observations system is a brief, relationship-based intervention designed to sensitize parents to their newborn’s capacities and individuality, to help parents understand the infant’s cues, and foster the parent-infant bond.

Aim of the study: To investigate effects of the NBO intervention, in a population at-risk of postpartum depression, on maternal knowledge and communication with the infant after three NBO sessions, and on maternal sensitivity and infants’ regulatory capacity at 4 months postpartum.

Material and Methods: Two-group randomized trial design with four measurement points. Participants were allocated to a group receiving the NBO in addition to postpartum care-as-usual (n=30), or care-as-usual (n=30) comparison group. The study was conducted in a health care center in Reykjavik, Iceland from September 2016-April 2018. Outcome measures included parent satisfaction/benefit questionnaires after each NBO session and, at 4 months postpartum, filmed parent-infant interaction coded with the Emotional Availability Scales (EAS). Two sample t-tests compared EAS scores between groups at 4 months. Mixed effects models tested between-group differences across three time points.

Results: There were no between-group differences in infant regulatory capacity or maternal sensitivity (p < 0.319) on the EAS at 4 months (n=53); but intervention-group non-hostility scores were higher (p<0.031). NBO-group reported more confidence as mothers (p<0.037) and greater learning from their postpartum follow-up about responding to baby’s signals (p<0.001) and how infants communicate through behavior (p<0.001).

Conclusion: This pilot study revealed possible NBO effects on mother-infant interaction. The NBO enhanced mothers’ learning and confidence over time. Larger real-world studies should test the infant-parent relationship effectiveness of this postpartum intervention that is valued by at-risk mothers.
THE EARLY DETECTION OF THE RISK OF AUTISM SPECTRUM DISORDER IN CHINA

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Introduction
China has about 22% of the world’s population. The recent national study reported an estimated autism prevalence of 0.70% (Zhou, H. et al., 2020). Early detection of autism risks plays an important role in making parent-baby care possible, in the hope of upsetting the prognosis. The literature about ASD detection in China mainly focuses on the introduction and comparison of screening tools. Among the 44 articles published in China in the last 10 years, children aged 2 to 6 years is the most mentioned, only 4 studies are focused on infants under 2 years. The most frequently used scales are CARS, ABC, Gesell and M-CHAT. Aims of the Study
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Results and Prospects
The training of 500 early childhood professionals to evaluate the signs risk of autism from the fourth month.

Conclusions
A study on early detection of autism risk in the first year of life seems essential in China, but training of early childhood professionals is also necessary.


The influence of maternal attachment representations on maternal heart rate mediated by perceived stress

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Introduction
According to the attachment theory there is a closely related to interpersonal and intrapersonal factors including psychobiological stress and resilience. Up to now adult attachment research has mainly focused on subjective reports about stress and its symptoms. It is assumed that stressful situations activate the attachment system, and physiological systems are an important mechanism for the expression of stress responses.

Aim of the study
We aimed to assess the influence of attachment representations on heart rate mediated by perceived stress.

Material and Methods
Mothers (N=172) of a well-documented birth cohort for investigating the pathways leading to resilience or vulnerability in the cycle of maltreatment were examined with regard to their attachment representation as well as their actual perceived stress experience. In parallel to the psychological parameters, the biological stress reactivity was assessed by means of the heart rate. Statistical analyses showed that the course of the mother's perceived stress, differed significantly between the group of secure and insecure attachment representation. The course of maternal heart rate and the mean heart rate also differ significantly between the two groups. The results of the calculated mediation model also showed that the direct correlation between the two groups of attachment representation and maternal heart rate was mediated by perceived maternal stress.

Conclusions
Based on attachment theory and the findings of this study, psychological and biological systems are thought to be linked to attachment style and together they control the appraisal, response, and recovery processes to threats. The results showed that a secure attachment representation acts as a buffer during physiological reactivity and stressful situations and, that the relationship between an insecure attachment representation is significantly mediated by maternal perceived stress. These findings could be considered a basis for further research to understand the relations between attachment representation and physiological or psychological factors.
Parental deprivation and RAD: The moderating role of the OXTR gene

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Introduction
Reactive Attachment Disorders (RAD) is characterized by a consistent pattern of inhibited, emotionally withdrawn behavior, in which the child rarely or minimally directs attachment behaviors towards any adult caregivers, associated to persistent social and emotional disturbed behaviors. Etiological research on RAD has consistently indicated severe neglect and deprivation, such as institutionalization, as the major cause for the development of RAD. The role of individual factors remains underexplored.

Aim of the study
The current study examined the contribution of genetic and environmental factors to RAD in institutionalized and family-reared preschool children by investigating whether the oxytocin receptor (OXTR) SNP rs2254298 moderated the effect of parental deprivation (institutionalization) on attachment disordered behavior.

Material and Methods
One hundred and thirty-six (136) institutionalized and 219 family-reared preschool children were assessed using the Disturbances of Attachment Interview (DAI). OXTR genotypes were assessed by Fast Real-Time PCR System using DNA from children’s buccal swabs.

Conclusions
We found that OXTR rs2254298 polymorphism significantly moderated the influence of parental deprivation on RAD. Children carrying at least one A allele (risk allele) demonstrated to be more susceptible to the influence of environment. These findings will be discussed contrasting the diathesis-stress and differential susceptibility models. Additional research is needed into the role of genetic effects in attachment disorders exploring G × E interactions, adopting methodological approaches that include genome-wide analysis and epigenetic individual variations.
Screening autistic siblings to intervene with a very early transdisciplinary preemptive intervention: a clinical trial

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Today, searchers agree that despite initial risk factors, autism spectrum disorder (ASD) trajectory isn’t predetermined and that a very early intervention, when cerebral plasticity is great, could modify their developmental trajectory. Very early interactive experiences should be crucial to shape the cerebral development in the social brain direction. Whitehouse (2021) showed that an intervention with 12-months-old infants clinically at risk changed the prognosis for some of them. PREAUT grid, the earliest screening tool for ASD, was assessed at 4 and 9 months in general population (Olliac 2017) and in a small sample of at-risk infants with West syndrome (Ouss 2014). Autistic siblings (recurrence risk of 20\%) display in their first year a special misleading phenotype (lack of joint attention response), not predictive of ASD outcome, whereas the lack of joint attention initiation is predictive. Yet, PREAUT assesses infant’s motivation to be an object of attention and pleasure for its care-giver, and specifically focuses on infant social initiative. Thus, PREAUT should be a good screening tool for siblings.

Our clinical trial project aims to determine how accurately PREAUT predicts outcome (ASD or developmental delay) in autistic sibling’s infants and whether a very early preemptive intervention for those who screen positive will change their 3-year outcome.

225 siblings will be assessed for general movements and passed PREAUT at 2, 5, 4, 6, 8 and 10 months, and receive 3-years outcome to assess sensitivity and predictive value at each age. Positive infants will be randomized to TAU or a very early transdisciplinary (relational, sensorimotor and osteopathic) intervention. Their functional adaptation at 3 years will be assessed with Vineland scale and their neurodevelopmental status with MSEL and ADOS.

Screening at-risk infants with PREAUT in the first months of life could allow a very early preemptive intervention, taking also into account very early motor impairments.
Parent/Caregiver-Child Early Relational Health (ERH): The sum is greater than its parts

**Dr Dani DUMITRIU**

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There is incontestable evidence that exposure to early adverse childhood experiences conveys risk for adverse mental and physical health outcomes across the life-course. On the other hand, early relational health (ERH), or the ability to form and maintain safe, stable, and nurturing parent/caregiver-child relationships, is integral to both parental/caregiver wellbeing, and child development/socio-emotional functioning. Emerging evidence shows that the parent/caregiver-child dyad is a unique entity, with features that cannot be explained by simply summing the features of each member of the dyad. Additionally, parent-child influences are bidirectional due to epigenetic, behavioral, and mental co-development and a comprehensive understanding of the health and wellbeing of both parents/caregivers and children must include the functioning of the dyad as a key and independent outcome.

The aim of this symposium is to explore how pre- and postnatal parent/caregiver-child dyadic experiences and/or intervention strategies can act as buffers for childhood adversity and promoter of life-course resilience in both parent/caregiver and child.

Firstly, Dr. O'Connor will show observational longitudinal evidence providing a basis for expanding models of ERH to incorporate biopsychosocial models, such as pre- and postnatal maternal stress physiology. Secondly, Dr. Lavallée will present meta-analytic data supporting the notion that early dyadic interventions effectively support non-dose-dependently several measures of ERH, including bonding, parent/caregiver sensitivity, attachment, and dyadic interactions. Drs. Ahlqvist-Björkroth and Twohig will dive into specific dyadic intervention strategies implemented pre- and postnatally as promoters of ERH, parent/caregiver mental health and child functioning. Specifically, Dr. Ahlqvist-Björkroth will discuss the effectiveness of a prenatal intervention – interactive ultrasounds – as a tool to support mother-fetus relational health among women with minor depressive symptoms during pregnancy. Finally, Dr. Twohig will discuss the impact of a brief early dyadic postnatal NICU-based intervention – video interaction guidance – on ERH, social-emotional functioning, and parent/caregiver mental health.
Early Dyadic Parent/Caregiver-Infant Interventions to Support Early Relational Health: A Meta-Analysis

Dr Andreane Lavallee¹, Dr Lindsy Pang¹, Dr. Jen Warmingham¹, Ginger D. Atwood¹, Imaal Ahmed¹, Marissa R. Lanoff¹, Dr. Morgan A. Finkel¹, Ruiyang Xu¹, Elena Arduin¹, Kassidy K. Hamer¹, Rachel Fischman¹, Sharon Ettinger¹, Yunzhe Hu¹, Kaylee Fisher¹, Esther A. Greeman¹, Mia Kuromaru¹, Sienna S. Durr¹, Dr. Elizabeth Flowers¹, Aileen Gozali¹, Dr. David Willis², Dr Dani DUMITRIU¹³
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Introduction: In 2021, the American Academy of Pediatrics published a policy statement seeking to create a paradigm shift away from a focus on childhood toxic stress and toward the emphasis on early relational health (ERH) as a buffer for childhood adversity and promoter of life-course resilience. A comprehensive appraisal of the efficacy of contemporary parent/caregiver-child interventions in – primarily – improving ERH, and – secondarily – enhancing child well-being and neurodevelopment is needed to guide widespread implementation and policy.

Aim of the study: Determine the effectiveness of contemporary early dyadic parent/caregiver-infant interventions on ERH, child socio-emotional functioning and development, and parent/caregiver mental health.

Methods: Five databases were searched in April 2022. Studies targeting parent/caregiver-infant dyads and evaluating effectiveness of a dyadic intervention were eligible. Study selection was performed in duplicate. Data extraction and risk of bias assessment were completed in duplicate with consensuses by first author. Data were pooled using inverse-variance random effects models. The primary outcome domain was ERH. Secondary outcome domains were child socio-emotional functioning and development, and parent/caregiver mental health, and were only considered in studies where at least one ERH outcome was also measured. The association between dose of intervention and effect estimates was explored.

Conclusions: 93 studies (14,993 parent/caregiver-infant dyads) met inclusion criteria. Based on very low to moderate quality of evidence, we found significant non-dose-dependent intervention effects on several measures of ERH, including bonding, parent/caregiver sensitivity, attachment, and dyadic interactions, and a significant effect on parent/caregiver anxiety, but no significant effects on other child outcomes. Current evidence does not support the notion that promoting ERH through early dyadic interventions ensures optimal child development, despite effectively promoting ERH outcomes. The field is ripe for novel, innovative, cost-effective, potent ERH intervention strategies that effectively and equitably improve meaningful long-term child outcomes.
Does Interactive Ultrasound Intervention prevent negative effects of perinatal depression on maternal attachment representations?

**PhD Sari Ahlqvist-björkroth¹, Master of Psychology Iida Hilska¹, MD Henrika Pulliainen¹, Professor Riikka Korja¹, Associate Professor Eeva Ekholm¹**

¹University of Turku, Turku, Finland

Perinatal depression, especially minor depression, is common during pregnancy and is likely to continue into the postpartum period. It impairs the mother’s health, the infant’s neurodevelopment, and measures of early relational health (ERH). Perinatal depressive symptoms can distort a woman’s attachment representations during pregnancy. The aim of this study is to evaluate the effect of an interactive ultrasound intervention on representations of mildly depressed women.

**Methods:** The study was a randomized controlled trial. Altogether, 100 women scoring 10-15 on the Edinburgh Prenatal Depression Scale (EPDS) and with a singleton pregnancy were recruited using a web-based questionnaire at the beginning of the second trimester. Mothers were randomized (1:1) to the intervention group or the control group. The maternal representations were assessed using the Working Model of the Child Interview (WMCI) before (M=25 gestational weeks) and after (M=34 gestational weeks) the intervention. Three intervention sessions were conducted in between the WMCIs. The focus of the session was to observe the behavior of the fetus collaboratively with the mother from the 4D-ultrasound picture.

**Conclusions:** The preliminary results (n=22) showed no statistically significant effect on attachment representation classification. In the intervention group, a positive trend was found in the quality of attachment representations (p=.059). Maternal depression scores significantly decreased in both intervention and control groups after the intervention (p<.000). Although this preliminary sample did not have full statistical power, these preliminary results indicate that the interactive ultrasound intervention may have a positive effect on prenatal attachment representations. The WMCI as a promoter of maternal attachment representations may potentially explain the reduction of depressive symptoms in both groups. Analyses on the full sample will be presented and discussed.
Pre-Conception Influences on the Early Parent-Infant Relationship

**Professor Tom O'Connor¹**

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Introduction: There is long-standing clinical and research interest in the developmental origins of early relational health (ERH). To date, much of the focus for research – across a variety of conceptual frameworks – is on early adversity and current psychological and psychosocial context and how these factors shape cognitive, social, and affective processing underlying parenting behavior. There is limited evidence on how these factors accompany or shape maternal biology and, more generally, what role biological factors such as stress physiology plays in shaping the quality of ERH.

Methods: The current study capitalized on a prospective longitudinal study that has been collecting psychological, socio-demographic, and biological data through the perinatal period and included observational assessments of parent-child relationships on multiple occasions in infancy. Data from the current study are based on a diverse pregnancy cohort of n=326 individuals who have been followed since the first trimester; the primary inclusion criterion was a normal healthy singleton pregnancy. Biosamples (from blood, saliva, urine), clinical (depression from the Edinburgh Postnatal Depression Scale; anxiety from the Penn St Worry Questionnaire; Adverse Childhood Experiences scale) and demographic data were collected from mothers throughout pregnancy and on three occasions in the first postnatal year. Observations of parent-infant relationship quality at 6m and 12m were coded by trained raters using the NICHD system.

Conclusion: Two markers of compromised ERH, depression and experiences of early adversity, were robustly associated with maternal cortisol: elevated symptoms or experience of early adversity was associated with a blunted diurnal pattern (p<.05). There was modest evidence that elevated symptoms or experience of early adversity was associated with other neuroimmune or neuroendocrine biomarkers. Analyses using these biomarkers as mediators of observed parent-child relationship quality are underway. The findings provide a basis for expanding models of parenting to incorporate biopsychosocial models and methods.
Early Parent/Caregiver-Infant Intervention: Impact on interactions, social emotional outcome and parent mental health

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Introduction: Early experiences within relationships are at the core of infant mental health. Preterm birth is one context which may impair infant and parent/caregiver mental health and the quality of early relational health (ERH). Early intervention to promote parent/caregiver-infant interactions may secondarily target and support infant social-emotional functioning and parent/caregiver mental health.

Aim of the study: To explore the impact of a brief early dyadic intervention in the neonatal intensive care unit (NICU) with dyadic video interaction guidance as the core component, on parent/caregiver-infant interactions, socio-emotional functioning and parent/caregiver mental health.

Methods: The intervention was conducted with parents/caregivers and their very preterm infants within a tertiary referral NICU, and follow-up occurred at 6 and 12 months corrected age (CA). Parent/Caregiver-infant interactions were measured using the CARE-Index, socio-emotional functioning was screened using the Ages and Stages Questionnaire: Social-Emotional (ASQ:SE), and parent/caregiver outcomes included maternal and paternal depression, anxiety, maternal post-traumatic stress symptoms and sense of competence.

Conclusions: There was no statistically significant difference in maternal sensitivity during play at 9 months CA, nor in any of the maternal outcomes. However, there were fewer infant self-regulation and communication problems reported by mothers at 12 months CA following intervention. Fathers experienced fewer depressive symptoms after the intervention. The findings are discussed in relation to developing early interventions for medically at-risk infants and their parents/caregivers.
Early Parent-Infant Relationships: Perspectives From Clinical and Non-Clinical Studies.

Professor Claire Hughes\textsuperscript{2}, Dr Sarah Foley\textsuperscript{1}, Miss Caoimhe Dempsey\textsuperscript{2}, Dr. Evelien Dirks\textsuperscript{3}, Ms Helen Dolling\textsuperscript{2}

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In this symposium, speakers from universities in England, Scotland and the Netherlands will report findings on early parent-child relationships within three different groups. The first two studies both draw on the New Fathers and Mothers study, which tracked a low-risk sample of families from before the birth of the first child to the children’s second birthdays. The third study focuses on parents (mostly mothers) of deaf or hard of hearing infants, while the fourth study includes families receiving rapid whole genome sequencing to identify rare genetic conditions in the child. Counterbalancing these contrasting foci on different families, the papers share common ground in terms of their methodological approaches. For example, two papers apply the 5-minute speech sample to assess parental perceptions, three use video-based coding of parent-toddler interactions and two include fathers in their analyses. By bringing together speakers from both clinical and non-clinical backgrounds, we hope to stimulate an interesting dialogue about the commonalities and contrasts in families’ experiences.
Psychosocial Impact of Paediatric Early Rapid Genomic Testing and Diagnosis: retelling the story.

Ms Helen Dolling, Madeleine Freeman, Ilana Cope, Miss Mishika Mehrotra, Raymond Lucy, Professor Claire Hughes

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INTRODUCTION: Serious illness in infants exerts enormous stress and worry on parents, potentially exacerbated by diagnostic delays that also limit delivery of treatment and family counselling. Recent technological advances have enabled rapid expansion in the availability of whole genome and exome sequencing (WES/WGS) (NHS Long Term Plan, 2019). Worldwide, the Next Generation Children Project (NGCP: French et al., 2019, 2022) was the first cohort of children (521 families) to have received rapid trio whole genome sequence analysis (rWGS) for any suspected single gene disorder. While clinicians, bioethicists, and researchers have new concerns about testing critically ill neonates and the potential harms to family relationships, parental perspectives remain little explored.

AIMS: We are investigating how early genomic testing and diagnosis impact parental experiences and early family relationships, with a view to (a) elucidate benefits or harms, including decisional regret and (b) identify risk and protective factors for family adjustment.

DESCRIPTION: We have followed up 62 NGCP families, with 53% receiving a diagnosis of mostly rare/ultra-rare disease in the child. 57 mothers and 35 fathers completed questionnaires, semi-structured interviews, and the Five-Minute Speech Sample (FMSS). Interviews illustrate clinical and personal utility of genomic testing results whilst survey responses highlight ongoing parental anxiety and uncertainty about the future in many families, coupled with changing attitudes over time. FMSS transcripts are currently being coded for narrative coherence (Sher-Censor, 2019) to explore parents’ sense of competence, adaptive parenting, as well as parental attitudes and schemas regarding their child.

CONCLUSIONS. Among families of children with serious health problems, responses to FMSS offer a valuable window into parental experiences, concerns, and mental health, as well as the dynamic and complex nature of contrasts in family experiences. These appear more meaningful than simple measures such as presence / absence of genetic diagnosis.
Wait and see: Parent-child interaction of deaf children with cochlear implants

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Introduction.
Early parent-child interactions are essential for children's language development. For deaf children who experience more challenges in their language development these interactions are of special interest. Parental intrusive behavior and joint attention are related to language abilities in children with typical hearing, but less examined in deaf children with cochlear implants.

Aim of the study.
We examine the association between parent-child interaction and language abilities in very young deaf children with cochlear implants, focusing on parental non-intrusive behavior and joint attention during free play.

Material and methods.
Parent-child interactions have been videorecorded during a free play activity at home for 25 deaf children with cochlear implants (mean age 25 months) and 25 children with typical hearing (mean age 36 months). To study parental propensity to follow their child's lead we applied the non-intrusiveness scale of the Emotional Availability Scales (Biringen, 2005). In addition, the interactions were coded for episodes of joint attention. Standardized language tests were used to relate children's language development to parent-child interaction.

Conclusions.
On average, parents of deaf children with cochlear implants showed more intrusive behavior, compared with parents of typical hearing children. Episodes of joint attention were also briefer in the interactions between deaf children and their parents. Within the deaf sample, less intrusive parent-child interactions and longer episodes of joint attention were associated with stronger child language abilities. To promote language development in deaf children with cochlear implants it is important to provide opportunities for children to take the lead and engage in joint attention during interactions with their parents.
Positive parenting in foster care: A video-feedback intervention to promote positive parenting – theory and practice

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Foster children are known to be at high risk for developing attachment problems. Moreover, their associated behavioural problems can be a burden for the foster family and increase the risk of placement breakdown. A sensitive parenting style promotes a secure attachment which, in turn, can reduce the chance of difficulties arising and protect against placement disruption. Interventions using video-feedback of parent–child interactions offer a method of increasing parental sensitivity and improving the quality of the parent–child attachment. The intervention discussed in this presentation is part of a wider initiative, Video-feedback Intervention to promote Positive Parenting and Sensitive Discipline (VIPP-SD), fashioned to promote sensitive parenting, secure attachment and a reduction in children’s behavioural problems. Its effectiveness has been shown for a variety of target groups. A variant of the approach was developed specifically for foster and adopted children, Video-feedback Intervention to promote Positive Parenting and Sensitive Discipline – Foster Care/Adoption (VIPP-FC/A). During the presentation, the design and delivery of the intervention are discussed and illustrates these with case material.
Factors associated with insecure attachment behavior of young Flemish foster children

Prof. Frank Van Holen\textsuperscript{1,3}, Drs. Delphine West\textsuperscript{1,2}, Camille Verheyden\textsuperscript{1}, Laura Gypen\textsuperscript{1}, Johan Vanderfaeillie\textsuperscript{1}

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Family foster care is the option of choice in case of out-of-home placements in Flanders, resulting in rising numbers of family foster care placements. As a number of the foster children experienced traumatic events and all of them were separated from their primary caregivers, concerns can be raised about the quality of attachment between foster children and their foster carers. Additionally, international research regarding associated factors with attachment quality is scarce and inconclusive and to our knowledge, Flemish research into this matter was non-existent. The sample of this research consisted out of 68 young foster children and their foster mothers. The attachment behavior was scored by the foster mothers on the Attachment Insecurity Screening Index. The mean for the total Attachment Insecurity Screening Index was non-clinical, but significantly higher than the mean of the norm group, this points to foster mothers perceiving more insecure attachment behavior in the relationship with their foster children. The rates for insecure attachment were comparable to the regular population. Parenting stress and problem behavior were positively associated with insecure attachment scores and, negatively with self-reported sensitivity of foster mothers. These factors were entered in a multiple linear regression model. This model shows that higher levels of parenting stress and more behavior problems were associated with higher insecure attachment scores. We recommend to pay sufficient attention to the attachment relationship of foster children and their foster carers, parenting stress and behavior problems by monitoring them regularly and providing additional support and interventions when these are indicated.
Before the novel coronavirus began to sweep through the world in early 2020, UNICEF estimated that there were approximately 140 million orphans around the world, 8 million of whom were living in institutional care settings; tragically, Covid-19 has left an additional 10 million children without caregivers. Although the quality of institutional care varies across countries, a common theme that cuts across virtually all institutions is neglect. Given the experience-dependent nature of postnatal brain development, neglect can lead to profound disruptions in brain development. This has been carefully documented in a number of studies focused on children who experiencing institutional care, but none more so than the Bucharest Early Intervention Project (BEIP). The BEIP is a randomized trial of foster care intervention for young children who experienced early deprivation. After an initial baseline assessment of 136 abandoned children, half were randomly assigned to a high quality foster care program and half to remain in care as usual (continued institutional care). More than 80% of the children initially enrolled in this study have been followed through the first two decades of life. In this presentation I will summarize the brain-based findings through age 16. In particular, I will report that a) there is a dramatic reduction in the brain electrical activity (EEG) among children randomly assigned to care as usual, compared to those placed into foster care, b) the degree of recovery is tied to the age at which children were placed into foster care, c) at ages 8 and 16 children in both groups showed a dramatic reduction in grey matter, whereas those in foster care showed some increase in white matter; and d), by age 16 regions of the prefrontal cortex were thicker among institutionalized vs. foster care children, suggesting a lack of pruning.
Supporting early parenting through engaging videos to promote positive, safe interactions with infants/toddlers

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Introduction: New parents are often challenged by the reality and responsibilities of early parenting. They want simple, easy to understand information to support their parenting journey. Supporting new parents through educating them about developmental expectations and how to facilitate optimal development of their infants and toddlers results in parents who better understand child development, feel more confident in their parenting, and utilize positive strategies that encourage thriving in infants and toddlers.

Aims: The aim of this video presentation is to share several videos that can be used to facilitate positive interactions between parents and their infants/toddlers, resulting in optimal developmental progress of infants and toddlers and an increased likelihood of secure attachment between parent and infant. Several engaging early parenting videos will be presented, and are part of a complete set of 18 engaging videos for those working with 0-2 year-olds, and 18 videos for those working with 3-5 year-olds. All videos are available for complementary use. Topics available include: brain development, self-regulation, social development, cognitive development, language development, and physical development. Each video is between 7-20 minutes long and includes comprehensive, recent, and accurate information about how infants and toddlers develop through their interactions with their caregivers. Furthermore, there is a video for each topic (typically 2-5 minutes long) that discusses the impact of trauma on that realm of development. Finally, there is also a companion video to each topic area that discusses 10-20 specific strategies that parents might choose to implement to support their baby’s development.

Conclusions: Providing parents with information that is engaging, non-judgmental, and easy to understand and implement empowers parents to support the flourishing of their infants and toddlers. Viewers will leave the session with new tools available in English and Spanish to support parents.
Infant-peer triads in the caregiving context of childcare

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Introduction:
The social context of childcare provides opportunities for infants to interact with others outside of the infant-parent dyad and mother-father-infant triad. While research has described some characteristics of infant-peer group behaviour in laboratory (Bradley & Smithson, 2017) and childcare settings (Pursi & Lipponen, 2020), little is understood about infant social development within groups.

Aim:
This workshop will focus on how infants: (1) communicate and interact with other same-age children in childcare across the first two years of life, and; (2) what these communications/interactions mean for their social development in groups.

Material and Methods:
Participants were 20 focus infants (aged 3-21 months), and four early childhood educators from two Australian childcare centres. An infant mental health approach was used to examine and understand infant-peer interactions through: (1) collection and microanalysis of 564 videos of infant triads (a third infant with an interacting-peer dyad) and; (2) 18 interviews that gathered educators’ thoughts and feelings about infants’ interactions through the psychoanalytic method of infant observation. Key concepts of infant social development, dynamic systems theory, and educators’ perceptions about infant behaviour were brought together to generate new understandings of infant sociality and social development in groups.

Results:
Third infants’ communications and interactions consisted of: looking and approaching; pauses; changes in social position; breaking the interactions between their peers; and expressing themselves by vocalisations, touch, facial expressions, and simultaneous rhythmic interactions involving bodily movements, sound and shared emotion. In interviews, educators described third infants’ behaviour as a desire for connection, jealousy, and attempts to understand the relationship between their peers.

Conclusions:
Infant-peer groups are open, flexible and dynamic linking systems consisting of fleeting group processes. Through these processes, infants learn about the relationships between their peers, the intentions of their play, and how to enter and sustain peer group play.

References:
INFANT PARTICIPATION IN A NEW KEY - Part one: epistemological foundations and research procedures

Associate Professor Eystein Victor Våpenstad

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INTRODUCTION
The United Nations Convention on the Rights of the Child (UNCRC) gives the right to participate and be heard in situations that affect their lives to all children, even pre-verbal children and infants. But infants are often denied the right to participate because they don’t possess verbal language. But the last 40 years of infant research has shown how infants powerfully communicate their intentions in quite refined ways. The crux of the matter is to develop methods to find the voice of pre-verbal children, that is: to register their impact on us and decode their influence into common language and practical action.

AIM OF THE STUDY
We want to describe a research project based on the primary intersubjectivity of infancy. In this first of two brief presentations, we would like to describe the epistemological foundations and the procedures of the research project from data collection to interpretation. An example is given to illustrate the narrative raw material and the procedures of interpretation in our project.

MATERIAL and METHODS
Our project builds on qualitative methodology grounded in a depth-hermeneutical interpretation of narratives made by parents just before and after birth of their first child. Concretely, we implement an adapted version of Scenic narrative microanalysis (SNMA), a promising research methodology especially suited to identify and interpret unconscious non-verbal material both on an individual and societal level.

CONCLUSIONS
We have some very promising and exiting results illustrating how the infant voice can be present in the parent’s narrative. We would like the workshop to help us understand and develop even further our methodology and our understanding of participation and involvement, both legal and psychological, for pre-verbal children. THE NEXT PRESENTER (Brynulf Bakkenget) WILL OUTLINE SOME OF THE RESULTS AND IMPLICATIONS FROM THE PROJECT
Adversity and Resilience in Caregivers and Young Children: Protective and Compensatory Experiences (PACES)

Dr Amanda Morris¹, Dr Jennifer Hays-Grudo¹, Dr. Jens Jespersen¹
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Introduction

This workshop will present the principles and strategies for a balanced parenting approach to raising resilient children. Balanced Parenting expands on the concepts of authoritative parenting, incorporating protective and compensatory experiences (PACES), the importance of self-care and trauma-recovery practices for caregivers, and a focus on the dyadic and family systems. We have drawn from decades of research that we and others have done on adversity and resilience, child and brain development, and parenting.

Aim of the Study

Our goal in presenting this workshop is to share what we have learned from our research on adversity and resilience, particularly as it relates to the application of practices to build resilience within early childhood. The workshop will include opportunities to explore PACES as a framework for research and practice through assessment and cross-generation exploration.

Methods

This workshop will introduce two novel assessments for gathering data related to early positive experiences, one designed for infants and toddlers, PACES for Babies, and one for parents, Current PACES in adults. Other activities to explore intergenerational patterns of risk and resilience in the caregivers will be introduced, including the ChaACEs (Childhood adaptations to ACEs) and GraACEs (Grown-up adaptations to ACEs), with information about how to use them clinically and in research.

Conclusions

New methods are required for assessing and treating intergenerational patterns of adversity and resilience will be discussed in the context of Balanced Parenting with babies and young children. This workshop will present evidence-based strategies to promote parenting that builds resilience and reduces risk of adversity for young children.

References


Using phenomenological approaches in building relationships with vulnerable mothers and infants

Ms Minna Sorsa1,2, Professor Bente Dahl3, Senior researcher Idun Roseth4
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Introduction: Vulnerable mothers with insecure adult attachment, life crises, psychological distress and/or substance abuse may struggle in the caregiver-child interaction, which can negatively impact child development and well-being. Building good relationships between families and clinicians has been connected with improved reflexive capacities, quality of attachment, and child well-being. The current interventions reaching out/building relationships may miss the vulnerable parents, who struggle with open intersubjective relations. The approach of the clinicians in connecting with families is crucial in the area of infant mental health. In current research phenomenological approaches in creating trustful relationships exist, but are scarce.

Aim of the study: In this presentation we will discuss the utility of phenomenology in developing relationships and attachment via four separate studies.

Material and Methods: We will discuss findings from a Lifeworld oriented metasynthesis of mothers enduring perinatal psychological distress. Next, we will discuss how the elements of a phenomenological approach could aid in building relationships with vulnerable mothers and their infants. Third, we present a phenomenological study on the importance of having sufficient time to develop a sense of parenthood after having given birth to a dead child. Last, we present findings from a review on the use of phenomenology in studies within the field of infant mental health, and what recommendations can be drawn for current state-of-art.

Conclusions: There is a need to improve services to reach out for the most vulnerable, and phenomenological approaches offer essential insights that may enrich our clinical praxis. A phenomenological attitude of being empathically connected with the whole, situated person can elicit self-healing capacities. Clinicians need attitudinal skills such as appreciation, and recognition of the other as a fellow human being. This involves being authentic, ethical with a bodily awareness in the clinical encounter, whilst maintaining the professional role.
Intersubjective pain in postpartum: interest of a combination of tools to screen mother-baby bonding disorders

Joelle Rochette-Guglielmi, Sylvie Viaux Savelon

A 2020 French report on mother’s morbidity and mortality has highlighted that 91% of maternal mortality due to mental illness were preventable and highlights in particular “the importance of prevention and coordinated multidisciplinary care pathways involving primary care”. Faced to this Public Health issue, a post-natal interview between the 4th and 8th week has been developed in emergency in France. The correlation between moral and physical pain in postpartum and failure of mother-child interactions at one year is demonstrated by studies on very large cohorts (Kasamatsu, 2020). The intersubjective dimension of “co-pains emerges as an interesting concept strengthened by the physiology studies linking physical and moral pains (Sirigu 2014).

In this way it was urgent to develop a kit of identification and prevention tools that could been used by front-line professionals in routine consultations, then to allow early screening and referral if necessary to specialized care services for baby parents to reduce morbidity for both mother and child.

Method: we developed a clinical action research (I) to implement this screening and prevention kit in first-line professionals pilots (2) to realize multi-focal and longitudinal mother-child screening by measurements between 0 and 3 months, then at 12 months using a “kit” of validated scales (ADBB, EPDS, Visual Analogue Scale for dyadic pain, MIBS)

Results: preliminary results will be presented on 100 dyads followed from birth to one year postpartum. Feasability and acceptability of the “kit” was good for the professionals. Predictive value of the kit score in early postpartum was clearly improved by combining scales with high relevance (sensitivity 72.7%, specificity 83.3%; predictive value + 76.%; predictive value – 80.6%; X 2: 0.01; Q: 0.72 (Rochette, 2020)

Conclusion: Combinated tools including intersubjectivity co- pain is a good and valuable way to screen and address high risk dyads.
INVITED SPEAKERS’ PRESENTATIONS

Why is social withdrawal in infants important to acknowledge and to screen for? Recent developments

Pr Antoine Guedeney

Early diagnosis of psychopathology and parent infant relationship disorders require a valid understanding of psychological development in infants and toddlers, 0-5. The first description of social withdrawal behavior comes from Katarina Wolff’s as René Spitz work on anaclitic depression. The early death of Katarina Wolff deprived us of more insights in this relatively unexplored dimension of early development. Bowlby and Ainsworth have provided us with a description of development of attachment behavior in infant, as well as sensitive caregiver’s behavior fostering secure attachment. Fraiberg was the pioneer in describing early defense mechanisms in infants faced with adverse relational issues. Stern and Trevarthen and Robert Emde have given us proposals about how the interpersonal world of the infant builds up along time, scaffolded by relationships.

Infants are born with an exceptional ability to synchronize and to get in relational touch with caregivers. The other side of the coin is the high sensitivity of the infant to any durable and repetitive violation of his/her expectations within the relationship with caregivers. Sustained social withdrawal behavior is the first defense mechanism to be used by a highly sensitive newborn who is eager to participate in the interactional game, but who has no other way to control for the flow and quality of the interaction he or she is so dependent of. Early prevention and intervention is in need of sound theoretical frames, as well as of sound assessment choices of behavioral targets, validated by clinical controlled research, and leading to assessment tools that can be used daily.

This presentation will briefly survey the building of the ADBB and Modified short ADBB scales, their validation and applications in different setting and developmental circumstances and discuss their utility as a systematic first line screening tool.
Parental Reflective Functioning: Key Issues in Measurement

Dr Arietta Slade, Dr Ann Stacks

1Wane State University, , 2Yale Child Study Center, ,

This double symposium focuses on the challenges of measuring and enhancing parental reflective functioning (PRF). The term – first introduced by Fonagy and his colleagues (1991) -- refers to the parent’s capacity to imagine the child’s as well as their own thoughts and feelings, and to – in general - recognize the value and meaning of internal, subjective experience. Research has consistently linked high levels of PRF to a range of positive relational outcomes in child, parent, and dyad. PRF has typically been measured using the Parent Development Interview (PDI; Slade et al., 2004), an interview designed to elicit parents’ thoughts and feelings about the child and the parent-child relationship, or the Pregnancy Interview (PI; Slade, 2003). Whereas the PDI is designed to elicit parents’ thoughts and feelings about the child and the parent-child relationship, the PI invites the expectant parent to reflect on their emotional experience of pregnancy and emerging parenthood. More recently, Luyten and his colleagues introduced a questionnaire-based assessment of PRF: the Parental Reflective Functioning Questionnaire (PRFQ; Luyten et al., 2017). A prenatal version of this questionnaire has also been developed by Pajulo and her colleagues (Pajulo et al., 2012).

Over the past three years, an international group of researchers and clinicians has met regularly to discuss the complexities and challenges of measuring PRF as well as finding ways to support and enhance it in clinical interventions. In the first part of this symposium, we will focus on the measurement of impaired mentalizing and mentalizing breakdowns. In the second part of this symposium, we will focus on a set of key questions facing clinicians aiming to enhance and promote parental mentalizing in a range of contexts.

Part 1 Parental Reflective Functioning: Key Issues in Measurement

Across samples of mothers placed at risk of insensitive parenting due to high levels of adversity, PRF scores tend to be in the low range. Yet breakdowns in mentalizing can take many clinically meaningful forms, some of which can be difficult to distinguish from true reflective capacity. Arietta Slade will begin with an overview of PRF, its measurement and scoring, and describe this group’s efforts to understand and operationalize these breakdowns. Kristyn Wong and Sanna Isosävi will then present on mentalizing breakdowns in prenatal and postnatal RF. Finally, Michelle Sleed will discuss different forms of representational risk and their clinical significance.
Over the past two decades there has been a significant increase in understanding about the mothers’ relationship (both emotional and cognitive) with the unborn baby in terms of i) the ways in which this relationship can be assessed; ii) the stability of this relationship over time (i.e. continuity post birth), and iii) the implications in terms of parenting in the postnatal period. This paper will summarise the most recent research on this topic, and describe the findings of a recent overview of what works to support the relationship between the mother and the unborn baby.
Neglect in Young Children: Research, Practice and Policy Issues

Professor Charles Zeanah

Child neglect is often noted to be the most prevalent but least understood type of child maltreatment. Scholars have lamented the “neglect of neglect” in research for almost four decades. The effects of neglect on infants and young children are especially complex and powerful, and because of developmental vulnerabilities in young children should invite special considerations in practice and policies. In fact, the profundity of the effects of neglect are underappreciated in practice and policies that are often not developmentally sensitive. Some have suggested, for example, that child protection intervention should be reserved only for life threatening situations. In this presentation, I review research on psychosocial neglect and its effects on young children’s development, highlighting the potential for lasting harm. Next, I highlight research that informs policy considerations regarding neglect. Finally, I consider the effects of neglect on infants and young children on providers, including ethical dilemmas, moral distress and countertransference. I conclude with a promising but as yet untested model for a collaborative approach to young children and their families.
Attachment and Trauma-Informed Child Protection: The Infant-Toddler Court Team Collaborative Approach

Dr Ann Stacks

Maltreatment in infancy and separation from parents can profoundly impact early development and have a cascading effect leading to persistent mental and physical health problems. Courts decide whether a child can remain safely in their home and what parents must do to have their children returned home. Yet, many of the decision-makers have no formal training related to the needs of maltreating families or very young infants.

Infant Toddler Court Teams ensure that decision-makers in the court and the child protection system understand attachment and intergenerational trauma and the importance of infant mental health treatment for families. Critical to infant toddler court teams is a collaborative and non-adversarial approach where infant mental health clinicians providing services to families also provide the court with information about the child and family strengths, needs, and progress. All members of the court team, including judges and attorneys, protect the therapeutic alliance and recognize strengths. This approach results in families receiving effective services, children being reunified with their families at higher rates, and not coming back into care.

In this masterclass, participants will see videos of parents and court team professionals describing the values that drive this collaborative work and see examples of court hearings. Evaluation data will be shared showing the effectiveness of infant toddler court teams. Participants will also learn how the infant-toddler court team in Detroit, Michigan, USA, was established and how it has been sustained for more than a decade. Resources will be shared related to establishing court teams.
Is the ‘sensitive mother’ the same the world over? Developing culturally sound infant mental health practice in South Africa

Professor Astrid Berg

Variations exist in the way parents care for their children. Parenting styles are informed by the social, cultural and economic context in which families live. While this is obvious and well known, much of infant mental health theory is derived from the Western world, which represents less than 10% of the world’s children. Thus, effective and evidence-informed infant mental health practice in Lower Middle-Income Countries (LMIC) necessitates local research into the constructs pertaining to infant mental health.

This Masterclass will outline three South African research projects which investigated infant mental health concepts. The notions of sensitive mothering, the impact of mental illness on reflective functioning and the paradigm of shared pleasure will be described. It will go on to outline several locally developed and locally adapted infant mental health interventions that have been informed by this research. The integration of indigenous knowledge has further enriched these interventions. While this research was done in South Africa, the findings may well apply to other parts of the world.
Healing the Past by Nurturing the Future: Learning from Aboriginal and Torres Strait Islander communities to foster early connectedness and healing as we emerge from the ‘colonial dark ages’

Prof Catherine Chamberlain, Prof Caroline Atkinson, Ms Alison Elliott

Family and extended kinship systems have always been central to the functioning of Aboriginal and Torres Strait Islander societies as the social fabric and cultural attachment systems for nurturing healthy, happy children. These systems have been underpinned by cultural knowledge, governance structures and lore, supporting Aboriginal and Torres Strait Islander peoples to adapt and thrive for at least 2000 generations. Since colonization a mere 200 years ago, Aboriginal and Torres Strait Islander communities have been impacted by colonial violence, genocidal policies and discrimination, including the forced removal of children from their families - resulting in intergenerational trauma and concurrent oppression, suppression and destruction of Aboriginal and Torres Strait Islander knowledges that would enable recovery.

In this masterclass, we will briefly contextualise the important life course opportunity for healing the past by nurturing the future as we emerge from these ‘colonial dark ages’ and share some insights into cultural practices that foster connectedness, from four years of Aboriginal and Torres Strait Islander-led community-based participatory action research and co-design. We will also discuss effective Aboriginal and Torres Strait Islander strategies to safely hold discussions about trauma with parents, including dadirri, storytelling and yarning; to help transform cycles of intergenerational trauma and harm to intergenerational cycles of nurturing and recovery. So that Aboriginal and Torres Strait Islander families can, once again, live health happy lives in our abundant land we now share.
Providing a Developmental Response to Developmental Concerns in the Absence of a Diagnosis

Dr Chaya Kulkarni, Ms Mary Rella

This session will introduce participants to Hand in Hand, a model for developmentally guided response to infant and early mental health concerns. This model can be embedded into the practice of a variety of practitioners ranging from home visitors, early learning and care practitioners, child protection workers and early interventionists among others.

During this session, delegates will download Hand in Hand, a tool developed and evaluated in Canada that is used to create developmental support plans that are family friendly and offer caregivers and practitioners an immediate response to developmental risk for poor mental health. In many parts of the world, health care systems follow a traditional medical model that demand a diagnosis to access interventions and treatment delaying access to the supports a child may need. This delayed response to developmental concerns can actually further amplify the concerns. Hand in Hand is based on a robust body of science that illustrates how early recognition and response to such risks, including infant and early mental health risks, can mitigate or even prevent the emergence of a diagnosis. Today we know that the first three years of a child’s life is a profound period of brain development unmatched by any other time in a child’s life. Based on this science, recognizing and responding to a child’s developmental needs early in life can have a significant impact on developmental and mental health outcomes across a child’s lifespan.
From Child and Parental Mental Health needs toward generation of an empirically supported treatment: The Chilean experience with Video-Feedback

Fanny Leyton

A historical journey will be exposed through the development of four projects over eleven years evaluating the feasibility and efficacy of brief psychotherapeutic interventions performed in Chile using Video-feedback under a "bottom-up" research approach. The main goal is providing innovative, useful, and scalable interventions to the public health system in Chile. This journey ends with the development of a culturally sensitive intervention model with Video-feedback: The “Strengths-based Video-feedback” (SB-VF). This research is framed into the attachment theory, seeking to test low-cost Video-feedback interventions which could be implemented in public settings in Chile and Latin-America.

The first project focusses on mother-infant dyads with depressive symptoms and the analysis of maternal mental health history, sensitive response, maternal reflective function, and infant development.

The second project focuses on mother-father-infant triads between one and three years of age with difficulties in socio-emotional development and analyzes the sensitive parental response, the quality of triadic interactions, mental health history, and child development.

The third project evaluates the feasibility of delivering Video Intervention Therapy (VIT) in dyads of children hospitalized in a Child Psychiatry ward and their caregivers.

The last project was implemented during COVID-19 pandemic, an online SB-VF intervention was performed to improve maternal sensibility in mother-infant dyads with maternal depressive symptoms being treated in primary public health centers. The SB-VF intervention developed in Chile nourishes from international evidence and from previously developed FV models (VIG, VIPP, ODISEA and VIT) and from Mentalization-Based Therapy, in addition to the clinical and research experience obtained from more than a decade.
Premature infants and their parents in the NICU during the COVID-19 pandemic: What have we learned?

Dr Grażyna Kmita

Human development is embedded in parent-child relations. This goes beyond the fundamental, protective role of attachment and includes different forms of participation in the process of co-creating and sharing meaning in the context of family, society and culture. Pre-term birth can be regarded as a severe risk factor for child development and mental health directly, via biological vulnerabilities and medical complications, but also indirectly, via the specificities of parent-infant relationship formation. Traumatic perinatal experiences, separation from the baby, as well as specific physiological and behavioral features of premature infants, can all contribute to parental difficulties in initiating and maintaining early quality interactions with their hospitalized child, diminish maternal and paternal self-efficacy, increase a feeling of helplessness and loss of control.

This problem seems even more pronounced in the times of COVID-19 due to additional restrictions and sanitary regulations in obstetric and neonatal intensive care units (Genova et al., 2022; Murray & Swanson, 2020; Ahmed et al., 2020; Cena et al., 2021; Kostenzer et al., 2021, 2022). In the effect, contact of parents with their prematurely born infants is even more limited, which leads to specific hazards for parental mental health, but also infant development and mental health in light of our current knowledge of the crucial role of early human interactions in modulating neonatal pain and stress and promoting positive neurodevelopmental outcomes (Campbell-Yeo et al., 2015; Provenzi et al., 2018).

In this master class we will first discuss recent results of studies on the impact of the COVID-19 pandemic on premature infants and their families in different countries (including the results of Zero Separation project). Next, I will share the results of a series of unpublished mixed method and qualitative studies conducted in Norway, Sweden, Poland, Italy and Serbia with mothers, but also fathers and staff members of neonatal intensive care units, just before and during the pandemic. In addition, clinical experiences related to supporting NICU parents and their infants during the pandemic with the use of ECIMH framework will be an integral part of the class. We will also discuss potential traps in ways of sharing our knowledge with a wider audience, hidden assumptions that may distort interpretation of research results, with potentially iatrogenic effects on NICU parents. Furthermore, we will try to identify ways of promoting resilience in families of premature infants.
Promoting the Professional Development of Pre-Service and In-Service Educators of Infants and Toddlers: Developmental Approaches to Supporting Dispositions, Knowledge, and Skills in Relationship-Based Practices

Prof Holly Brophy-Herb, Dr Claire Vallotton

Growth toward the professionalization of the infant and toddler care and education field has resulted in the identification of practices associated with high quality, relationship-based models of care. Yet, comprehensive competencies for promoting relationship-based practices in infant and toddler care and education, and strategies for building competencies in education preparation and professional development programs are lacking.

This masterclass is designed for those who teach infant/toddler development and programming courses for students planning to work with infants, toddlers, and families in home or center-based center settings, and for those who deliver professional development to infant/toddler educators already in the field.

In the masterclass, we will:

a) provide an overview of ten domains of competencies for infant/toddler educators, each comprised of dispositions, knowledge, skills, and programmatic facilitating conditions related to the domain;
b) present teaching and learning strategies that support development of knowledge, dispositions, and skills across competency domains.

The ten identified domains include:

1. reflective practice;
2. building and supporting relationships;
3. partnering with and supporting diverse families;
4. guiding infant/toddler behavior;
5. supporting development and learning;
6. assessing behavior, development, and environments;
7. including infants and toddlers with special needs;
8. professionalism;
9. leadership, mentoring, and coaching; and
10. social justice in infant and toddler education.

We will discuss methods and adult learning strategies that utilize interactive learning activities in oral and written forms, self-reflection, applied practices and strategies in the field, visual aids, anecdotes and field examples, and resources for leadership and mentoring.
The next generation of co-parenting progress for the field of infant mental health

Dr James Mchale

Infants and toddlers throughout the world are cared for, socialised and acculturated in distinctive multi-person family collectives. The participation, teamwork, containment of child-related conflict and attunement of the co-parenting adults within each child’s collective afford a family-level environment and atmosphere experienced as sturdy and protective or brittle and confusing.

In an important paradigmatic shift, the DC 0-5 acknowledged the central importance of young children’s coparenting systems and networks through its introduction of a more searching and reformulated assessment approach for its Axis II, for the first time, directing professionals to attend to, evaluate (and thereby also consider the substantive relevance of) the coparenting context supporting and affecting each child’s development and adjustment. This expanded conceptualisation of caregiving contexts is unquestionably an important step in children’s best interests, and it opens the doors for significant advances in how we understand early childhood experiences, events and impacts.

In this masterclass, the first generation of co-parenting theory, research and practice will be summarised with primary focus on the most significant knowledge gaps still remaining to be addressed thoughtfully and systematically in the coming decades. The readiness of professionals to assess coparenting and to promote adults’ mindfulness about its importance and developmental impact in diverse family systems and configurations will also be addressed.
Tays Huoma Digital platform and Parental Coaching program: a web-based service for parents of young children

Prof Kaija Puura

Demand of child psychiatric services even for families with infants and young children has grown globally after the Covid-19 pandemic, forcing service providers to come up with novel solutions. In this master class we present an easy-to-use web-based service for families with young children in need for child psychiatric care. The service can be used with a mobile phone, tablet or computer, and consists of 1) digital platform upon which personalized treatment path can be built for each family and of 2) Web-based Parental Coaching. The Parental Coaching program is based on an adaptation of Dialectic Behavioral Therapy (DBT). We describe the first experiences and using of the Tays Huoma service in the Infant and Family Psychiatry Unit of Tampere University Hospital.
An exploration of the Third Space: the interface between infant mental health and adult mental health in responding to infant-parent relationship problems in frontline services

Ms Catherine Maguire, Ms Mairead Carolan

Winnicott said “There is no such thing as an infant” but we extend this to “…or just an infant mental health clinician”.

The infant-parent relationship is the frequent port of entry when there are clinical concerns requiring early intervention and repair. This becomes a critical window when concerns lie within the parental mind, are felt within the infant’s mind, are observed in the quality of dyadic relational interactions, and also experienced in the minds of treating clinicians within infant mental health (IMH) and adult mental health (AMH) services.

Essential to this is the challenge to know, appreciate and verbally represent, for ourselves and the client family, the distinctive characteristics of the interactions within the parent’s subjective experience, the infant’s subjective experience, and the intersubjectivity generated in the dyad - the analytic third that

“...provides a framework of ideas about the interdependence of subject and object, of transference and countertransference that assists the clinician in his efforts to attend closely to and think clearly about the myriad of intersubjective clinical facts he encounters” (Ogden, 1994)

We consider Ogden’s concept of the analytic third as a beneficial framework within which to consider not just the intersubjectivity of the parent-infant dyad but also the treating clinicians and systems.

Two frontline clinicians working with distressed parent-infant dyads, one in IMH and the other in AMH, will reflect on the effectiveness of this theoretical framework in understanding and intervening with some of the most complex dyadic struggles in infant-parent relationships. Case examples will demonstrate the application of these concepts.

Reference


Time to Move Beyond the Western Mother: Parental Distress in Different Cultures After the Birth a Premature Baby

Prof. Naama Atzaba-Poria

The birth of a preterm infant is often an emotionally traumatizing crisis for both parents, raising feelings of anxiety and depression that are related to parents’ feelings of loss of control and inhibited trust in their child, in their own future, and in their role as competent parents. This risk may be further increased for an ethnic minority population. However, most research on both parental experience and preterm infants’ development has focused on mothers from Westernized cultures. This is worrying because research suggests that a substantial number of men experience signs of anxiety and depressive symptoms (particularly during the child-rearing years) and that parents from ethnic minority groups are at high risk for postpartum emotional distress.

This talk will address this gap by uncovering the experiences that both fathers and mothers from distinct cultures may experience following a preterm birth and presenting data about the long-term effect of parenting a preterm infant while considering the parental mental state following their infant’s birth and throughout the first years of their infant’s life. Using data from multiple studies on an ethnic majority population (Jewish Israelis) and an ethnic minority population (Arab Bedouin), a deeper examination of ethnic minority fathers’ and mothers’ experiences on parenting a preterm infant and their infant’s cognitive and socioemotional development will be presented. Risk and resilience processes will be discussed while considering universal factors (e.g., stress experienced at the NICU) as well as more culturally specific factors (e.g., acculturation status). Clinical implications of early intervention during the NICU stay and in the first years of the infant’s life will be discussed.
What should scaling early intervention for infant mental health look like?

Professor Paul Ramchandani, Dr Christine O'Farrelly

Behaviour problems are distinct in being the commonest mental health difficulty affecting young children as well as having the earliest onset. They often occur in the context of other difficulties including, socio-economic deprivation, challenges in language development and difficulties in the parent-infant relationship.

There are effective interventions available to support families and communities in addressing these challenges, but few interventions are widely available and the degree to which they have been evaluated and scaled varies enormously.

In this session we will examine optimal methods for providing effective support and intervention for young children and their families. We will draw on current and recent studies (Helping Little Minds Thrive, Playtime with Books and Healthy Start Happy Start) conducted at the Play in Education, Development and Learning (PEDAL) Research Centre to consider what elements of early mental health intervention should look like for families and communities. We will introduce and discuss examples of interventions that have been evaluated in real world public health contexts and effective interventions that have been optimised for scaling.
Child-led tube-management and tube-weaning

Prof. Dr. med. Marguerite Dunitz-Scheer¹, Prof. Dr. med. Peter Scheer

In September 2022 we published a textbook at Springer bearing the above title. Regarding the field of infant mental health and its borderline with pediatric intensive care, we would like to highlight the therapeutic approach we advocate in the task of supporting infants and young children from enteral (tube) feeding to natural oral food intake. The idea of our treatment is to follow the child in its endeavor to learn to eat. Our clients – be it in our outpatient clinic or online – are preterm infants and toddlers as well as medically fragile children suffering from complex medical conditions, like inborne heart-failures or genetic disorders.

We offer two types of treatment:
1. On-site treatment in our outpatient clinic “Eating-school” thus avoiding the impression of a medical treatment center. Our service includes:
   a. Online Pre-assessment by two pediatricians
   b. Preparing the out-patient stay
   c. A 12 day-care treatment running from 9am to 6pm
   d. Aftercare treatment for 35 days after the last tube feed
2. Online tube weaning treatment, named Netcoaching, including aftercare
3. Additionally, we offer by-products like “learn to eat” for children suffering from insufficient caloric intake, ARFID, FTT, Picky eater and an online treatment for adolescents suffering for eating disorders called weight-doc.

The masterclass invites participants to submit questions in advance regarding our topic. An open discussion offers support for colleagues performing comparable work and gives insight into the complexity of psychosomatic work with fragile infants and their parents.
Reviving ‘Amae’ and Communicative Musicality of Infancy to Recover and Retrieve Sense of Self in Relational Context

Dr Hisako Watanabe

As our world becomes increasingly unpredictable, what inner resources can we mobilize to recreate a sustainable society where infants and vulnerable people can live in meaningful way? Infants are born anticipating people to be genuinely warm and kind. Emde clarified this innate endowment of human moral to have following three components; reciprocity, empathy and value (REV Theory). Infancy is a rare and time-limited window into what Stern called ‘kairos’ in interactions, a world where feelings, imaginations and narratives prevail. If we humbly open ourselves to the world of infants and young children, they, with their subtle bodily signs, rhythms of movement and visceral interaction, will guide us to our long-forgotten embodied affective communication from early intimate relationships.

I will introduce ‘Amae’, a Japanese cultural mode of interdependency, deriving from a vernacular ‘amai’, meaning sweet. In Amae, people are able to presume upon each other’s kindness and reciprocate with empathy and respect. From psycho-evolutionary perspectives, Amae could have originated from universal basic embodied communication and mutual reliance for survival and human evolution, preceding the birth of words and logics.

Malloch and Trevarthen (2009) discovered musical components in this mode of communication and named it Communicative Musicality. Through decades of clinical practice in response to ever-increasing psychosocial problems in children in Japan (abuse, school refusal, anorexia nervosa etc.), I have witnessed pervasive deprivation of intimacy in early life caused by rapid postwar industrialization and westernization nationwide. I will illustrate how reviving Amae and communicative musicality served as a matrix to recover and retrieve sense of self in relational context.

Improving outcomes for vulnerable infants living in families with parental substance abuse: an overview of the Parents under Pressure program

Prof Sharon Dawe

Improving family functioning and child outcome in families with a multitude of problems – such as parental substance misuse, mental health problems, and parental childhood maltreatment - is essential if we are going to change an intergenerational pattern of adversity. Parents with extensive substance use histories face enduring problems with self-regulation and impulsivity. These add complexity to one of the most challenging jobs in the world: raising infants and young children.

It is not surprising then, that traditional approaches that predominantly involve teaching parenting skills is increasingly recognized as insufficient. The capacity to regulation emotions, and develop inhibitory control is both a predictor and a consequence of substance misuse. Combined with enduring adversity, parenting of young children can easily become insensitive and at times, hostile. In this presentation I will provide an overview of the Parents under Pressure (PuP) program.

The two central tenets of the PuP program are a focus on emotional regulation and the enhancement of safe and nurturing caregiving relationships within the family. There is a growing evidence base for effectiveness of the PuP program across a range of populations. Notably, however, not all families show improvement. Thus extending the evaluation of whether PuP is effective, to a more nuanced analysis of determining who may respond best to PuP (moderator analyses) and causal mechanisms drawing from the PuP program logic (mediator analyses) is essential for further development of the program and informs future tailoring of this and other interventions.
Spotlight on the practitioner working with infants and their parents: strengths, challenges and self curiosity

Mrs Tessa Baradon

Many practitioners report that their work with infants and parents is the most challenging aspect of their practice, yet this work is also highly rewarding.

In this talk I will address aspects of the work that present particular challenges to the practitioner – such as the immersion in raw emotions and early states of mind, the evocative and often taxing quality of parent-infant disturbance, the pull to align with either parent or infant. I will argue that the rewards lie in the nature of the relationship that we to co-construct with the participants, and I will describe the elements that make for a therapeutic essence.

Finally, I suggest that meeting the challenges and reaping the rewards depends on our ability to sustain self-curiosity and personal psychological work through reflective practice.
When does a baby need a psychotherapist?

Prof Kai von Klitzing

Several clinical studies have shown that parent infant psychotherapy is often very effective with respect to the mothers’ health, baby’s symptoms, and the quality of parent infant interaction. In the masterclass, I will present some reflections on how we can understand processes of change in therapies.

Do we primarily aim at getting rid of the baby's annoying symptoms (like feeding or sleeping problems); or do we understand the symptoms as an expression of unsolved conflicts in the parent infant relationship? I will delineate my psychoanalytic understanding of early development, especially the growing of early object relationships and processes of triadification/triangulation. How do these processes influence therapeutic change?

I will present a case example, some essential theoretical concepts and empirical results, which can help to shine a light on our therapeutic work.
Early communication within the family system: understanding interactional synchrony

Dr Julia Scarano de Mendonca

Federal University of Pará, Belém, Brazil

Based on the Family System approach (Minuchin, 1985), our objective is to understand early family communication through the lenses of the social partners’ interactional synchrony (IS).

IS is a universal phenomenon and a key element of all social interaction. It reflects the reciprocity of attention, interest and resonance between the social partners. Two ethological behavioral based micro-coding schemes to assess family communication at the child’s second and third year of life will be presented. They are multidimension observational tools that indicate the level of dyadic and triadic behavior synchrony between the social partners in relation to the interpersonal physical distance, visual and body orientation, play involvement and shared affect.

Research on the factors that may be associated with IS within the family system will be presented; they are: context, attachment relationship, parental depression (own and partner), child’s gender, parental culture values (socialization goals and familism) and the child’s and mother’s hormones.

Results show, for example, that when interacting in dyads, both mothers and fathers were in close contact with their child suggesting a synchronous style of interaction whereas, in the triadic context, mother-child dyads formed the main unit of the ongoing interaction while fathers were more distant from them.

Results also show that low-income Brazilian children may be exposed mostly to fathers’ values and practices characterized by the encouragement of the child’s dependency and adherence to more traditional values, when the family plays together in triads. These and other results will be discussed in the light of a developmental systems perspective (Fitzgerald et al., 2020).
## Scientific Abstracts – Author Index

<table>
<thead>
<tr>
<th>Author</th>
<th>Year(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aalberg, Marianne</td>
<td>200175</td>
</tr>
<tr>
<td>Abudayya, Abdallah</td>
<td>200433</td>
</tr>
<tr>
<td>Acheson, Ashley</td>
<td>104</td>
</tr>
<tr>
<td>Acil, Dorukhan</td>
<td>201129</td>
</tr>
<tr>
<td>Adair, Mitch</td>
<td>200885</td>
</tr>
<tr>
<td>Adekoya, Anike</td>
<td>200072</td>
</tr>
<tr>
<td>Adkins, Tina</td>
<td>200096</td>
</tr>
<tr>
<td>Afek, Einav</td>
<td>200271</td>
</tr>
<tr>
<td>Agarwal, Pratibha</td>
<td>200066</td>
</tr>
<tr>
<td>Agostini, Francesca</td>
<td>200611, 200683, 200607, 200706</td>
</tr>
<tr>
<td>Ahlqvist-björkroth, Sari</td>
<td>200356, 201236</td>
</tr>
<tr>
<td>Ahmad, Sam</td>
<td>200423</td>
</tr>
<tr>
<td>Ahmed, Imaal</td>
<td>201235</td>
</tr>
<tr>
<td>Ahmed, Kanon</td>
<td>77</td>
</tr>
<tr>
<td>Ahn, Yeojin Amy</td>
<td>200116</td>
</tr>
<tr>
<td>Aichele, Stephen</td>
<td>201048, 200417</td>
</tr>
<tr>
<td>Ajala, Ola</td>
<td>200369</td>
</tr>
<tr>
<td>Akhavein, Kimia</td>
<td>200206</td>
</tr>
<tr>
<td>Alamo, Nicole</td>
<td>200078</td>
</tr>
<tr>
<td>Alarcon, Cassie</td>
<td>200885, 201073</td>
</tr>
<tr>
<td>Albert, Rachel</td>
<td>200036</td>
</tr>
<tr>
<td>Albizzati, Alessandro</td>
<td>200260</td>
</tr>
<tr>
<td>Alexander, Stacey</td>
<td>200941</td>
</tr>
<tr>
<td>Alfaara, Emily</td>
<td>200935</td>
</tr>
<tr>
<td>Almeida, Renita</td>
<td>200574</td>
</tr>
<tr>
<td>Almeida, Sara</td>
<td>201083</td>
</tr>
<tr>
<td>Alvarez-Segura, Mar</td>
<td>200098</td>
</tr>
<tr>
<td>Amberg, Stefanie</td>
<td>201096</td>
</tr>
<tr>
<td>Amini Virmani,</td>
<td>200390, 200300</td>
</tr>
<tr>
<td>Anderson, Beatrice</td>
<td>200406, 200434</td>
</tr>
<tr>
<td>Anderson, Peter</td>
<td>200031</td>
</tr>
<tr>
<td>ANDERSON, Sheila</td>
<td>200156, 200216, 200760</td>
</tr>
<tr>
<td>Ando, Satoko</td>
<td>201192</td>
</tr>
<tr>
<td>Andrade Costa, Ethylene</td>
<td>200549, 200811</td>
</tr>
<tr>
<td>Andrei, Federica</td>
<td>201019, 201021, 201025</td>
</tr>
<tr>
<td>Angelats, Alejandra</td>
<td>200696</td>
</tr>
<tr>
<td>Anguera, M. Teresa</td>
<td>200340</td>
</tr>
<tr>
<td>Anke, Teija</td>
<td>200175</td>
</tr>
<tr>
<td>Antonietti, Jean-Philippe</td>
<td>200699</td>
</tr>
<tr>
<td>Antunes, Joana</td>
<td>200255</td>
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<tr>
<td>Antunes, Sandra</td>
<td>200917, 200933</td>
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<tr>
<td>Appel, Clara</td>
<td>100, 94, 200018</td>
</tr>
<tr>
<td>Aptaker Ben-Dori, Shyly</td>
<td>200688</td>
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<tr>
<td>Aracena, Marcela</td>
<td>200696</td>
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<td>Aramaki, Misako</td>
<td>201192</td>
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<tr>
<td>Araújo, Filipe</td>
<td>200838</td>
</tr>
<tr>
<td>Archer, Michaela</td>
<td>201005</td>
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<tr>
<td>Arduin, Elena</td>
<td>201235</td>
</tr>
<tr>
<td>ARIKAN, GiZEM</td>
<td>200599</td>
</tr>
<tr>
<td>Arnardottir, Stefania</td>
<td>201188</td>
</tr>
<tr>
<td>Ashby, Bethany</td>
<td>200229</td>
</tr>
<tr>
<td>Ataman-Devrim, Merve</td>
<td>200931</td>
</tr>
<tr>
<td>Atkinson, Caroline</td>
<td>201278</td>
</tr>
<tr>
<td>Atwood, Ginger D.</td>
<td>201061, 201235</td>
</tr>
<tr>
<td>Atzaba-Poria, Naama</td>
<td>200464, 200132, 200176, 200278, 200688, 201290</td>
</tr>
<tr>
<td>Atzl, Victoria</td>
<td>200025</td>
</tr>
<tr>
<td>Augustin, Michaela</td>
<td>200873, 200927</td>
</tr>
<tr>
<td>Austin, Judy</td>
<td>201061</td>
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<td>Numbers</td>
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<tr>
<td>Elita Ammitzbøll, Janni</td>
<td>201098, 201103, 201104</td>
</tr>
<tr>
<td>Amorim, Mariana</td>
<td>200621</td>
</tr>
<tr>
<td>Amro, Amin</td>
<td>200460</td>
</tr>
<tr>
<td>An, Nan</td>
<td>200760</td>
</tr>
<tr>
<td>AN, Jing</td>
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Cabrera, Natasha J. 200156
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Campbell, Linda 19
Cañadas, Margarita 119
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Capelli, Elena 200428, 137
Caporali, Camilla 200201
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Carlsson, Viktor 200798
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Burakevych, Nataliia 200384, 200385
Bureau, Jean-Francois 200042, 200505
Burkhardt, Tiffany 200168, 200170, 201228
Burkhardt Bossi, Carine 148
Burtchen, Nina 200098
Buss, Claudia 201111
Butler, Emma 86
Byrne, Elizabeth 170
Byrne, Marion 200758

Clark, Caron A. C. 200206, 200522
Clark, William 200129
Clarke, Aleisha 201016
Clarke, Mary 86
Clément, Sarah 200495
Cloutier, Paula 200843, 200847
Clyde, Alexis 200392
Coates, Erica 200035, 200674
Coble, Kelly 200231
Cobo-Lewis, Alan 200646
Cockshaw, Wendell 70
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Cohen, Dina 200114
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716
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Escorcia, Claudia 119
Essel, Claudia 200822
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Evald, Therese Alexandra 201103

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Fagan, Elaine 200088
Fahey, Laura 131
Farkas, Chamarrita 200704
Farley, Jennifer 200209
Farman, Melanie 200404, 200661, 200672, 200677, 200679
Fasching, Peter A. 200600
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Feinberg, Mark Ethan 200626
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Feldman, Tamar 143
Feng, Tianshu 200094
Feniger-Schaal, Rinat 82
Fenn, Haley 200926
Fernández, Olga 200078

Fisher, Kaylee 201235
Fisher-Solomon, Angela 200881, 200882
Fitzgerald, Shalese 160
FitzGerald, Serena 200642
Fitzgibbon, Sarah 200916
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Fletcher, Richard 134, 200012, 200019
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722
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Kennelly, Ellyn 200303
Keren, Miri 201161
Kerr, Margaret 201255
Khan, Maria 87
Khan, Nadya 78, 79
Khetani, Mary 200465
Khng, Kiat Hui 200285, 200375
Kift, Sara 200048
Killam, Teresa 200534
Kim, Loria 43, 200072
Kimkool, Parisut 200070
Kindler, Heinz 201160, 200772, 201096, 201108
King, Elizabeth 200130
King, Salena 201059, 200947
Kinloch, Karen 200404, 200647, 200677
Kirby, Natalie 170, 201016
Kitagawa, Megumi 200059
Kittel-Schneider, Sarah 200822, 200833
Klawetter, Susanne 200299
Klawitter, Heiko 201111
Klawetter, Regina 200865, 200035, 200062
Kluver, Robert 201190
Koziol, Natalie 200465
Kragstrup, Jakob 100
Kratz, Oliver 200600
Krijnen, Lisa J.G. 200711
Krippel, Misty 108
Krishna, Arnie 201064
Kristensen, Camilla Dahl 201104
Kristensen, Ingeborg 200345
Krogh, Marianne Thode 200359, 200373, 201091
Kubo, Akihiro 201192
Kuehne, Nicola 200623
Kuromaru, Mia 201235
Kwon, Kyong Ah 201023
Kyle, Margaret 201061
Kalland, Mirjam 200710
La Grutta, Sabina 201019
La Vecchia, Silvia 200895
Labovitch, Sarah 200369
Lacharité, Carl 200265, 200266
León-Estrada, Irene 200325
Leppert, Mary 200276
LERNER, ROGERIO 200729, 200732
Leshem, Mai 117
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Overbeck, Gritt 100, 162
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Perry, Deborah 200925, 201174, 201198
Peruzzo, Denis 200205
Perzolli, Silvia 201255, 200814, 200869, 200639
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