CHILDREN/YOUTH

2018-100 Aquatic Safety Education for Children with Autism
Children and Youth  50 Minute Session

According to a report by the National Autism Association, 91% of reported accidental deaths in children with autism between 2009 and 2011 were drownings (McIlwain & Fournier, 2012). Research cites higher incidence of elopement among children with autism, which can contribute to unsupervised encounters with water. Children with autism can demonstrate behavioral patterns, sensory preferences, and cognitive impairment which increase the risk for wandering towards water (Anderson et al., 2012; Kiely et al., 2016; Rice et al., 2016). Impairments in coordination, strength and endurance, and praxis seen in children with autism limit their ability to engage safely in and around water (Curtin, Anderson, Must, & Bandini, 2010; Jansiewicz et al., 2006; Pan, 2012).

Swimming skills allow people with autism to be more readily able to engage in aquatic occupations including aquatic sports and social activities, as well as promoting pro-social skills in non-aquatic environments (Bremer, Crozier, & Lloyd, 2016; Chu & Pan, 2012; Fragala-Pinkham, Haley, & O'Neil, 2008; Pan, 2012). By focusing on the performance factors unique to people with autism, occupational therapy practitioners can develop tailored instruction and educational supports to enhance their clients participation (Little, Sideris, Ausderau, & Baranek, 2014; Misce-Lawson, Cox, & Foster, 2013; Pfeiffer et al., 2017; Prupas, Harvey, & Benjamin, 2006; Yanarag, Akmanoglu, & Yilmaz, 2013). As people with autism often demonstrate differences in motor and process skills, occupational therapists can use evidence-based strategies to promote skill development and increased independence (Lee & Porretta, 2013; Pan, 2012; Petrus et al. 2008; Pfeiffer et al., 2017).


People with autism are susceptible to accidents in aquatic settings. Preventable drowning in people with autism is a safety concern which limits clients participation in aquatic settings. This presentation reviews treatment approaches to improve water safety for clients with autism.
After completing this presentation, the occupational therapists will
1. have additional strategies to augment current elementary curricula for English Language Arts and
2. be able to explain why the changes are beneficial to the child to school stakeholders.
3. These strategies will improve students understanding and motivation for learning while
decreasing anxiety and frustration to engage in education.
4. The therapist will have strategies to help teachers because students will have fewer behavioral problems and
5. improved ability to access their education through the DO IT ~ SEE IT ~ HEAR IT approach.

How many kids come home from school melting down saying, I can’t do it?! Encoding DysGraphia changes their paradigm. Reading, or decoding, is divided into five areas according to the education curriculum for K-12. These areas are phonemic awareness, phonics, and vocabulary: oral, read, and written, fluency, and comprehension. Encoding is the study of anything that is put to paper. It is divided up into the scribbling, pre-writing. Letter/shape formation, phonetic, syllabic, and conventional stages. Difficulty with putting anything on paper is called dysgraphia. Many school-based occupational therapy referrals include difficulty with dysgraphia. However, there are times in which is difficult to explain. Encoding DysGraphia breaks down the components of writing difficulty and correlates them into five subcategories. These categories include lexical (written expression), motor, geometrical (spatial), phonological (memory), and dyslexic dysgraphia. Each sub type is linked with visual perception, visual motor integration, and visual memory to maximize a child’s strengths and minimize their weaknesses. It provides the occupational therapist with tools to add to their toolbox so that they can better instruct teachers and parents in the facts about dysgraphia.


Encoding DysGraphia analyses handwriting, visual perception, and visual motor integration. It helps occupational therapists explain our role in the IEP team and provides instructions for teachers to DO IT ~ SEE IT ~ HEAR IT toward success.

2018-102 Trisomy 21: Assessment and Intervention: 0-3 years
Children & Youth 1 Hour 50 Minute Session

Learning Objectives:
1) Attendees will understand how an interdisciplinary clinic model approach can be used to follow individuals with developmental disabilities, and specifically individuals with Down syndrome
2) Attendees will be able to conduct comprehensive developmental evaluations of children, birth to 3 years old with a specialized focus on the common needs of children with Down syndrome.
3) Attendees will understand and be able to provide best practice for proper progression of developmental skills as well as recommendations for families specific to areas of improvement common in children with Down syndrome, birth to 3 years.

In this presentation, we will discuss our approach to developmental surveillance of children with Down syndrome by the following: Review of the clinic model, inclusive of the interdisciplinary team members involved within the clinic, specific characteristics of the patients seen within clinic, as well as the timing and frequency in which the children are evaluated. Skill acquisition and achievement of developmental milestones for children with Down syndrome ages birth to 3 years will be the focus of this program, including the use of typical movement patterns observed within this population. Assessment of a child with Down syndrome will be examined with emphasis on the following topics: participation in ADLs, gross motor skills and transitions, fine motor skills, visual motor integration skills, language skills, cognitive and play skills, sensory preferences and impairments, oral motor skills and use of standardized assessments. Discussion of our common recommendations including family-based interventions related to the assessment areas listed above will be included as well as equipment recommendations.

Instruction will be provided using a didactic approach including use of PowerPoint with photos and
video. Additionally, samples will be provided of both home programs and individual recommendations for all attendees.


Present an interdisciplinary clinic model as an effective and efficient way to monitor developmental progress in children with Down syndrome as well as their subsequent developmental disabilities. Review assessment, intervention and recommendations for families within this specific patient population.

2018-103 Routines-based Intervention: A Systematic Review

The learning objectives for this session are as follows:
1. Participants will be able to describe RBEI as evidence based intervention as operationalized in the literature.
2. Participants will be able to distinguish salient characteristics of effective practice of RBEI including intended appropriate populations and recommended settings.
3. Participants will demonstrate understanding of specific RBEI techniques and expected outcomes supported in the literature.

This poster presentation aims to inform current occupational therapy practitioners about the evidence-based practices that meet fidelity of routines-based early intervention (RBEI). The presentation will briefly navigate participants through the process and findings from the systematic review on RBEI, delineating common themes, techniques, assessments, and settings that demonstrated effective outcomes of RBEI. Clinical importance will be discussed. A facilitated questions and discussion session will be included in the presentation to support integration of evidence-based findings to practice. This presentation aims to provide support to early occupational therapy practitioners who provide early
intervention services. Increased knowledge related to evidence based intervention and strong measures of outcome can improve clinical reasoning, professional competence and promote advocacy within practice settings. Implication for the use of RBEI as treatment will be discussed.


Routines-based early intervention (RBEI) has demonstrated best outcomes in early intervention (EI). This in-depth systematic review reveals common themes and techniques found to be an evidence based intervention for EI. Clinical implications and implications for evidence based intervention are discussed.

2018-104 LowTech-MidTech AT for the SP.Ed Classroom
Children & Youth Poster

Purpose: The purpose of the poster is to:
1. Illustrate the role of each team member when determining assistive technology needs for a student and/or classroom.
2. To share examples of low to mid tech assistive technology devices developed by the team.
3. Highlight the process of determining the student's and/or classroom needs.

Process: The team consults with the classroom staff. The team observes the student in question and/or the classroom set-up. The team meets to collaborate on the best approach to meet the student's and/or classroom needs. The team fabricates or recommends assistive technology. the team follows-up with the classroom staff to determine effectiveness of the assistive technology intervention. Changes are implemented as needed.
Outcome: The outcome is increase, maintain, or improve the functional capability of a student with a disability in order to access their curriculum or educational environment.

Future Implications:
1. To continue to support the classroom and student's individual and unique needs through assistive technology and make it more accessible to the classroom staff. 2. To make assistive technology integral to the everyday routine for the classroom. 3. To demonstrate the importance of the multidisciplinary approach and how each discipline contributes to providing appropriate assistive technology and access to the assistive technology. 4. To provide a model for a team approach for delivery of assistive technology services in the school environment.


Assistive Technology Solutions in Minutes, Book II, Ordinary Items, Extraordinary Solutions. Therese Wilkomme, Ph.D., ATP 2013


Purpose: The purpose of the poster is to:
1. Illustrate the role of each team member when determining assistive technology needs for a student and/or classroom.
2. To share examples of low to mid tech assistive technology devices developed by the team.
3. Highlight the process of determining the student's and/or classroom needs.

2018-105 MET levels guiding pediatric cardiac rehab
Children & Youth Poster

Participants will:
1. Recognize occupational therapy’s distinct contribution in pediatric rehabilitation post cardiac transplant.
2. Analyze an evolving pediatric cardiac rehab program through a case study using current available MET levels.
3. Gain awareness of the need for occupational therapy to further develop our role with this population and study outcomes to guide intervention.

In 2017, 431 heart transplants were performed in pediatric patients in the United States, and this number has remained relatively stable over the last decade. Childrens Hospital of Pittsburgh of UPMC (CHP) is one of the most active transplant centers in the world. Each year CHP completes 10-15 pediatric heart transplants. Prior to surgery, the majority of children waiting for transplant hearts to become available experience a dramatic decline in capacity to participate in daily life activities. Wait time for a pediatric transplant ranges from approximately 2 to 4 months, leading to severely compromised strength and endurance as well as potential fear and learned helplessness. Post-surgery, occupational therapy plays a vital role in training children to maximize participation in daily life activities. Metabolic Equivalent (MET) levels currently govern adult cardiac rehab programs and have strong evidence to support its presence; however, there is a paucity in the literature regarding pediatric MET levels. The occupational therapy department at CHP has an evolving pediatric cardiac rehab program with a systematic and graded
MET level approach implemented throughout the continuum of care beginning in the acute phase. This approach facilitates challenging the patients cardiovascular system through occupational activities and provides a common language for therapists, physicians, and parents to communicate regarding the patients activity tolerance. It has enriched our program of measuring vital signs during occupational participation. Details of this evolving program will be illustrated via case study including occupational therapy documentation, parent feedback, and activity logs.


Childrens Hospital of Pittsburgh of UPMC has designed a post-transplant pediatric cardiac rehabilitation program. Occupational therapy's distinct contribution using a graded MET level approach in daily activities will be highlighted. Documentation and activity logs will be shared.

2018-2016 Printing Update: Focus on Size. Form will follow.

Children & Youth 1 Hour 50 Minute Session

At the end of this session, participants will be able to:
1. Explain, recite, instruct & score Letter Size (& spacing! the second most important variable!) according to “The Rules.
2. Recall & describe 2-3 ways SMHP can be embedded across all content areas, including during Push-in Collaboration, Center Times, Handwriting Club and as a stand alone curriculum
3. Identify the Key Concepts, main focus & sequence for instruction in the Size Matters Handwriting Program

In two separate published research studies, The Size Matters Handwriting Program (SMHP) proved to significantly & quickly impact legibility across the curriculum for preschoolers through third grade with & without special needs. This finding is especially relevant to school-based OTs since therapists report that 64% of their caseload is related to handwriting.

Printing continues to be an essential skill, even in the age of technology. Unfortunately, teaching printing has fallen victim to limitations in budgets & time. Moreover, 88% of surveyed teachers report no preparatory education to address this skill. Mandates to use evidence-based programs, measure progress, & achieve proficiency scores on standardized tests challenge therapists & teachers while prompting questions regarding whether manuscript instruction could still be covered without daily blocks of instructional time or school wide consumable workbooks.

Using available resources & respectful of the demands already placed on school teachers, SMHPs memorable mnemonics, simple scoring & reproducible grade-level writing papers are easy, fun, motivating & both teacher & kid-friendly. As a concept-driven approach, Occupational Therapists are able to use SMHP to push into classrooms to support, adapt & measure handwriting instruction & accuracy in the least restrictive environment as advocated by IDEA & AOTAs Best Practices.

This Keynote presentation provides an overview of the research, Key Concepts and empowering strategies that enable SMHP to be embedded during all content areas with minimal to no materials.

Letter Size has proven to be the variable impacting legibility most. With only 3 sizes (versus 62 forms), correcting errors in Letter Size makes an immediate, visible and measurable difference in the consistency and readability of the written page.

Children & Youth Poster

The participant will: (1) understand the benefits of inclusion in recreation for children with disabilities through an occupation lens (2) become empowered as advocates for the voices of children with disabilities and their parents as important stakeholders in the assessment of program outcomes.

For all children, being a participant in recreational sports program is important for the well-being and quality of life (LÃ³pez, Moreno-RodrÃ­guez, Alcover, Garrote & SÃ¡nchez, 2017). Children with disabilities may not always have the same opportunities for sports programs. Unified Sports®, an inclusive team sports program developed under Special Olympics®, aims to break down stereotypes about children with disabilities. Unified Sports® serves as an example of inclusion in recreation and has been found to be a useful vehicle for promoting the social inclusion of children with intellectual disabilities (McConkey, Dowling, Hassan, & Menke, 2013, p. 923). It, however, lacks sufficient documented outcomes. Previous research failed to explore outcomes of non-education-based inclusion programs from the perspectives of the two main stakeholders: children with disabilities and their parents. These perspectives are key to analyzing success of current inclusion programs and developing future ones. This study explored perspectives and experiences regarding outcomes of Unified Sports® using the Model of Human Occupation (MOHO) lens. The specific aim was to answer the research question: What are the perspectives of children with disabilities and their parents on inclusion in Unified Sports®? In order to answer this question, selected participants from a convenience sample completed online surveys. Participants included two athletes with disabilities and three parents. The surveys had seven questions about their feelings and experiences with the Unified Sports® Program. Study results demonstrated that Unified Sports®, may help children with disabilities build relationships, grow personally, and integrate into positive environments. Creating more recreation-based inclusion sports opportunities for children with disabilities is encouraged. Additional research is needed.


Recreational sports programs are important for the well-being and quality of life. This poster will summarize the outcomes of inclusionary sports from the perspective of children with disabilities and their parents.

2018-108 Stability Balls and Learning Behavior in Children
Children & Youth 50 Minute Session

1. Attendees will gain foundational knowledge regarding the connection between sensory processing, physical activity, and learning in children in addition to learning of empirical evidence examining the aforementioned.
2. Attendees will learn of the investigators current research exploring the behavioral effects of stability ball seating on attention, arousal, and on-task behaviors within a regular-education kindergarten classroom.
3. Attendees will be provided guidance on how to promote optimal sensory processing and modulation within the classroom as well as, correspondingly, will be encouraged to advocate for Tier 1, Response to Intervention occupational therapy services within the school setting.

Since the introduction of No Child Left Behind and the Common Core Curriculum, educational personnel report increased pressure to augment learning intensity and instructional time during the school day or expand the school day itself in order to comply with the elevated teaching requirements (Farbman, Goldberg, & Miller, 2014). Moreover, research demonstrates that elementary students spend a valuable 29% of the school day engaging in off-task behaviors including peer, individual, and environmental distractions, especially during individual and whole-group work at desks (Godwin, Almeda, Petroccia, Baker, & Fisher, 2012). Furthermore, research demonstrates that both sensory processing and physical activity play a key role in a child’s ability to control his or her body, attend, engage in on-task behavior, and learn (Ayres, 2005; Erwin, Fedewa, Ahn, & Thorton, 2016). Conversely, recent educational trends include decreasing sensory and movement rich activities such as art, dramatic play, and science centers and instead increasing sedentary workbook, textbook, and worksheet learning (Bassok, Latham, & Rorem, 2016). Thus, an educational gap is created in which educational personnel seek to increase instruction as well as necessary on-task and attentive behaviors but simultaneously act to reduce the sensory and movement input children need in order to most successfully meet those learning demands, which leads to the critical question of how to bridge the divide. The current study proposes stability ball seating as a potential compromise. Utilizing a single-subject, quasi-experimental, A-B design, the current study investigates the effect of promoting sensory modulation, via stability ball seating, on the learning of kindergarteners manifested as whole-class behavioral ratings of attention, arousal, and on-task behaviors. The presentation will include a review of sensory processing in children, previous research, the current study, as well as the implications for school-based occupational therapists, namely in promoting Tier I, Response to Intervention services.


The presentation provides an overview of the role of sensory processing on learning behaviors, previous research on stability ball seating, the speakers study examining the benefits of stability balls in the understudied kindergarten classroom, and implications for school-based occupational therapists.

2018-109 Families Experiences during a Relaxed Performance
Children & Youth Poster

1. The learner will increase his/her understanding of how occupational therapists can partner with museums to provide sensory-friendly Relaxed Performance events for individuals with sensory processing needs

2. The learner will distinguish features that support or hinder community participation during a Relaxed Performance

3. The learner will be able to identify ways to improve or modify similar Relaxed Performance programs in the future

Museums strive to provide families the opportunity to interact together in an environment designed for learning. Occupational therapists have a unique role in which they can partner with museums to analyze museum environments and support inclusion through environmental modifications (physical and social), innovative programming, and personnel training to promote positive experiences for all visitors (Silverman, Bartley, Cohn, Kanics, & Wash, 2012). A qualitative study analyzing a sensory-friendly Sunday, community-based program at a local museum found pragmatic supports consisting of financial access, human help, and preparedness for access, along with modifications to the sensory environment improved the quality and duration of the visit for the families with children with sensory processing needs, therefore improving feelings of well-being (Silverman & Tyszka, 2017). Although there has been increasing popularity of specific sensory days at museums, little research has been done relating to Relaxed Performances.

An occupational therapy program has partnered with a science museum to provide Sensory Friendly Sunday programs which seek to expand the museum experience to individuals with sensory processing needs to increase community participation. During this Sensory Friendly event, a Relaxed Performance was offered. The Relaxed Performance is a unique type of performance which incorporates sensory modifications to increase enjoyment and participation for children who have sensory processing needs. Sensory modifications during the performance included an encouraged movement area, allowance of fidgets and stress toys, less crowds, and decreased volume and flashing lights. Following completion of
the Relaxed Performance program, participants families were invited to participate in a IRB approved survey. This poster’s purpose is to identify the participants perceptions of features in the Relaxed Performance which support or hinder participation for children with sensory processing disorders and ways to better enhance similar programs in the future.


The purpose of this presentation is to explore participant perceptions of a Relaxed Performance during The Franklin Institutes Sensory Friendly Sunday program which seeks to expand the museum experience to individuals with sensory processing needs to increase community participation.

2018- 110 Sensory Diet Intervention in Children with Autism
Children & Youth Poster

I. Learn the goals that sensory diets interventions have successfully addressed.
II. Learn when to include a sensory diet as part of an occupational therapy intervention by considering the goals for the individual receiving services
III. Learn guidelines for implementing sensory diets

The objective is to present evidence on the effects of a sensory diet intervention in children who have autism spectrum disorder (ASD). The methods for gathering this evidence included searching databases and hand searching of bibliographies for quantitative studies that included a sensory diet intervention used with children who have ASD. This presentation examines six research studies that fit this criteria. Results were that sensory diets may be a successful intervention in children who have autism if the goal of the intervention involves decreasing sensory integration (SI) dysfunction/sensory problems/sensory behaviors, decreasing autistic mannerisms, increasing individualized goal attainment, increasing attending/engagement, increasing motor performance, and/or decreasing level of caregiver assistance. Results also indicated a sensory diet would most likely not be a successful intervention with a child who has ASD if the goal of the intervention involves progress towards goals in social responsiveness/interaction. These findings should be considered in occupational therapy (OT) when services are being provided to a child with ASD.


Journal of Occupational Therapy, 65.


An evidence review presenting the effects of sensory diet interventions in children with autism specifically regarding the following intervention outcomes: sensory integration dysfunction/sensory problems/sensory behaviors, autistic mannerisms, social responsiveness/interaction, level of caregiver assistance required, motor performance, attending/engagement, and goal attainment.

2018-111 Proprioceptive interventions on sensory deficits
Children & Youth Poster

1. To learn how weighted vests should best be used.
2. To learn which sensory integration programs are found to be most effective when working with children with sensory deficits.
3. To understand that every child presents with different symptoms and difficulties, making it crucial for occupational therapists to individualize interventions.

The evidence was evaluated for the effectiveness of different types of proprioceptive input in skills of attention, performance, and engagement with children with autism spectrum disorder (ASD), attention deficit hyperactivity disorder, pervasive developmental disorders, and sensory deficits. After reviewing 19 articles, eight Level I articles fit into the inclusion criteria to analyze the research question. Most of the articles found focused on ASD and sensory and attention deficits. Various forms of proprioceptive techniques have been utilized throughout the clinical and classroom settings including Hug Machine, weighted vests, and sensory integration programs. The Hug Machine demonstrated that children with ASD with high levels of arousal and anxiety experienced a calming effect after receiving deep pressure, along with reduction in tension and anxiety. Weighted vests within the clinical setting overall improved a child's attentional performance and on-task behavior. Within the classroom setting, effectiveness of weighted vests varied. Some children demonstrated negative effects towards the weighted vest and acted more as of a distraction, but they shouldn't be deemed ineffective when using in a classroom. Sensory integration interventions included a range of techniques focusing on vestibular, proprioceptive, and tactile sensation in order to promote engagement in activities. After administration of the sensory integration program, children with ASD presented with a reduction of sensory problems and symptoms. There was a specific increase in joint attention, behavior regulation, social behavior, initiating behavior, and attentiveness to a task, which lead to an increase in classroom engagement. As compared to weighted vests, the research presented with stronger evidence supporting the use of sensory integration programs. Overall, proprioceptive techniques work best when collaborating with other types of interventions.


*Lin, H-Y., Lee, P., Chang, W.-D., & Hong, F.-Y. (2014). Effects on weighted vests on attention, impulse...
control, and on-task behavior in children with attention deficit hyperactivity disorder. American Journal of Occupational Therapy, 68, 149-158. doi: 10.5014/ajot.2014.009365


We evaluated the evidence of the effects of proprioceptive input on children with sensory and attention deficits. Interventions included weighted vests, touch therapy and sensory integration programs in classrooms and therapy clinics. Interventions were most beneficial when individualized to clients.
1. The learner will increase his/her understanding of the current state of occupational therapy and transportation resources for individuals with autism spectrum disorder.
2. The learner will be able to identify transportation resources and understand how to incorporate the transportation resource toolkit into their occupational therapy practice.

Transportation is reported to be one of the single most restricting barriers for adults with autism spectrum disorder (ASD) to integrate into their community (Advancing Futures for Adults with Autism, 2014). Navigating hidden curriculums such as public transportation is often a "gray area" for families with children with ASD in the transition period entering adulthood. Occupational Therapy (OT) is identified as a critical service to help students with intellectual or developmental disabilities successfully transition into adulthood and navigate hidden curriculums of adult based settings (Berg et al., 2017). However, it was found that less than 7.5% of students with a disability receive occupational therapy services in the transition to adulthood years (Eismann et al., 2017). Research shows early intervention and additional research on developmental life course interventions such as transportation is crucial to make a difference in adults with autism across their life span (Baker et al., 2018). Autism Speaks identifies travel training to be a proactive tool to establish independence, and that a comprehensive approach is needed to cover the different components of traveling (2015). A study from Rutgers University found providing access to transportation to adults with autism can increase opportunities for independence and community integration (Feeley et al., 2018). A comprehensive, transportation resource toolkit was developed specific for families, individuals, and professionals working with ASD focused on the southeastern Pennsylvania area. Poster session participants will gain an understanding of the current state of occupational therapy in transportation resources for individuals with ASD and how to incorporate a developed, accessible transportation resource toolkit into their occupational therapy practice.

Advancing Futures for Adults with Autism. (2014). Core Issues, Community Integration. Five-year vision: adults living with autism will have the opportunity to be valued, contributing members of their communities based on their unique strengths, differences and challenges. Retrieved from http://www.afaa-us.org/core-issues/community-integration


Feeley, C., Deka, D., Lubin, A., & McGackin, M. (2015). Detour to the right place: A study with recommendations for addressing the transportation needs and barriers of adults on the autism spectrum in
Transportation is often a roadblock for individuals with autism spectrum disorder (ASD) to integrate into their community. A resource toolkit and education on supporting the post-secondary transition for individuals with autism in accessing transportation will be shared in poster presentation.

2018-113 An Interdisciplinary Sensory Processing Measure
Children & Youth Poster

Participants will:
1. Identify the sensory processing patterns examined in the Brain Body Center Sensory Scales;
2. Compare the Brain Body Center Sensory Scales and Sensory Profile 2

Occupational therapists often work with children who have sensory processing (SP) difficulties. Currently, all assessments, which measure SP, are administered by occupational therapy practitioners. This research introduces an interdisciplinary tool to broaden the understanding and quality of services for children with SP challenges. The purpose of this study was to compare the BBC Sensory Scales (BBC) and Sensory Profile 2 (SP2). Research questions addressed the reliability and validity of the BBC. The researchers also explored caregiver preferences. The findings and data collected on the BBC contribute to the research and development currently being performed on this instrument by the developer.

Early in the development of the SP2, several studies were performed to create a standardized sensory processing tool (Benson & Clark, 1982). This process began by performing multiple reviews, focus groups, and pilot studies (Miller-Kuhaneck et al., 2007). Thus far, the instrument development for the BBC has consisted of examining its validity regarding the comparison of children who are typically developing and children with autism and ADHD (Guilfoy et al., 2017). Kolacz et al. performed an initial comparison study of the SP2 and the BBC in 2017 to assist with the validity of the BBC.

The researchers used convenience sampling to recruit participants, who were caregivers of children ages 3 to 12 years old and had completed the SP2 within six months prior to the study. Research questions were analyzed using nonparametric statistics. Caregivers provided comments that were coded into themes on their perceived experience.

Both the validity and reliability of the BBC were supported. Further research on the BBC Sensory Scales is required to assist in this tool's development. Implications for occupational therapy practice need to be explored.


The Sensory Profile 2 (SP2) and BBC Sensory Scales (BBC) gather information about children’s sensory processing. This research introduces an interdisciplinary tool to broaden the understanding and quality of services for children with sensory processing challenges.

2018-114 Utilization of OT services within Response to Inte
Children & Youth Poster

1. Articulate the need for interdisciplinary understanding of occupational therapy’s scope of practice in a school-based setting.
2. Describe the role of occupational therapy in tier 1 and tier 2 of the RTI model in a school-based setting.
3. Articulate the need for occupational therapy’s involvement in the RTI model in a school-based setting.

This study examined occupational therapy’s role in tier 1 and 2 of Response to Intervention (RTI) and educated clinical staff in a school-based setting on that role. The purpose of this study was to explore the need for more education on how occupational therapy can provide additional support within the RTI model, specifically in tier 1 and 2.

RTI is a multi-tiered approach to providing services and support to students that was introduced in the 2004 revision of the Individuals with Disabilities Act (IDEA). It generally is composed of a 3-tiered approach. Tier 1 is a consultative role focused on prevention, tier 2 consists of small group interventions with at-risk populations and tier 3 is individualized interventions and services. Prior research indicates that half of OT/OTAs in school-based settings believe that occupational therapists can and should be more involved in the RTI process (Cahill, McGuire, Krumdick, & Lee, 2014). In one case report in which occupational therapy services were implemented within RTI, therapists noted wishing to continue with their involvement in RTI, additionally the feedback from teachers was positive (Reeder, Arnold, Jefferies & McEwen, 2011). However, the research also shows a need for additional education and training for staff on what RTI is (Castro-Villarreal, Rodriguez & Moore, 2014), as well as what occupational therapy’s role is within that system.

The current study examined staff’s response to provided education on occupational therapy’s role within tier 1 and 2 of the RTI model using a post-presentation questionnaire. All staff reported improved understanding of occupational therapy’s scope of practice, how occupational therapy can be involved in tier 1 and tier 2 and felt they were more capable of explaining to other staff how occupational therapy can assist in the classroom.


This study examined OTs role in school-based Response to Intervention (RTI) Tiers 1 and 2 and educated school-based clinical staff on that role. Researchers examined staffs response to the provided education. All staff reported improved understanding of OTs role.

2018-115 Teachers Perceptions of School-Based OT
Children & Youth Poster

The presenter will be able to
1. identify whether teachers perceptions affect their referral of students to occupational therapy services
2. determine how occupational therapists can better advocate for school based services for better student outcomes.
3. identify the roles that school based occupational therapists hold within the educational team

School based occupational therapists play a vital role within the educational team that facilitates success of a wide variety of students needing special education services (AOTA, 2016). An unclear understanding of the roles and responsibilities as well as capabilities of what a school based occupational therapist can do by other members of the educational team does not promote best practice or outcomes for students needing such services. Benson, Szucs, and Mejasic (2016) surveyed approximately fifty teachers from the state of Pennsylvania and found that almost a quarter of the participants identified occupational therapy as not being important within the school system, and another quarter reported that they have had a negative experience with a school based occupational therapist. In a similar study, Casillas measured perceptions of teachers about occupational therapists, finding that there needed to be more reciprocal collaboration and communication between occupational therapy practitioners and teachers (pg. 1, 2010). This research builds upon previous studies in regards to teachers perceptions of school-based occupational therapy in order to broaden the view of how these misconceptions and misunderstandings may be coming about. An exploratory, non-experimental, cross-sectional design via survey research was utilized in order to measure the perceptions of school based occupational therapy of Kindergarten through 12th grade teachers in public, private, cyber, and/or other types of schools within the United States. The survey was distributed via social media.


This survey research was conducted amongst k-12 grade teachers in the United States, aiming to assess teachers perceptions of school-based occupational therapy. This research can guide occupational therapists in advocating for improved student outcomes as well as for our profession.
1. Participants will review the evidence regarding the pain treatment approaches currently used with students living with CRPS.

2. Participants will discuss the importance of an interprofessional approach to support students with CRPS as they work to achieve educationally relevant goals in school.

3. Participants will identify strategies for integrating the findings of this study into their school-based occupational therapy practice.

The purpose of this presentation is to discuss a research project that addressed the following clinical question: Will an intensive interdisciplinary pain treatment program for individuals ages eight to 24 years with Complex Regional Pain Syndrome (CRPS) increase engagement in education occupations? The methods used in this evidence-based research project included the following five steps: 1) description of a practice scenario 2) development of a clinical question 3) systematic review of the current relevant empirical research 4) integration of findings for practice and 5) directions for future research.

Clients with CRPS are involved in intensive interprofessional pain treatment programs that emphasize a biopsychosocial approach. The goal is to decrease pain, and emotional and social stress while increasing an individuals ability to cope with said pain. As a result, children and adolescents with CRPS may be better able to engage in their primary occupations of B/IADL, work, social participation, play and leisure, and education (Swinth, Chandler, Hanft, Jackson, & Shepard, 2003; AOTA, 2014). Through this treatment method, individuals will show improvement in school attendance and social participation (Logan et al., 2012). Upon completion of these programs, individuals need to receive the proper care to participate in the school environment (Logan, 2005). With these primary occupations in mind there is significant educational relevance for school-based occupational therapists.

This presentation aims to express the need for further research that supports school-based occupational therapists continuity of care for students with CRPS by integrating treatment approaches and serving as liaisons between healthcare professionals and school personnel. In addition, the intent is to identify the essential role that a school-based occupational therapist could have in the process of reintegration for students with CRPS into the natural school environment.

Selected References:


The purpose of this presentation is to inform individuals about the significant impact that Complex Regional Pain Syndrome has on student engagement in education. An interprofessional program that includes a school-based occupational therapist is essential to achieve educationally relevant goals.

2018-117 Mindfully Mending Anxiety in Children: A Literature Review
Children & Youth Poster

Upon reviewing the poster attendee will be able to:

1. Identify the efficacy of mindfulness-based interventions with children that are exhibiting symptoms of anxiety.
2. Understand mindfulness and types of mindfulness-based interventions.
3. Discuss the role of occupational therapy in facilitating mindfulness interventions to decrease symptoms of anxiety.

There are 74.5 million children in the United States; of those children, an estimated 17.1 million have or have had a psychiatric disorder. Furthermore, 80% of children with a diagnosable anxiety disorder are not receiving treatment (Childrens Mental Health Report, 2015). Mindfulness is an engaging, deep-focused practice that is experienced through meditative techniques. Mindfulness-based practices are focused on creating an open minded self-awareness in the present moment (Semple & Lee, 2011). Evidence suggests mindfulness-based interventions may be effective in reducing childhood anxiety. Occupational therapy can aid in the reduction of anxiety in children through facilitating a variety of interventions based on mindfulness. Existing intervention strategies include coloring activities (Carsley, Heath, & Fajnerova, 2015), yoga (Weaver & Darragh, 2015), self-reflection through journaling (Costello & Lawler, 2014), and mindfulness-based cognitive therapy (Semple, Lee, Rosa, & Miller, 2010).

The purpose of this poster is to present a summary of the current evidence regarding the efficacy of mindfulness-based interventions in reducing anxiety in children. Through a focused literature search and critical appraisal of articles, available evidence related to the efficacy of mindfulness-based interventions with children were found and analyzed. Specific inclusion criteria were as follows: anxiety, children, peer-reviewed articles within ten years, and mindfulness. The current research suggests a variety of interventions with a focus on mindfulness are beneficial in reducing anxiety in children. The implications for using evidence-based mindfulness interventions in occupational therapy practice will be reviewed.


Emotional Education, 6(2), 21-39.


In the U.S., 80% of children with diagnosable anxiety disorders are not receiving treatment. Evidence suggests mindfulness-based interventions may be effective in reducing anxiety in children. This poster will present mindfulness interventions, current evidence, and implications for occupational therapy practice.

2018-117 OT and Obesity: Getting Kids Moving
Children & Youth Poster

Upon reviewing this poster, participants will:
1. Identify effective community-based intervention strategies to address childhood obesity.
2. Learn about the literature related to the efficacy of community-based childhood obesity programs.
3. Understand the role of occupational therapy in providing occupation-based health promotion programs to address childhood obesity.

One in six children in the United States are impacted by obesity (Centers for Disease Control and Prevention, 2017). In addition, overweight children are 70% more likely to become overweight or obese adults, increasing their risk for health problems (Quinn, 2011). According to the American Occupational Therapy Association (AOTA), obesity affects children's activities of daily living, social participation, play and leisure and education (Reingold & Jordan, 2011). "Occupational therapy practitioners can play a critical role in working with school teachers, nutritionists, and other professionals to enhance healthy lifestyles in all children and youth" (AOTA's School Mental Health Work Group, 2012).

The purpose of this poster is to present current research regarding the efficacy of community-based childhood obesity intervention programs in increasing physical activity. Through a scoping literature review, relevant articles related to this topic were selected and critically appraised. Evidence suggests that these programs are an effective way to increase physical activity levels (Dinkel et al., 2017; Hoffman et al., 2018; Lee & Kim, 2015; Quinn, 2011) as well as increase levels of self-esteem (Dinkel et al., 2017; Lau, Stevens & Jia, 2013). Clinic and community based interventions also show a greater effect of increasing physical activity and quality of life than clinic based interventions alone (Hoffman et al., 2018). Therapists can create community-based programs to increase physical activity levels in children, helping them to participate in their primary occupation of play.

School Mental Health Toolkit.


This poster will present the best available evidence regarding community-based childhood obesity interventions. Content will include a review of the efficacy of interventions to decrease the detrimental effects of childhood obesity as well as implications for occupational therapy practice.

2018-118 Effectiveness of Pre-Vocational Training in a School Store
Children & Youth Poster

Upon conclusion of the session, participants will:

(1) Identify the effectiveness of pairing vocational training modules and client participation in a natural work environment to improve the acquisition of pre-vocational skills for students with disabilities in the public school therapeutic setting.

(2) Understand the methodology of the research study and the use of Goal Attainment Scaling as an outcome evaluation tool.

(3) Recognize the importance of designing research studies to evaluate the effectiveness of occupational therapy based program development and implementation in relation to transition programming for Middle School students with disabilities.

The purpose of this research study is to evaluate the effectiveness of an occupational therapy based School Store program (C.O.M.E.T Corner) intended to develop and improve pre-vocational skills in four targeted areas, (money management; inventory/product organization and equipment use; professional development and etiquette; and interpersonal communication and social skill development), for students with disabilities in a Middle School setting. C.O.M.E.T stands for Connecting Our Minds and skills for Effective Transition. This single subject design implemented Goal Attainment Scaling as a method of evaluation. The primary researcher is currently in the data collection phase of the research study. During the poster presentation, the primary researcher will discuss: research study design, methods, intervention
and procedures, and data collection. The primary researcher will also disseminate the findings of the research study via data analysis. Throughout the presentation, the primary researcher will: elicit discussion related to the benefits of the research and the role of occupational therapists on school district transition teams for students with disabilities; establish connections between the research and current practice settings of the participants; and discuss future implications for school-based practice and the broader occupational therapy profession based on research findings.


The purpose of this research is to evaluate the effectiveness of a School Store program intended to develop and improve pre-vocational skills for students with disabilities. This single subject design implemented Goal Attainment Scaling as a method of evaluation.
Participants will:
1. Understand how the framework of occupational therapy aligns with the goals of church disability ministries
2. Identify the various ways occupational therapists may contribute to the church participation of individuals with IDD disabilities

Individuals with intellectual and/or developmental disabilities are less likely to identify as belonging to a church community (National Organization on Disability, 2010). In addition, families of children with disabilities are 33.2% more likely to switch their places of worship (Ault, Collins & Carter, 2013). When considering the needs of an individual with intellectual and/or developmental disabilities, the American Occupational Therapy Association suggests the importance of addressing social participation for the individual and their caregiver(s) in therapy (Ideishi, DAmico, & Jirikowic, 2013). However, there is currently little to no literature in the profession exploring the potential on how to address church disability accommodations.

This presentation represents a qualitative study of the responses of church leaders and occupational therapists currently involved in church accommodations for individuals with intellectual and/or developmental disabilities to understand: what churches are doing now, what needs are not being met, and how the unique qualifications of occupational therapists could contribute to these needs. The poster will also establish how the OT practice framework relates to individuals who have IDDs and their participation in church services.


This presentation will portray the different roles occupational therapists may take in church disability accommodations for individuals with developmental and/or intellectual (IDD) disabilities. A thematic analysis of interviews with disability ministry staff members and occupational therapists reveals the various ways our profession can contribute to this ministry.
Attendees will have an understanding of the difference on participation that sensory based interventions versus occupational therapy with sensory integration have in the classroom. Attendees will understand the importance of creating individualized sensory interventions since each child has their own sensory needs in order to actively participate in the classroom. Attendees will expand their knowledge base with occupational therapy with sensory integration and occupational therapy using sensory-based intervention to ensure occupational therapy using sensory approaches are properly provided and evidence-based.

The purpose of this program is to educate occupational therapy practitioners on the impact that sensory integration has on participation specifically for children with autism spectrum disorder. The importance of understanding the difference between Ayres Sensory Integration approach and Dunns occupational therapy with sensory-based interventions is addressed. The discussion of the results of multiple studies and varying in levels of research, demonstrate the effectiveness of each approach in specific settings. Occupational therapists utilize differing methods of sensory integration daily within the context of schools, outpatient facilities, and inpatient facilities with mixed results. These mixed results could infer that therapists have a lack of education on how to apply each sensory strategy to practice when implementing sensory strategies. When reviewing research articles, it is evident that the researchers do not differentiate between the models of Ayres Sensory Integration and Dunns model of sensory integration. Furthermore, practitioners are not able to differentiate between Ayres model of sensory integration and Dunns model of sensory integration. In order to improve the effectiveness of sensory integration techniques, therapists can utilize a standardized assessment, associated with the correct method of sensory integration they wish to use, and find the clients specific sensory profile prior to suggesting interventions. Specific sensory interventions are more appropriate for some sensory profiles and less appropriate for others. As a client-centered profession, individualized intervention plans for each student take precedence.


In occupational therapy practice, different sensory approaches utilized. This research aims to identify which sensory integration approach, occupational therapy sensory integration or occupational therapy with sensory-based interventions, increases attention and participation of children with autism spectrum disorder in the classroom.

2018-121 Self-concept and social media education among children
Children & Youth Poster

1. Participants will express the extent of the knowledge elementary school children have on social media and how it has become a part of their daily routine.
2. Participants will identify which character traits elementary school children perceive to be qualities of a role model, to better explain their awareness of which qualities are important to be a good friend/child/sibling.
3. Participants will discuss how childrens self-concept can be affected by social media use and how that impacts their social communication.

Self-concept can be affected by overexposure of social media happening in the current technology age (Yau & Reich, 2018). Peer comparison can decrease self-concept in elementary school children who internalize comments from peers causing them to decrease their self-worth (Spilt et al., 2014). Occupational therapists can intervene by educating on the reality of social media and providing tools for a positive self-concept. This program was implemented to educate on editing used on social media and to reflect on the character traits of role models, to provide tools to deflect negative feelings that may arise with overexposure to social media. The participants included 12 students, 9-10 years old, in an elementary school class. Students were shown an image demonstrating how posts can be deceiving and educated on
how people portray themselves differently on social media than in real life. Students divided into 4 groups and created a list of role-models and character traits they admire in those people. The list of character traits was used to reflect on which qualities are important to look for in themselves and others. Students were instructed to remember these important qualities if they have negative feelings after overexposure to social media. Students were given an anonymous survey, which found that 10 of 12 students had a social media account and 4 of 12 had 3 or more accounts. Students unanimously responded that they did not compare themselves to others, have negative thoughts after viewing social media, and they were aware photos were changed. Students were able to name multiple ways to improve their self-concept if they felt bad about themselves including play soccer, call someone that you know, and don’t change yourself. Limitations of this study include skewed survey results secondary to students answering the way they think they should and a small sample size.


Children are overexposed to social media, leading to a poor self-concept. Educating on the reality of social media and focusing on positive characteristics of role models can help children deflect negative feelings brought on by overexposure of social media.

2018-122 Creating a Sensitive Santa Event
Children & Youth Poster

1. Learn about the population who is appropriate to attend the sensitive santa event.
2. Learn the various steps in creating and initiating a community-based sensitive santa event.
3. Consider the logistical steps and accommodations that are supportive.
4. View helpful marketing strategies and outcomes.
5. Appreciate how a community event can enhance family and community social participation.

Attendees will learn about the steps to create and host a sensitive event in a variety of community settings. Steps will include who is appropriate to attend sensitive santa, registration process, marketing efforts, logistics, the use of accommodations, and outcomes.


This interactive poster will describe the steps and practical tips to create and host a sensitive Santa event in community-based settings for children with Autism and other sensory processing disorders.

2018-123 Developing an Interdisciplinary Pediatric Intensive Outpatient Therapy Program for International Patients
Children & Youth 50 Minute Session

1. Describe the process of starting an intensive outpatient occupational therapy program
2. Examine the literature regarding intensive outpatient therapy programs
3. Identify common benefits and challenges treating children within an intensive therapy model


Clinicians developed an interdisciplinary intensive outpatient therapy program for international pediatric patients. This presentation describes the development, features, challenges and benefits of developing and participating in this program.

2018-124 Mealtime Distraction and Nutrition Risk among Young Children
Children & Youth Poster

1. Provide an overview of current recommendations for screen time in young children overall and specifically during mealtimes.
2. Describe the relationships between distraction during meals, overall screen time, and risk of nutritional deficiency in a small sample of children with SFA.

Sensory Food Aversions (SFA) cause children to refuse entire food groups based on varying sensory characteristics, such as taste, texture, temperature, color or smell. Parents of children with SFA try many different strategies to improve food acceptance during meals. Using the television as a distraction is a common strategy despite national recommendations that children should not be engaging in screen time during meals or snacks (USDA, 2018). Using data collected from the Nutrition Screen for Every
Preschooler: Toddler versions, we examined relationships between mealtime distraction, screen time and risk of nutritional deficiency in young children with SFA. Parents of 16 young children with SFA reported how often each child was distracted (by TV, books, or play) during meals on a 5-point Likert scale (0 = never, 4 = always) as well as how many hours each child was in front of a screen. Spearman's rho correlations were calculated between these responses and risk of nutritional deficiency (low, moderate, high). We found a moderate association between distractions during mealtime and risk of nutritional deficiency that was approaching statistical significance (rs = .45, p = .08). However, the association between total screen time and risk of nutritional deficiency was very weak and non-significant (rs = .15, p = .58). These findings suggest that distractions (including screen time) during meals are more closely related to nutrition than the overall screen time for young children with SFA. Future research should aim to parse out the directionality and potential causality of this relationship.


Parents of children with feeding issues often assert that their children eat better when distracted. We aim to describe associations between mealtime distraction, cumulative screen time, and nutritional risk among young children with Sensory Food Aversions (SFA).

2018-125 Bridging the Gap: Elementary to Middle School Goals
Children & Youth 50 Minute Session

Through the use of a visual presentation, lecture and audience participation the participants will be able to: 1) Obtain sequential approach to human systems as they are viewed within elementary school and middle school; 2) Acquire the ability to assess elementary level IEP goals and consider the qualities within the goals; and 3) Modify the goal appropriately for transition to the demands of the middle school.

The purpose of this presentation is to compare and contrast primary and secondary school settings, give examples of helpful assessments, and increase the Occupational Therapists perspective on writing relevant goals for the increased demands of the school environment. Raising awareness of how targeting each performance skill or body system deficit area that relates to the child’s need at the elementary level, can further be addressed by proper goal writing for middle school. Occupational Therapy continues to have an important role in impacting these students, while the goal framework may change based on the new expectations.


Continued intervention for occupational performance rests in relevant goal establishment. The evolution of well written IEP goals for the next phase of education requires an understanding and match of the students skills within the expectations of the school environment.

2018-126 Occupational Comparison of Children in Three Countries
Children & Youth Poster

- Realize typical occupations of children ages 4-9 with disabilities in three countries
- Discover similarities and differences in occupations across cultures
- Distinguish practice implications of cultural differences in occupations of children with disabilities.

Culture is stated to greatly impact routines, roles, beliefs, and parenting behaviors (Bornstein, 2012). Literature indicates that culture has influence on different occupations, and therefore on which occupational therapy evaluations/assessments may be employed, and how treatment services are rendered (Paul, 1995; Getty, 2015; AOTA, 2014). Limited information regarding cultural differences in occupations of children encouraged this pilot survey study in three countries - Ecuador, Germany and the United States - to facilitate knowledge and cultural sensitivity for planning of occupational therapy.

The study is a mixed methods study using qualitative data for understanding specific occupations and quantitative data to describe perceptions and participant information. Participants were a convenience-based sampling of clients ages 4-9 years old from three community based outpatient occupational therapy clinics. A survey with both closed and open questions was completed by the caregiver in the primary language. Caregivers described weekday and weekend routines and answered Likert scale questions to report their perceptions regarding play activities and family roles. The survey was developed in English and translated into Spanish and German. Data was aggregated and themes were derived for each country and then compared for similarities and differences.

Results demonstrate remarkable distinctions across countries in regard to types of occupations (play and activities of daily living) but similar in regard to parent perceptions. Participants in the United States report the greatest number of toys, participants from Germany the greatest variety in outdoor activities and the Ecuadorians report having more family meals and visits with the extended families. Caregivers in all three countries state belief that their child is not limited in his/her ability to participate in family activities (in spite of his/her limitations in other occupations). The purpose of this study presentation is to provide knowledge of occupations for cultural sensitivity in best practice occupational therapy.


Culture impacts routines, roles, beliefs and parenting. Literature indicates that culture influences occupations and occupational therapy interventions. Limited information regarding the occupations of children ages 4-9 years prompted this pilot survey in three countries Ecuador, Germany and the United States.
2018-127 Exploring the Influence of Coloring on Attachment
Children & Youth Poster

Following our presentation, attendees will be able to (1) describe the impact of insecure attachment on individuals across the lifespan, (2) understand trauma-informed care as it applies to occupational therapy intervention, and (3) recognize the implications of coloring on stress, anxiety, and attachment.

This poster presentation will discuss the influence of coloring on attachment. Using a mixed methods pretest-posttest pilot study, we assessed the general utility of a coloring book, Color Me Closer, as a tool to foster attachment in college students. The purposes of our study were to assess the influence of coloring on attachment and anxiety and to explore if coloring is a valid therapeutic tool for individuals with and without trauma histories. Multiple exposures to early trauma can have harmful effects on an individual's capacity to make and sustain satisfying relationships, yielding insecure attachments (van der Kolk, 2005). These attachment patterns and behaviors are pervasive, negatively impacting one's roles and habits over the lifespan, especially when engaging in social interactions (Champagne, 2011). Coloring is being explored as a therapeutic approach with these individuals, as coloring has many known benefits, including decreased self-reported anxiety and stress, as well as increased positive mood (Eaton & Tieber, 2017). If substantiated, Color Me Closer may be used to foster attachment between children and their caregivers to reduce insecure behavioral patterns which have a lifelong impact on an individual's occupational performance.


This poster presents an evidence-based project that explored the utility of a new coloring book, Color Me Closer, as an intervention to facilitate attachment between two individuals.

2018-128 Sensorimotor Strategies Effect on Attention and In-Seat Behavior
Children & Youth Poster

Participants will be able to:
2. Describe how sensorimotor strategies can be implemented in the classroom setting to address attention and in-seat behavior.
3. Understand how to use evidence to develop classroom strategies to support occupational performance.

Children with Autism Spectrum Disorder (ASD) face many difficulties in their daily life, which are commonly associated with social communication and interaction (American Psychiatric Association, 2013). However, children with ASD often also struggle significantly in the classroom, demonstrating
difficulty with attention and behavior (Ashburner, Ziviani, & Rodger, 2008). Use of sensorimotor strategies within the classroom is a simple approach that may support educational participation in the least restrictive environment. Although limited research currently exists surrounding sensorimotor based intervention provided directly in the classroom during activity, much of the literature points to connections between classroom performance and self-regulatory and sensory processing deficits (Adamson, OHare, & Graham, 2006). This study explored whether sensorimotor strategies embedded within activity have an effect on attention and in-seat behavior in preschoolers with ASD. Researchers utilized an A-B-A-B design, collecting video footage from sessions twice a week across 4 weeks during the preschoolers morning circle time. The researchers independently reviewed the videos and documented attention duration and in-seat behavior for each participant. Ultimately, results of this study will add to the body of knowledge surrounding intervention, and specifically sensorimotor strategies, for attention and in-seat behavior in children with ASD. Final results will be presented. Preliminary analysis suggests that during sessions with sensorimotor strategies average duration of attention was greater, however there was no difference in duration of in-seat behaviors. Complete analysis will indicate if this pattern was consistent across children with autism. Providing sensorimotor strategies embedded in classroom activity affords students the opportunity for both self-modulation and classroom participation, while also promoting attention for students with autism. Implications for occupational therapy include consultation with classroom staff to discuss appropriate strategies to facilitate optimal student engagement.


This session will present findings and implications of research that explored whether sensorimotor strategies embedded in activity in a classroom have an effect on attention and in-seat behaviors in preschoolers with autism spectrum disorder.

2018-129 Perspectives on the Transition Process for Youth with IDD
Children & Youth Poster

The learner will:
1. Understand the challenges of the transition process for both youth and families.
2. Identify the gaps in the transition process related to occupational therapy services.
3. Identify strategies to address the gaps in the system to improve occupational therapy's role in the transition process.

A successful transition to adulthood is defined as the accomplishment of specific social milestones and role transitions, such as finishing school, finding full-time paid employment, getting married, and starting a family (Henninger & Taylor, 2014). Adolescents with Intellectual and Developmental Disabilities (IDD) experience unique challenges during the transitional process that result in a higher rate of unsuccessful transitional outcomes (Hetherington et al., 2010). Families of adolescents with IDD describe dissatisfaction in areas such as lack of communication from school staff, frustration with assumptions directed toward the student, funneling of the student into inappropriate adult programs that do not match
the students abilities, lack of direct engagement for students in the transition planning process, and a lack of liability from the schools (Hetherington et al, 2010). Literature supporting transition planning for this population is underrepresented. To address this literature gap, this study investigated how adolescents with a diagnosis of IDD and their parents perceive and describe the transition process in order to identify how occupational therapists can address gaps in the current process. A phenomenological qualitative approach was used to gather data specific to transition experiences. This approach allowed for an understanding of parents and adolescents perceptions of and experience with the transition process. Data was gathered through semi-structured interviewing of both adolescents with Intellectual and Developmental Disabilities (IDD) and their parents. Preliminary data analysis resulted in five themes identified as components of successful transition planning: "Finding the right fit: The match between client and context," "Going above and beyond: The relationship between family and professionals," "Building a bridge between family and community via resource sharing," "Creating a supportive environment through open communication," and "The Phases of the Transition Process: From exploration to implementation." Final results of the study will be presented.


This study sought to address the literature gap pertaining to how adolescents with IDD perceive and describe the transition process using qualitative methodology and semi-structured interviewing. Five preliminary themes were identified as components of successful transition planning.

2018-130 Reducing Mogigraphia in College Students
Children & Youth Poster

This presentation broadens the understanding of the lack of research and intervention types for handwriting in the college population.
In addition, this research highlights the need for occupational therapy interventions.

College students whose preferred method of note taking and/or studying that involves the pen/pencil and paper handwriting method are more prone to suffer from the effects of mogigraphia. This study aspires to fill the gap in the current research in regards to the effects of mogigraphia, by targeting college students and identifying the challenges faced by this population in regards to mogigraphia. The researcher aims to discover if mogigraphia within the college population at a small, rural university does in fact inhibit occupation as a student/note-taker.

The researcher plans to conduct an exploratory, non-experimental research study implemented via an online survey distributed electronically through population sampling. A secure link to the survey will be distributed via email to all college students at a small, rural university. The survey consists of non-identifying demographic questions, the Binomial Distribution of Right, Mixed and Left Handedness Questionnaire 1 and 2 (Annett,1967), and the Physicians Clinic of Iowa Hand Questionnaire (Chimenti et al, 2017). The researcher will then utilize descriptive statistics as well as analyze the responses in order to determine the differences amongst the students who do experience mogigraphia and students who do not experience mogigraphia.

This study will add to the body of knowledge for both occupational therapists as well as the general
college population. Occupational therapists may build upon this information to better identify challenges and implement appropriate interventions and/or preventative techniques for addressing mogigraphia in this specific population. Additionally, by increasing the knowledge and awareness of mogigraphia, college students can identify resources to increase overall performance in areas related to their occupation as a college student.


Students might experience mogigraphia, making it difficult to stay on task and complete assigned work. There is a need for college students of a rural population to learn handwriting techniques that are effective in reducing mogigraphia.

2018-131 After the Injury
Children & Youth  50 Minute Session

1. Understand the variability and complexity of the impairments associated pediatric brain injury and the many accompanying challenges.
2. Be aware of and identify hidden deficits that may arise months to years after a brain injury and how that impacts their participation at home, in school, and in the community.
3. Identify ways to educate persons involved with children who have experienced a brain injury to effectively provide support to improve participation in daily life.

Each year, children and adolescents suffer from brain injuries that can lead to hospitalizations, death, and disability. These children initially spend time in the hospital and rehabilitation centers to regain as much independence as possible before being discharged home. Post-injury, most of these children experience not only physical deficits, but cognitive, emotional and behavioral barriers, as well. After acute rehabilitation, children start the reintegration process back to their lives. Their stories do not end after completing their rehab journey; in fact, for most of these kids, a new and likely changed life is just beginning. This presentation will discuss the prevalence of pediatric brain injury, and describe its complexity. It will focus on how children continue to recover with new and sometimes hidden deficits that can impact their daily occupations and social interactions. Transitions back to the school and community can be difficult. They are returning to an unchanged environment as a changed person. School systems initially put supports in place, but as children continue to recover, the more obvious deficits fade and hidden deficits can arise, making it sometimes difficult to remember they had a brain injury. As school becomes more challenging, these children may struggle more without the appropriate support. Families can become easily frustrated that their child is falling behind and concerned for their future. New barriers arise and can influence the rest of their lives. It is important for occupational therapists and other professionals to specifically consider adjustment needs relating to school activities from various perspectives when aiming to provide individualized interventions. (Kocher Stalder, et. al., 2017) As occupational therapists, we have the opportunity to bridge this gap and to educate families, teachers, and peers not only about these hidden deficits, but ways to effectively help with reintegrating these children now and into their future.


We will focus on pediatric brain injury and hidden deficits that exist after the transition back to their home, school, and community. We will emphasize challenges that exist, new challenges that arise, and how occupational therapy plays a role.

2018-132 Gender differences in brain after childhood trauma
Children & Youth Poster

After participants view this poster they should be able to identify gender differences throughout the stress pathway of children (ages 0-18) who have experienced trauma.

Additionally, participants will gain knowledge of recommended treatment approaches for this population that they can carry out in their practice.

Viewers should be able to demonstrate their knowledge of trauma informed care, how to create a safe and trusting therapeutic environment, and how to use knowledge of completion to motivate clients with trauma histories.

There is a plethora of research showing that childhood trauma negatively impacts brain development in ways that persist throughout the lifespan. However, there is little research that aims to discover if and how trauma impacts the brains of young boys and girls differently. The purpose of this research is to examine the literature in order to identify possible gender differences in the brains of children who have experienced trauma. This research particularly sought to examine areas of the brain involved in the stress pathway: specifically the hypothalamic pituitary adrenal axis, hippocampus, amygdala, and prefrontal cortex. A literature review was conducted in order to answer the research question does the experience of childhood trauma affect male and female brains differently? The following search terms were used to obtain literature that was relevant to the study: childhood trauma, developmental trauma disorder, adverse childhood experiences, child maltreatment, brain development, amygdala, hippocampus, prefrontal cortex, hypothalamic-pituitary-adrenal axis, stress, gender differences. The researcher consulted an expert through formal interview. This key informant provided information based on her experience and expertise obtained while pursuing her masters of psychology and her doctorate in clinical psychology as well as working as a school psychotherapist, school principal, and clinical psychologist.

After participants view this poster they should be able to identify gender differences throughout the stress pathway of children (ages 0-18) who have experienced trauma. Additionally, participants will gain knowledge of recommended treatment approaches for this population that they can carry out in their practice. In regards to these treatment approaches, viewers should be able to demonstrate their knowledge
of trauma informed care, how to create a safe and trusting therapeutic environment, and how to use
knowledge of completion to motivate clients with trauma histories.


The purpose of this research is to identify possible gender differences in the stress pathways of the brains of children who have experienced trauma. Specifically the role of the hypothalamic pituitary adrenal axis, hippocampus, amygdala, and prefrontal cortex were examined.

2018-133 Parental Mealtime Strategies and Nutritional Risk in Children
Children & Youth Poster

¢ Explore the relationships between parental strategy use and risk of nutritional deficiency in young children with SFA.
¢ Provide evidence-based recommendations of positive mealtime strategies for parents to implement.

Selective eating during early childhood is a common concern of parents of young children, due to the risk of nutritional deficiency. The purpose of this study was to describe the relationship between parental mealtime strategy use and risk of nutritional deficiency among young children with Sensory Food Aversions. Specifically, we were interested in parental use of coaxing, threats, and force-feeding during daily meals. We selected items from the Behavioral Pediatric Feeding Assessment (BPFAS) to assess how often parents used these strategies on a 5 point Likert scale (1 = never to 5 = always). The Nutrition Screening Tool for Every Preschooler (NutritSTEP) and NutriSTEP Toddler were used to quantify risk of nutritional deficiency. 21 parents of young children (aged 18 “ 54 months) completed these assessments. We found a moderate, statistically significant, association between frequency of force feeding and risk of nutritional deficiency (rs = .50, p = .021), indicating that more frequent force feeding was related to higher nutrition risk. There were no significant associations between parental use of coaxing or threats and risk of nutritional deficiency. Interestingly, there was also a significant, moderate association between force feeding and parental frustration or anxiety during child meals (rs = .57, p = .007). Controlling feeding practices (such as force feeding) are predictive of lower BMI and weight gain in preschool children (Wehrly, Bonilla, Perez & Liew, 2014). Future research is needed to determine the effect of controlling parental feeding practices on child nutrition. Parents should be educated on the risks of controlling feeding practices and the benefits of positive mealtime strategies, such as family meals, social modeling, and positive reinforcement.


Selective eating is a common source of frustration among parents of young children. This study aims to describe relationships between parental mealtime strategy use and risk of nutritional deficiency in young children with Sensory Food Aversions (SFA).
Incorporating Yoga Techniques in School-based OT Practice

1. Practitioners will be able to identify 3 benefits of using yoga techniques in school-based OT.
2. Practitioners will be able to identify 3 yoga postures that can be used in the classroom.
3. Practitioners will analyze the scientific evidence of using yoga techniques in classrooms.

Yoga techniques are defined as mind-body intervention that includes physical postures, controlled breathing, meditation and relaxation exercises to improve mental and emotional awareness and self-regulation skills (Weaver & Darragh, 2015). Occupational therapists can use yoga techniques of: targeted breathing exercises, yoga postures & relaxation techniques as preparatory methods to enhance functional and academic performance of students with a variety of disabilities (Koenig, Buckley-Reen, & Garg, 2012). Children in autism support and emotional support classrooms can be highly anxious due to common stressors in the environment such as an unexpected change or a task demand that they perceive to be too difficult. Yoga techniques can be implemented and integrated within the classroom to decrease anxiety and aggression and increase attention to enhance their educational participation. Yoga techniques have been founded to elicit adaptive neural and mental responses that can improve behavior and emotional regulation among children who experience anxiety and anxiety related symptoms. (Weaver & Darragh, 2015). This session would involve analysis and discussion of current evidence-based practice research on implementing yoga techniques in school settings. Practitioners will leave the session with knowledge and ability to incorporate yoga techniques into treatment sessions to enhance student participation within the classrooms.


This presentation is designed to inform and provide occupational therapy practitioners with yoga techniques that can be used in the classrooms to enhance educational participation.

Collaborating for student success in Kindergarten classrooms

1. Participants will understand the importance of collaborating in the kindergarten classroom to enhance student participation.
2. Participants will be able to identify strategies to support therapist - teacher collaboration in kindergarten classrooms to promote student performance skills.

Occupational therapists are prepared to work collaboratively with educational personnel to provide supports and services that facilitate student access and participation in the general education setting within
the natural contexts. Review of the Occupational Therapy Practice Framework: Domain and Process (Framework), 3rd Edition (AOTA, 2014) will confirm that not only is it necessary to consider the students as clients, but also the education personnel staff and caregivers. Exploration of how applying a top-down approach supports the Person-Environment-Occupation (PEO) Model (Law, Cooper, Strong, Stewart, Rigby, & Letts, 1996). This allows school-based occupational therapists to consider the person factor and environmental factors for occupational performance in the kindergarten classroom (Hollenbeck & Miller, 2013).

As stated by Chandler (2012), the root of occupational therapy was developed so that all activities and tasks were designed to support development and growth in the natural environment. With the reauthorization of the Individuals with Disabilities Education Act (IDEA) in 2004, occupational therapists roles have broadened and are now presented with more opportunities to support meaningful participation, optimum development, and engagement within the natural educational contexts, including least restrictive environments (LRE).

The overarching goal of school-based occupational therapy services is to promote student performance of education-related activities based on access to and engagement in the occupations of education. Through a collaborative consultative approach, occupational therapists support skill refinement or maintenance of function for students to meet curriculum expectations. Instead of fixing a problem, occupational therapists collaborate with educators to modify the classroom environment to enhance participation. Fifty minutes of lecture and audiovisual will be provided to demonstrate how one elementary school embedded strategies into everyday tasks, specifically Fun Day Friday®, while still meeting education standards and promoting student development in kindergarten classrooms following teacher-therapist collaboration. Interviews with teachers will support the importance of collaboration and how their perceptions of what occupational therapy is changed.


School-based occupational therapists can engage in collaborative partnerships to promote student participation in occupation in the school environment. This session will explore strategies to promote student success in Kindergarten classrooms through knowledge translation resulting in meaningful classroom activities.
Learning objectives for this poster session will include:

1. Participants will analyze the evidence for oral motor, behavioral, and SOS feeding interventions to determine applicability to their practice.

2. Participants will relate one feeding intervention to a current patient and share how the evidence can support their practice.

3. Participants will describe how these interventions and approaches can be used to improve the occupational performance of children with feeding difficulties.

Feeding is the most complex task humans engage in and as many as 50% of infants and children have some type of feeding difficulty. A systematic review done in 2010 by Williams, Field and Seiverling, found that 78% of children with food refusal also has some type of developmental disability. As Occupational Therapists, we focus on improving feeding performance by applying techniques to improve the mechanics of feeding or by suggesting strategies to caregivers to enhance feeding interactions and improve mealtime behaviors. This poster examines oral motor and behavioral interventions as well as the SOS approach to feeding. A review of the current literature accompanying these interventions and approaches was conducted and reviewed. Occupational Therapists work to help our patients establish the developmental sequence of self-feeding, improve acceptance of a wide variety of foods and textures, improve oral motor skills and provide patient and family education. It is important that we are using methods that are not only evidenced based but allow best practice for the feeding patients and families we treat. This poster examines these common interventions and approaches, provides a review of the literature on them and can be used to develop best practice in treating feeding difficulties in pediatrics.


Feltmeier, M. L. (2014). BEHAVIORAL FEEDING INTERVENTIONS FOR PEDIATRICS.


This poster will review evidence supporting current pediatric feeding interventions including oral motor and behavioral interventions, and the Sequential Oral Sensory (SOS) approach. To ensure best practice, a comprehensive search was conducted and reviewed. These findings were implemented into practice.

2018-137 American Sign Language Communication For Autism Spectrum Disorder Children & Youth Poster

1. Understand the impact of communication deficits for children with ASD and how augmentative and alternative communication (AAC) is being utilized to encourage social interactions
2. Discover the importance of and the untapped potential for interprofessional collaboration between occupational therapists and speech language pathologists as it relates to the social-communicative domain
3. Encourage further research regarding the use of American Sign Language (ASL) as a form of AAC for children with ASD to promote social participation through the use of gestures and eye-contact

Children with verbal communication impairments often utilize augmentative and alternative communication (AAC) as a strategy to effectively communicate. There is untapped potential for occupational therapists to intervene in the area of social participation in collaboration with speech pathologists. Children with autism spectrum disorders lack basic skills such as joint attention and reciprocity that would allow them to develop quality social interactions with others. Due to this, they often have fewer social relationships in comparison to their peers. The purpose of this research project was to explore the use of American Sign Language (ASL) as an alternative approach to communication for children with autism spectrum disorders to increase social participation. ASL requires skills that are under-developed in children with ASD, such as gesturing and eye contact. An in depth review of the literature was conducted to examine previous research regarding the use of American Sign Language and other forms of AAC. While no empirical evidence was found to support the claim that ASL would
promote greater social participation, evidence did support that AAC is beneficial for children with ASD. Further research is necessary to determine the specific implications of utilizing ASL as an approach to communication deficits in ASD. Inter-professional collaboration encourages a more holistic and integrated approach to intervention. The use of fine motor skills is also under the area of expertise in occupational therapy, and due to this, they may be more equipped to assist a child in learning ASL. The domain of occupational therapy practice incorporates social participation as an area of occupation essential to quality of life. Engagement in meaningful social participation lays a foundation for positive peer and family relationships and increased self-esteem. Occupational therapy can maximize its role in the social communicative domain through an effective multidisciplinary approach.

References


Learning Disabilities Research & Practice, 16, 222-229.


Occupational therapy has untapped expertise in the social-communicative domain of children with autism spectrum disorders. Occupational therapists can collaborate with and assist speech therapists in the realm of alternative and augmentative communication, including American Sign Language. The use of ASL has potential for children with autism spectrum disorders.

2018-138 A Systematic Review of Handwriting Programs and Interventions Children & Youth Poster

This research will add to the body of knowledge in the field of Occupational Therapy by determining the effectiveness of handwriting interventions and programs. This information will guide Occupational Therapists in utilizing the most effective treatment in the referrals they receive in handwriting. Therapists that may treat handwriting typically work in the school directly or in an outpatient clinic.

In the past ten years, countless evidence-based practice concerning handwriting interventions and programs have been published. Not published is research pinpointing the most effective intervention(s) or program(s). Occupational Therapists would benefit from such evidence to treat children with
handwriting deficits. Children can respond to handwriting therapy well at a young age because of the brain's ability to enhance, resulting in refined skills. By analyzing various research in the form of a systematic review, the researcher has identified common handwriting deficits experienced by children and distinguished interventions and programs utilized to address these deficits or difficulties. Studies from the research databases ProQuest, Education Resources Information Center, OVID, OTDBASE and OTseeker were explored for specific criteria. Studies were included in the systematic review by being peer reviewed in English, an experimental design, containing school-aged children with or without handwriting deficits, and published in the previous ten years. Each study was compared and contrasted to form descriptive data by being placed into a graphic organizer outlining the objectives, methods and findings of the study. Four handwriting programs and interventions addressed the greatest amount of handwriting areas and met significance. Task-Oriented interventions addressed nine areas of handwriting ($p=0.0001$), Size Matters intervention addressed seven areas ($p<0.05$), Sensory Motor program addressed six areas ($p=0.023$), and Handwriting Without Tears addressed five areas ($p=0.012$). The results indicate there are a few programs and interventions that strive to improve a greater number of handwriting deficits than others. Significance found within these select few prove effectiveness in developing treatment.


http://dx.doi.org/10.5014/ajot.2016.018820
A systematic review of studies of the past ten years focusing on handwriting programs and interventions utilized with children with or without handwriting difficulties was performed. The current research will assist OTs in identifying and selecting appropriate interventions for clients.

2018-139 Hybrid Parent Education Program Effectiveness and Feeding Outcomes
Children & Youth  50 Minute Session

Following the session, attendees will be able to:
1. Identify if and how parent participation in an education program on topics related to understanding, supporting, and managing feeding difficulties in children can decrease parental stress level, lead to parent-reported improvements in the child's eating behaviors, and improve parental feelings about the child's eating behaviors.
2. Identify and extrapolate practical techniques for integrating technology and web-based platforms within clinical practice in order to improve patient outcomes.

Feeding difficulties in the pediatric population are one of the most widespread struggles faced not only by the child themselves, but also by parents and medical professionals. Children with feeding difficulties are typically treated in the clinical environment following a traditional treatment model; consisting of direct treatment intervention between a therapist and a child, with ongoing parent education provided at the end of each treatment session. The parent education component augments the child's direct intervention, aiming to increase parental understanding of feeding difficulty and develop parent competency for carryover in the home environment. The traditional treatment model is not always feasible due to limited insurance coverage, insufficient local resources, and conflicting schedules due to other family responsibilities. Additionally, parents often express feelings of fear and doubt in their competence with carrying out treatment programs and supporting their child's ongoing progress with feeding.

The purpose of this presentation is to provide an overview of recent research regarding the effectiveness of an educational program for parents of children with feeding difficulties. The intent is to present findings which further enhance this area of evidence based practice. The presentation content will consist of an overview of the quasi-experimental, time-series study that explored the effects of providing education and support resources to parents of children with feeding difficulties on the child's feeding outcomes, the parents' stress level, and the use of parent resources for further understanding of their child's feeding difficulties placed within an online platform. Parent participants completed a pre-test prior to the educational intervention, a post-test one week after the intervention, and a post-post-test four weeks later. Each data set consisted of the Parental Stress Scale, the Behavioral Pediatric Feeding Assessment Scale, and the System Usability Scale.

This presentation explores both the practicality and the effectiveness of a hybrid-format educational program for parents of children with feeding difficulties; addressing parental stress, the child's eating behaviors, and the parents' perception of the child's eating behaviors.

2018-140 Increasing Parental Sensory Processing Knowledge through Interactive Learning
Children & Youth Poster

1. The audience will identify how sensory system deficits and dysfunction can manifest and impact a child's functional occupations.
2. The audience will recognize the importance of sensory processing education for parents to improve client outcomes in an outpatient sensory-based pediatric occupational therapy setting.
3. The audience will understand how to provide interactive educational sessions pertaining to sensory systems and their impact on function in order to improve clients' OT intervention carryover in the home.

In outpatient sensory-based pediatric occupational therapy (OT) clinics, OTs treat children with sensory processing disorders (SPD). Children with SPD, which are described in the sensory systems of proprioception, vestibular, tactile, visual, auditory, gustatory, and olfactory warrant OT treatment when they cause dysfunction and impact a child's occupations (STAR Institute for Sensory Processing Disorder, 2018). Though OTs educate parents on their child's specific sensory needs to encourage follow through with sensory diets and session attendance, there remains a lack of understanding of the sensory systems and their functional impact. Anderson (2016) found that many parents of children with Autism and SPD held misconceptions regarding SPD and showed interest in further education. This poster's purpose is to show the need for interactive educational parent sessions on the sensory systems to increase knowledge, support carryover, and improve the clients' potential goal attainment.

A systematic review on the effectiveness of parent education found that educational programs had a positive impact on both parents and children with SPD, resulting in reduced stress and improved child
performance (Miller-Kuhaneck & Watling, 2017). By educating parents on this topic, it will encourage greater carryover with sensory-based OT interventions at home, therefore creating greater opportunities to support functional outcomes. After an interactive learning session with a parent on SPD, pretest and posttest results showed the effectiveness of an individualized session on teaching the sensory systems and educating on the importance of OT services. During the interactive session, the parent used the OT equipment such as rice bins, bungees, cushions, and platform swings to more thoroughly understand the sensory systems. The audience of this poster session will gain an understanding on how parents of children with SPD do not fully understand their child’s needs and how implementing interactive educational sessions can increase this knowledge, therefore improving carryover and client outcomes.


Educating parents of children with sensory processing disorders is crucial for clients’ progression in therapy. This poster demonstrates how interactive educational sessions for parents are effective methods of increasing knowledge of the sensory systems and understanding the importance of OT.

2018-141 Improving Interoception: Hunger, Sleep, Emotional Regulation and Toileting Children & Youth 1 Hour 50 Minute Session

1. Understand Interoception and analyze Interoception as it relates to the improvement of self-regulation and occupational performance for individuals with Sensory Processing Disorder, Autism Spectrum Disorders and emotional regulation challenges.
2. Implement evidence-based strategies to assess and intervene to improve Interoception Awareness to improve an individual’s ability to recognize and manage their emotions, notice hunger, sleep and complete independent toileting.

Impairments of emotional regulation and sensory processing are common in children with autism spectrum disorder (ASD), often manifested through behaviors including tantrums, outbursts, aggression, irritability, and/or anxiety, (Samson, Hardan, Podell, Phillips, & Gross, 2015; Mazefsky & White, 2014). These behaviors can impede an individual’s daily activities such as attending and succeeding in school or completing occupations like toileting (Mazefsky, Pelphrey, Dahl, 2012). Accurately noticing one’s body states and possessing the ability to regulate one’s emotions is an important component of controlling one’s own behaviors. This concept of emotional regulation refers to the ability of an individual to perceive changes within his or her own body as well as changes in his or her environment, and then respond appropriately (Samson et al., 2015; Gross & Thompson, 2007). School-aged children with difficulties in emotional regulation often have a hard time regulating their classroom behaviors, frequently leading to decreases in classroom participation (Barnes, Vogel, Beck, Schoenfeld, & Owen, 2008) and performance of school-relevant activities and occupations (Cramm, Pollock, Dennis, Subramaniam, & Carkner, 2009). There is a large body of literature within the fields of psychology, psychiatry, teaching, and occupational therapy that have illuminated strategies to address the emotional regulation and/or subsequent
occupational performance of children with autism and sensory processing disorder (Barnes et al., 2008; Scarpa & Reyes, 2011; Alexander & Kuhaneck, 2015; Granpeesheh, Tarbox, & Dixon, 2009). Yet there still appears to be a need for additional strategies in order to meet the unmet sensory and occupational needs of those individuals. For those who continue to have difficulty with recognizing body states, such as toileting needs, poor interoception may be an important factor (Mahler, 2015) and may be the cause of decreased occupational performance.

Interoception is considered the eighth sensory system and refers to the ability of an individual to sense and process his or her body's internal state (Craig 2002). This sense is the foundation for how individuals feel and interpret their emotions. Nearly all emotions have corresponding sensations associated with them. For example, tense muscles, increased heart rate, and warm or flushed skin are all interoceptive sensations that are commonly associated with the emotion of anger. Interoception allows an individual to sense and identify these sensations, give meaning to them, and then act accordingly (the behavior) (Craig, 2002; Mahler, 2015). Having a lack of this sense would therefore make it difficult for an individual to understand and interpret the physiological changes in their body, which may influence their emotional regulation and performance in relevant daily activities (Craig, 2002; Mahler, 2015).

This presentation will equip occupational therapists with a firm understanding of interoception including an overview of what research tells us about interoception, and how to apply this research when developing programming for individuals with autism spectrum disorder and sensory processing disorder that are often impacted by poor interoception. Specific protocols for attaining baseline data through assessment and then intervening for several areas of occupation will be shared; emotional regulation and toileting will be shared.