Towards an Understanding of Psychoeducational Evaluations

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OBJECTIVES:

- WHAT IS A PSYCHOEDUCATIONAL EVALUATION/ASSESSMENT?
- TYPICAL STRUCTURE OF A PSYCHOEDUCATIONAL REPORT
- COMMON TESTS USED
- OVERVIEW OF THE WISC IV
 - UNDERSTANDING THE INDEX SCORES
 - IMPLICATIONS OF WEAKNESSES
- SOME HELPFUL TIPS TO CONSIDER...
- QUESTIONS....



WHAT IS A PSYCHO EDUCATIONAL EVALUATION?

- Essentially, it is "testing of the mind", or it evaluates the mind's ability to perform specific tasks.
- It produces results and conclusions based on the student's strengths and weaknesses as identified through several tests...not <u>ONE</u> single test
- The goal is to understand aspects of the student's learning, behavioral and/or social emotional adaptive functioning.



- Consists of two main parts: cognitive and academic
- <u>Cognitive</u> part assesses the student's intellectual ability or cognitive strengths and weaknesses.
- The <u>educational</u> part assesses academic skills or estimates of achievement levels, and could include testing of language, fine motor, visual processing skills...

Formats will vary from examiner to examiner.



- A good evaluation:
 - must include cognitive and achievement measures
 - will establish the presence and type of LD, ADHD, intellectual impairment...
 - will make differential diagnosis: receptive language deficits (CAPDD) vs. ADHD; or NVLD vs ADHD.
 - provides realistic and relevant recommendations/accommodations/strategies that will help support educational success.

- Basic components of well structured reports:
 - 1. Reason for referral (the goal of the assessment is to answer the referral mandate).
 - 2. Background Information: pregnancy, delivery, postnatal history, family history, school history, illnesses/trauma, academic challenges...
 - 3. Tests Administered
 - 4. Test Description and Interpretation of Results
 - 5. Summary and Recommendations-the most important and useful part of the evaluation.



- Intelligence or Cognitive Measures:
 - Wechsler Series (GOLD STANDARD)
 - Wechsler Preschool and Primary Scale of Intelligence (WPPSI-IV) ages 2 years and 6 mths-7 years and 7 months old.
 - Wechsler Intelligence Scale for Children (WISC IV; WISC V) ages: 6 –16 years and 11 months.
 - Wechsler Adult Intelligence Scale (WAIS IV): 16-90 years of age.



- Achievement Tests:
 - Wide Range Achievement Test (WRAT-4) ages 5-94 years old
 - Wechsler Individual Achievement Test (WIAT-III/WIAT II) ages: 4-50 years old
 - Woodcock Johnson Tests of Achievement (WJ-III): ages 2-90 years old.



Attention:

- Objective Measures
 - Test of Everyday Attention :
 - adult version (TEA): ages 18–80 years old
 - children's version (TEACH): ages 6-16 years old
 - Conners Continuous Performance Test (CCPT)-Third Edition Ages: 8 years +
 - Test of Variables of Attention (TOVA). Ages 4-80+



Attention:

- Subjective Measures:
 - Conners 3 Rating Scales
 - Behavior Rating Inventory of Executive Function (BRIEF)
 - Browns Attention Deficit Disorder Rating Scale

- Fine Motor Skills:
 - Beery Buktenica Test of Visual Motor Integration (VMI)
- Adaptive Behavior Scales
 - Vineland Adaptive Behavior Scales, Second Edition (Vineland[™]-II)
 - Adaptive Behavior Assessment System[®] Second Edition (ABAS II)



OVERVIEW OF WISC-IV

- Four Indices (VCI, PRI, WMI and PSI), 10 core subtests and 5 supplemental subtests
- Four indices are averaged together to give a full scale intelligence quotient (FSIQ), a VCI, a PRI, a WMI, and a PSI scores with a mean of 100 and a standard deviation of 15
- Individual subtest scores: mean of 10 and standard deviation of 3.
 - Subtest scores:
 - 1-7 below average; percentile range-1-16
 - 8-12 average; percentile range -25-75
 - 13-19 above average ; percentile range-84-99



OVERVIEW OF WISC-IV

FSIQ and index/achievement measures usually reported as percentiles and/or as:

- Very superior range: 130 or more
- Superior range: 120–129
- High Average range: 110-119
- Average range: 90–109
- Low Average range: 80–89
- Borderline range: 70–79
- Extremely low range: 69 or less.



OVERVIEW WISC IV

-cognitive full scale score fell within the average range, or at the 34th percentile relative to same aged peers (95% confidence interval = 86-104)
- Confidence interval means "there is 95% probability that this student's FSIQ will likely fall anywhere between 86–104 if retested in the future".
- 34th percentile=student performed the same or better than 34% of same aged peers.

OVERVIEW OF WISC IV: VCI

- Verbal Comprehension Index (VCI)
 - Assesses verbal skills gained through education and exposure, both expressive and receptive.
 - Subtests include:
 - vocabulary measures verbal reasoning and conceptualization, verbal comprehension and expression
 - **similarities** measure verbal reasoning and concept formation/abstract reasoning
 - comprehension measures the ability to understand and respond to questions based on social situations and common sense reasoning.



OVERVIEW OF WISC IV: VCI

- Implications of significant weakness in VCI
 - suggests a language based weakness (receptive/expressive) that may impact on:
 - reading comprehension,
 - math reasoning,
 - written expression,
 - social skills
 - emotional distress and behavior....



OVERVIEW OF WISC IV: PRI

Perceptual Reasoning Index (PRI)

- the ability to reason using nonverbal information;
- involves visual perception, fluid reasoning, spatial processing, and visual-motor integration skills...
- recognize patterns and forms mental pictures
- Subtests include:

- block design: the ability to analyze and synthesize abstract visual stimuli
- picture concepts: nonverbal abstract reasoning
- matrix reasoning: categorical reasoning and fluid intelligence



OVERVIEW OF WISC IV: PRI

- Implications of significant weakness in PRI:
 - fine motor skills/penmanship
 - gross motor skills
 - (spatial) organizational skills,
 - performing math operations, aligning columns, recognizing operational symbols...
 - understanding concepts of space/time, geometry, fractions, and decimals
 - written expression
 - capitals and punctuation
 - reading comprehension (abstract...)
 - letter reversals/decoding
 - copying tasks
 - maturity, emotional distress and behavior
 - social skills...



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OVERVIEW OF WISC IV: WMI

Working Memory Index (WMI)

- the ability to pay attention to, hold onto and manipulate auditory information in one's mind in order to perform a task – e.g. performing a mental math activity or holding onto to thoughts while writing an essay
- Subtests include:
 - digit span auditory rote memory
 - letter number sequencing -sequencing, mental manipulation, attention, short-term auditory memory, visuospatial imaging, and processing speed.



OVERVIEW OF WISC IV: WMI

Implications of significant weakness in WMI:

- receptive language (CAPDD), listening to and following instructions/directions,
- attention,
- reading (dyslexia and/or comprehension),
- written expression,
- math (learning multiplication tables, sequencing of math steps...),
- memory issues/forgetfulness,
- difficulties acquiring a second language
- behaviors and emotional concerns....

OVERVIEW OF WISC IV: PSI

Processing Speed Index (PSI):

- measures the speed of visual information processing as is related to mental capacity and under time pressures.
- Subtests include:
 - coding processing speed, short-term visual memory, visual-motor coordination, visual scanning ability, cognitive flexibility, attention and motivation
 - symbol search processing speed, short-term visual memory, visual-motor coordination, visual discrimination



OVERVIEW OF WISC IV: PSI

- Implications of significant weakness in PSI:
 - completing tasks and tests within allotted times,
 - note taking, copying off the blackboard,
 - manipulating numbers and making simple arithmetic computations especially when required to use paper and pencil,
 - written expression,
 - reading (both decoding/comprehension),
 - willingness to do homework (homework battles)
 - sloppy penmanship
 - the ability to focus on visual information
 - attention
 - negative behaviors and emotional distress
 - often described as lazy, procrastinators, unmotivated …



OVERVIEW OF WISC IV

Based on the WISC results a pattern of cognitive strengths and weaknesses will emerge.

Further investigation of academic skills, behavioral, social and emotional well being are needed in order to understand how the cognitive weaknesses are truly impacting on learning and behavior.



OVERVIEW OF WISC IV

 LD= significant discrepancy between the estimated performance based on cognitive ability and actual performance.

Example: If cognitive testing reveals average cognitive potential, then academic skills should also fall in the average range. This is then compared to the actual performance.

SOME TIPS TO CONSIDER:

- When reading reports, ensure that the report is relevant:
 - Check the date of report
 - Check the reason for referral
 - Does it answer questions about the student's learning challenges...
 - Does the report provide a conclusion/diagnosis...
 - Are the recommendations educationally well founded and realistic



SOME TIPS TO CONSIDER:

- If report is greater than 2-3 years old, <u>or</u> does not answer some of the student's current concerns, suggest a reassessment.
- If confused or the conclusions are unclear:
 - Consult/seek assistance of school psychologist
 - obtain authorization from the family to speak directly to the private psychologist for additional clarification.
 - suggest a school team meeting with the examining psychologist to review the results of the evaluation and to help develop the educational plan.



Thank you!

Questions.....

