

NEPSY – II Administration and Scoring

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Overview

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NEPSY Origins

- A major source of inspiration for the creation of the NEPSY was **Luria's approach** to assessing cognitive functions.
- His approach to assessment clearly articulated that **multiple brain systems** contribute to and mediate complex cognitive functions.
- To get at the primary and secondary cognitive functions, our assessment **approach** has to be different.

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Subtest/Item Level Example

What's the difference between a WISC-IV Similarities scaled score of 12 and a WISC-IV Similarities scaled Score of 12?

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What Does Similarities Measure?

WISC-IV Item: In what way are an ELBOW and a KNEE alike?

Response from Student A:
"Both joints." (Response delivered in 1 second.)

Item Score: 2
-response based on retrieval from long term storage

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What Does Similarities Measure?

WISC-IV Item: In what way are an ELBOW and a KNEE alike?

Response from Student B:
"An elbow and a knee... hmm....well,... um... let's see ...well, they are both body parts (Q).... hmm.... well...you can bend both...they're like hinges aren't they?" (Response delivered in 22 seconds.)

Item Score: 2
- response based on reasoning with language

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What Does Similarities Measure?

Depending on the response behavior of the client, Similarities is a measure of:

retrieval of verbal information from long-term storage
OR
reasoning with verbal information

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Process Oriented Psychological Assessment

▪ A Neuropsychologically-oriented Process Approach

- **different way of thinking** about:
 - test content,
 - assessment procedures,
 - test session behavior, and
 - test performance interpretation.

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Process Oriented Assessment

- Cognitive skills utilized during subtest task completion may vary from one individual to another
- The cognitive capacities required to perform a task can change:
 - across **different items** of the same task.
 - the **age** of the child attempting to perform the task.
 - the **ability level** of the child attempting to perform the task
- The psychological demands of the subtest task may be more important than the input or output demands

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Process Oriented Assessment

• How did they get the answer?

- Careful, systematic observations of problem solving strategies (process) en route to a solution, whether correct or incorrect, can yield more useful information about cognitive functioning than simple right-wrong scoring of the final solution (product or achievement)
- **Wrong answers as important as right answers.**
 - Knowing what an individual does wrong is as important as knowing what they do right; it is important to examine the nature of the particular errors made and the particular context in which they were made.

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NEPSY Overview

- Neuropsychological tests are not designed for the purpose of obtaining a normal distribution of scores as would be the case for measures of general cognitive ability.
- NEPSY is designed to measure constructs that are not necessarily normally distributed in the general population, but are:
 - indicators of specific brain-behavior relationships or
 - are indicators of atypical cognitive development.

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NEPSY-II Overview

- Neuropsychological assessment for ages 3 – 16
- Age-appropriate subtests
- Clinically sensitive subtest-level scores
- Assesses six cognitive domains
 - **Attention and Executive Functioning**
 - **Language**
 - **Memory and Learning**
 - **Sensorimotor**
 - **Social Perception**
 - **Visuospatial Processing**

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NEPSY-II Overview

What is NEPSY-II designed to do?

- Provide assessment centered on specific diagnostic or referral questions
 - Assist with differential diagnosis of:
 - ADHD, PDD's (Autism, Asperger Disorder), Language Disorder, Reading Disorder, Math Disorder, etc.
- Allow for extended testing
 - To provide more detailed or comprehensive information regarding neuropsychological functioning

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NEPSY-II Overview

- Includes 32 subtests (+ 4 delayed subtests)
 - Administer only those relevant to current referral questions
 - 7 – 19 subtests recommended for novice users
 - **Assessment Planner** suggests battery based on referral questions
- Subtest scores used to determine strengths and weaknesses
 - No global index or domain scores

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NEPSY-II Key Features

- Subtests designed specifically for ages 3 through 16
- Subtests were normed on a single well-stratified sample
- Developed using different subtest administration orders
 - Allows flexibility in subtest selection & order
- Standardized with validity measures including WISC-IV, DAS-II, WIAT-II, CMS, DKEFS
- Designed to identify cognitive deficits in childhood that may limit a child's academic success

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Four Common NEPSY II Types of Assessment

1. General Assessment
2. Diagnostic Assessment
3. Selective Assessment
4. Full Assessment

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General Assessment

- Provides an overview of a child's neuropsychological status across 5 functional domains
- Recommended in most cases regardless of the referral question
 - Due to co-occurrence of many impairments
 - For example, learning disorders with attention disorders, or motor/visuomotor problems
- List of subtests in [Table 2.4](#) (page 11 of Administration manual)
- Requires 45 minutes for preschool and an hour for school-age children

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Diagnostic Assessments

- Provides greater depth of assessment when addressing:
 - primary cognitive function
 - process
 - referral question
 - previous diagnosis
- Include subtests critical to the diagnosis of specific disorders.
- When there is no specific referral battery that addresses a referral question, for a neurodevelopmental disorder, a General Assessment should be administered.

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See Table 2.5 in Administration Manual Page 12

- Which subtests to administer for each Diagnostic Assessment referral battery for:
 - Learning Differences-Reading
 - Learning Differences-Math
 - Attention/Concentration
 - Behavior Management
 - Language Delays/Disorders
 - Perceptual and/or Motor Delays/Disorders
 - School Readiness
 - Social/Interpersonal Differences

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Selective Assessments

- Involves the examiner choosing subtests for a particular evaluation.
- When the General Assessment suggests the presence of a disorder of a complex function that may involve or affect components from several domains, additional testing using related subtests, as well as additional subtests from other domains, is recommended.

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Selective Assessments

- For example, graphomotor production required for handwriting and drawing might be further evaluated with subtests that assess fine motor coordination, the production of rhythmic motor sequences, visuomotor integration, and spatial perception.
- See Table 2.6 for subtest descriptions by domain, as well as ages for appropriate administration

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Full Assessments

- Consists of administration of every subtest appropriate for the child's age.
- Is especially useful when a child is referred for a thorough neurodevelopmental evaluation
 - Primarily due to brain damage or dysfunction, neurodevelopmental risk factors, central nervous system infections, or medical treatments that affect the CNS.
- Also recommended for children who have been followed over time for severe learning or developmental disorders.
- Takes 90 minutes for preschool children and 2 ½ to 3 ½ hours for school-age

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Subtest Order

- Order of subtests must be planned in advance to ensure that
 - Tasks vary sufficiently to sustain the child's interest and attention
 - Time lapse is sufficient between the immediate and delayed tasks of the memory subtests.
- *Remember immediate and delayed tasks of a subtest must be given in the same session.*
- Subtests are in alphabetical order in manual, stimulus books, & record form

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Use of NEPSY-II

- Typical use is to determine "Is child's performance low in particular skill areas?"
- Gather data on child's strengths and weaknesses
- But NEPSY tests designed primarily to distinguish normal vs. deficient performance
 - Above average or superior performance often not possible or relevant

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Subtest Administration and Scoring



General Guidelines

- Prior to administration, mark those subtests you plan to administer by highlighting specific start points and other relevant information on the Record form.
- Determine which subtests will be administered in which order and ensure that an appropriate time delay is included between immediate and delayed memory tasks.
- Administer Theory of Mind prior to Block Construction or any subtest that requires use of a pencil.
 - Do not open either of the identical boxes in view of the child unless instructed to do so in subtest directions

General Guidelines

- Fold the Response Booklet so that only one page at a time is in view.
- For subtests that require pointing, the Stimulus Book is usually laid flat so you can see the child's response; however some subtests are presented in the easel position.
- Most subtests require that you sit directly across from the child
- Page 18 of Admin manual has introductory statements for establishing rapport.

Administration Cautions

- These subtests require practice before they are administered:
 - Fingertip Tapping
 - Imitating Hand Positions
 - Inhibition
 - Manual Motor Sequences
 - Memory for Designs
 - Oromotor Sequences
 - Theory of Mind (Items 4 & 6)
 - Word List Interference

Administration Cautions

- These subtests require particular attention to record responses accurately:
 - Animal Sorting
 - Auditory Attention and Response Set
 - Clocks
 - Comprehension of Instructions
 - Geometric Puzzles
 - Memory for Names
 - Picture Puzzles
 - Speeded Naming

Testing Special Groups

- See excellent suggestions on pages 18-20 in Administration Manual for children with:
 - Attention problems
 - Language disorders
 - Simplify oral directions as needed
 - Deaf or hearing impaired
 - Motor disorders
 - Pervasive developmental disorders

Testing Special Groups

- Remember that when certain modifications are necessary and those changes affect performance, normative data cannot be directly applied.
 - The information, however, can provide important qualitative information about the child.
- Manual suggests use of stickers or other small reinforcers between subtests

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Start Points & Reverse Rules

- Most subtests have age-appropriate start points and a reverse rule.
- If a child does not correctly complete **either of the first two items administered**, administer previous items in reverse order until two consecutive items earn full credit.
- Then proceed with administration in forward sequence at the next unadministered item.
- Special reverse rules are provided for select subtests

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Discontinue Rules & Stop Points

- Discontinue rules are subtest specific and displayed at the beginning of the subtest on the Record Form.
- Ten subtests have Stop Points for younger children
- Start, reverse, discontinue, and stop icons appear in the Stimulus Books, Record Forms, and in the Administration Manual.

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Special Discontinue Rules

- The Body Part Naming and Identification, Imitating Hand Positions, and Theory of Mind subtests each have two tasks.
- **Do not skip the second task** in the subtest or you will not be able to compute all of the subtest total scores or contrast scores.

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Timing Issues

- Many subtests are untimed.
 - A general timing guideline is to proceed to the next item if a child has not responded within about 10 seconds.
- The rate at which you present items is important on
 - List Memory, Manual Motor Sequences, Oromotor Sequences, and Word List Interference.
- The amount of exposure time per item is important for immediate conditions on
 - Memory for Designs, Memory for Faces, and Memory for Names, and parts of Affect Recognition.

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Timing Issues

- If a child cannot keep up with the rate of presentation or if the time limits for items are too demanding, items can be presented at a slower rate or additional time can be given to complete the items.
 - Such modifications can provide useful information about what a child can do with and without the constraints of time.
 - However, that if these modifications are made, normative data cannot be applied to the subtest scores.

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Teaching & Practice

- Unless otherwise specified, demonstrations & teaching examples may be repeated at least once
- Demonstrate, teach, & allow practice only on specified items in manner prescribed

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Self Corrections

- If a child provides an incorrect response or says, "I don't know," but then provides a correct answer before the next item is administered, record the self correction in the Record Form.
- Self corrections are particularly important on the **Inhibition** and **Speeded Naming** subtests as they are scored.

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Item Repetitions

- Items cannot be repeated on
 - Auditory Attention and Response Set
 - Comprehension of Instructions
 - Repetition of Nonsense Words
 - Any subtest in the Memory and Learning domain.
- Requests for Repetition are recorded as Behavioral Observations for select subtests

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Behavioral Observations

- On the Record Form, qualitative or behavioral observations made during testing can be quantified and compared to age-level cumulative percentages.
- See **Appendix D** of the Clinical and Interpretive Manual for more information.
- Watch for other behaviors such as problem-solving strategies, reflective or impulsive approaches to tasks, rushing through tasks, and requests for repetition and note on Record Form.

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Scores on NEPSY-II

- Primary (Scaled) Scores
- Combined Scores
 - Total subtest scores made by combining two measures within subtest
- Process Scores
 - Assess more specific component abilities and skills or error rates on a subtest
- Contrast Scores
 - Provide information on a higher-level skill while controlling for a lower-level cognitive function
- Behavioral Observations

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Scores on NEPSY II



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Scores on NEPSY-II

- Primary (Scaled) Scores
 - Combined Scores
- Process Scores
- Contrast Scores
- Behavioral Observations

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Primary Scores

- Available for all subtests
- Represent global aspects or key clinical variables of each subtest
 - Describe overall or main abilities involved in subtest
- Typically expressed as scaled scores
 - A few are percentile ranks

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Combined Scores

- Special type of primary (scaled) score
- Total subtest scores made by combining two measures within subtest
 - E.g., on Inhibition subtest, a combined score for Inhibition Naming combines normed scores for:
 - Completion time
 - and–
 - Errors

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Combined Scores

- Integrate two scores with weighting toward one vs. the other
 - For example:*
 - Inhibition Naming weights errors more heavily than response speed
 - As controlled responding more relevant to inhibitory control
- Designed for clinicians who do not wish to report multiple scores
 - Forces them to evaluate important subcomponents of performance
 - But primary scores assessing single skills allow more precise interpretation

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Combined Scores

- Allow clinician to understand how child achieved score
 - By looking at scores feeding into it
 - For example:*
 - Well above average speed, but with higher than expected number of errors
- Help suggest different interventions
 - For example:*
 - Self-monitoring for those who are fast but prone to careless errors

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Example of a Combined Score

Total Errors – Cumulative %-ile

	< 2	2-5	6-10	11-25	26-50	51-75	> 75
1	2	4	6	9	13	18	24
2	3	5	7	10	14	19	25
.
.
9	10	12	14	17	21	26	32
10	11	13	15	18	22	27	33
11	12	14	16	19	23	28	34
.
.
18	19	21	23	26	30	35	41
19	20	22	24	27	31	36	42

Process Scores

- Assess more specific component abilities and skills or error rates on a subtest
 - May not be relevant:
 - For all children
 - or-
 - In assessment of all clinical disorders
- But provide additional insight into child's abilities which may be helpful in some circumstances

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Process Scores

- Allow examiners to look deeper into specific abilities that may influence a child's performance
- Expressed as scaled scores, percentile ranks, or cumulative percentages

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Examples of Process Scores

- Affect Recognition subtest yields process score for *Emotion Error Types*
 - May provide clinically meaningful information related to:
 - Conduct disorder
 - Autism spectrum disorders
- Auditory Attention and Response Set subtest yields process score for *Inhibitory Errors*
 - Helpful when inhibitory control is key issue for child

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Contrast Scores

- Allow clinician to compare higher- to lower-level cognitive functions
- Expressed as scaled scores
- Typically derived within a subtest that produces multiple primary scores
 - Some represent primary processes and others more complex processes
- Allow examiner to determine if skill deficit due to higher- or lower-level function
 - E.g., basic processing speed vs. inhibitory control

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Contrast Scores Example

- A scaled score of 10 on Memory for Faces and a score of 5 on Delayed MF would be a contrast scaled score of 4
 - Means child's delayed recall is **below** expected level when compared to children of similar initial encoding ability
- Score of 16 on MF and 9 on Delayed MF also yields a contrast score of 4
- A high contrast score (14 for example) would mean
 - Child's delayed recall is **above** expected level

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Behavioral Observations

- Behavioral Observations
 - Provide quantitative data on common behaviors observed in clinical populations
- Typically displayed as:
 - Percents
 - or-
 - Cumulative percentages

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Qualitative Descriptions of Scores

Scaled Score	%ile Rank	Classification
13-19	>75	Above expected level
8-12	26-75	At expected level
6-7	11-25	Borderline
4-5	3-10	Below expected level
1-3	≤2	Well below expected level

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What is Considered a Low Score?

Issues to Consider

- WISC-IV mean subtest scores for children with Mild MR
 - Range from:
 - 3.8 (Arithmetic)
 - to–
 - 6.2 (Cancellation)
- Most Mild MR means near 4.5

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What is Considered a Low Score?

Issues to Consider

- Most clinical groups are not as functionally impaired as children with MR
- Therefore, mean scores for most clinical groups expected to fall in range of 5 – 8
 - For mild to moderate disorders

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What is Considered a Low Score?

Rules of thumb:

- Most clinical groups obtain scaled scores between 5 and 8
- Can use scaled score of 7 or lower as rough break-point for problem areas
 - But even scaled scores of 8 and 9 can be meaningful

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What is Considered a Low Score?

Issues to Consider

- Score on a specific test indicates only how far child's performance is from mean of that test
- A low score does not necessarily imply:
 - Impairment
 - or–
 - A specific diagnosis

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What is Considered a Low Score?

Issues to Consider

- Attributions must be backed up by more than one piece of data**
- Clinician must corroborate test findings with:
 - Performance on other measures
 - or–
 - Indicators of daily functioning
- Preponderance of evidence** required to document an impairment
- Similar findings on at least 2 or more subtests

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Application



Why Test Attention?

- Prerequisite for learning and performance in classroom
- Attention deficits can be disruptive in classroom and at home
- Intelligence tests provide only crude estimates
- Attention tests explain how child attends best (and worst)

Difficulties with Assessment of Attention

- Components of attention are many and variously defined
- Attention must be evaluated in relation to some activity
 - Pure measures of attention difficult to obtain
- Attention in one-to-one testing situation often very different from more natural settings

Attention: Traditional Aspects

- Arousal and alertness
- Effortful attention
- Sustained attention (vigilance)
- Selective (focused) attention
- Shifting attention
- Attentional capacity
- Divided attention (multitasking)
- Attentional consistency
- Complex attentional processing

Attention in the Classroom

- **Selective attention:** the ability to focus on a specific task or activity and to suppress irrelevant stimuli.
- **Sustained attention:** the ability to maintain focus over a period of time.
- **Divided attention:** the ability to hold in mind and attend to multiple bits of information simultaneously, such as keeping track of the teacher's lecture while taking notes.
- **Shifting attention:** the ability to alternate or change the focus of attention smoothly.

Two Deficit Areas Related to ADHD

- **Inhibition**
 - Ability to resist engagement in enticing behavior
- **Selective attention**
 - Focus on specific task or activity and suppression of irrelevant stimuli

Executive Functions

- Mental functions associated with ability to engage in behaviors that are:
 - Purposeful
 - Organized
 - Self-regulated
 - Goal-directed
- Typically associated with frontal and prefrontal cortical functioning

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Executive Functions & Attention Related

- Executive functions interact with, direct, and modulate attentional processes including:
 - Sustaining optimal levels of arousal and vigilance
 - Search for, selection of, and attention to relevant information from broad array of stimuli

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Why Test Executive Functions?

- Internal supervisory guide for learning and performance in the classroom
- EF problems are common characteristic of learning disabilities, ADHD, TBI, etc.

Especially:

- Planning and organization
- Self-monitoring

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Executive Dysfunction

We've all seen it

- Failure to plan ahead
- Disorganized
- Lacks initiative
- Energy unsustained
- Rigid approach to tasks
- Cannot impose structure on own work
- Materials in disarray
- Lack of follow-through
- Poor written output
- Unable to monitor output in relation to goals
- Does not obtain or use feedback
- Problems with time management

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Attention & Executive Functions

Both require self-regulatory skills and have some common subprocesses such as:

- Inhibition
- Monitoring and Self-Regulation
- Vigilance
- Selective and sustained attention
- Cognitive flexibility
- Planning

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Poor Performance on Attention & Executive Functioning

- Children who demonstrate impairment in this domain may have underlying attention or executive function deficits or both.
- Low scores should lead you to investigate if a pattern of poor performance can be ascertained in relation to simple attention versus more complex self-monitoring tasks (executive function).
- But note that some children may find these tasks more motivating than classroom tasks, so your findings should be viewed in the context of what occurs in other, less structured situations.

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Relationship to Working Memory

- Many executive function tasks also require working memory—holding information actively in memory during cognitive tasks.
- Children with poor working memory may lose the “thread” and forget parts of the instruction or even their own intention if some other important information is competing.

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Memory & Learning

- Memory problems often secondary to deficits in Attention & Executive Functioning, Language, & Visuospatial Processing
- Primary memory problems impact child’s ability to learn and be effective in school and everyday life

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Memory and Learning Interpretation Hypotheses

Score	Hypotheses
Low List Memory and List Memory Delayed Total Correct	Poor rote memory or supraspan learning skills for verbal material
Low Memory for Designs Total Score	Poor visuospatial memory
Low Memory for Faces Total Score	Poor face discrimination and recognition
Low Memory for Names and Memory for Names Delayed Total Score	Poor learning or retrieval of verbal labels for visual material

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Memory and Learning Interpretation Hypotheses

Score	Hypotheses
Low Narrative Memory Free & Cued Recall Total Score	Poor verbal expression or comprehension; poor verbal learning
Low Sentence Repetition Total Score	Poor verbal short-term memory
Low Word List Interference Recall Total Score	Poor verbal working memory

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Language

- Central domain of neuropsychological assessment
- Important ability for daily life and crucial for success in school
- Subtests assess linguistic capacities associated with problems in speech & language, reading, spelling, & writing

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Sensory Motor Functions & Learning

- Most of what children learn and do requires coordination of multiple systems that mediate production of:
 - Speech
 - Smooth and efficient limb & whole body movements
 - Dexterous movements of hands and fingers
- Systems that mediate
 - Equilibrium
 - Eye movements
 - Visuospatial processing

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Sensory Motor Functions & Learning

- Certain subgroups of learning disabilities have:
 - Motor planning deficits
 - and-
 - Deficits in control and regulation of movement
- Children with severe deficiencies in **math** abilities perform significantly worse on measures of tactile-perceptual abilities than children with reading/spelling deficiencies

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Sensorimotor Development – Key Concepts

Concept

NEPSY-II

- | | |
|---|---|
| <ul style="list-style-type: none"> • Tactile discrimination • Kinesthetic processing • Fine motor coordination | <ul style="list-style-type: none"> • Processing basic tactile information • Imitating hand positions • Producing repetitive and sequential movement sequences • Using a pencil with speed and precision • Producing rhythmic hand movement sequences |
| <ul style="list-style-type: none"> • Visuomotor coordination • Coordination of rhythmic, sequential movement | |

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Social Perception

- One aspect of social cognition
 - How people process social information about individuals, groups & social context
 - Attribution of intent in social contexts
 - Interpret nonverbal communication
 - Form impressions of others
 - Use contextual information to make inferences about others

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Social Perception

- Markers of Autism Spectrum Disorders
 - Delayed social relatedness
 - Social aversion
 - Disinterest in social interaction
 - Poor social abilities
- Ability to interpret intents & actions of others is required to function adequately in most social contexts (including school)

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Social Perception Interpretation Hypotheses

Score	Hypotheses
Low Affect Recognition Total Score	Poor facial affect recognition
Low Theory of Mind Total Score	Poor ability to comprehend perspectives, experiences, & beliefs of others; Poor ability to match appropriate affect to contextual cues

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Visuospatial Processing

- Involves multiple, distinct but interrelated components
 - Ability to discriminate objects
 - Synthesize elements into a meaningful whole
 - Represent objects mentally
 - Judge orientation of lines & angles
 - Distinguish left and right
 - Understand location, directionality, & relationships of objects in space
 - Rotate objects mentally
 - Interpret maps & routes

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Visuospatial Processing

- Deficits can have transient or long lasting effects on performance
- Some children can compensate for problems with good language, memory, and attention/executive functioning
- Persistent visuospatial problems can interfere with learning
 - Particular areas affected are **geographical knowledge and math** (especially geometry)

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Interpretation



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Interpretation – Two Levels

1. Psychometric comparisons
Determine **which** functions are impaired
 - Compare to normally developing children in age group
 - Review performance in relation to own functioning
 - Relate results to observations in everyday life

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Interpretation – Two Levels

2. Clinical analysis
Determine **why** those functions are impaired
 - Which disorders might be present based on diagnostic clusters
 - Cluster pattern similar to a disorder does not guarantee presence of disorder
 - Must also have medical, genetic or environmental factors associated with disorder

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Social Perception Clinical Results

- Effect Sizes for Affect Recognition
 - Autism-1.2
 - ADHD- .37
 - Language- .54
 - Theory of Mind
 - Most sensitive to Autism
 - Children with Language Disorders had low performance

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Clinical Groups Tested (Chapter 5 IM)

CLINICAL GROUP	N
Reading Disorder	36
Math Disorder	20
Language Disorder	29
ADHD	55
Autism	20
Asperger's Syndrome	19
Emotionally Disturbed	30

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Overall for Reading Disorder

- Largest Effect Sizes
 - Speeded Naming
 - Phonological Processing
- Lowest Mean Scores
 - Speeded Naming Time (6.7)
 - Phonological Processing (6.9)
 - Inhibition Naming Time (7.5)

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Overall for Language Disorder

- Largest Effect Sizes
 - Word List Interference Repetitions
 - Inhibition Total Errors
 - Auditory Response Set Total Correct
- Lowest Mean Scores
 - Inhib Error TS (4.5), Switch CS (5.2), Inhib CS (6.2)
 - Narrative Memory Free + Cued (6.4), Free (6.7)
 - Auditory Response Set CS (6.8)

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Overall for ADHD

- Largest Effect Sizes
 - Auditory Response
 - Inhibition
- Lowest Mean Scores
 - Auditory Response Total Correct (7.8)
 - Inhibition Combined (8.3)
 - Inhibition Errors (8.3)

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Overall for Autistic

- Largest Effect Sizes
 - Animal Sort CS, TS
 - Comprehension of Instructions
 - Word Interference Recall and Repetition
- Lowest Mean Scores
 - Comprehension of Instructions (5.0)
 - Animal Sorting TS (5.3), CS (5.7)
 - Narrative Memory Free (5.3), F+C (5.7), RCvsF (5.5)
 - Word List Reps (5.6), Recall (5.8)

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Overall for Asperger's

- Largest Effect Sizes
 - Memory for Faces Immediate
 - Non-Dominant Finger Tapping
 - Design Copying
- Lowest Mean Scores
 - Memory for Faces Imm (6.6)
 - Non-Dominant (6.7), Dominant (6.7) Finger Tapping
 - Memory for Designs Delayed Content (6.8)
 - Auditory Attention CS (7.1)

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Overall for Emotionally Disturbed

- Largest Effect Sizes
 - Inhibition Switching Time
 - Speeded Naming Time
 - Comprehension of Instructions
- Lowest Mean Scores
 - Inhib Switch Time (6.2), CS (7.8)
 - Speeded Naming Time (7.1), CS (7.8)
 - Visuomotor Precision CS (7.4)
 - Auditory Response CS (7.2)

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NEPSY-II Training CD, Assessment Planner, and Scoring Assistant

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