

Score Interpretation and Assessment Process for Beginners (Evaluation report evaluation)

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Purpose and objectives

Introduce novice DSPs to format and terminology used in psychoeducational reports for LD and ADHD disability.

- Know the typical components of an evaluation and subsequent report
- Recognize Cognitive, Academic Achievement, and Social/Emotional tests
- Interpret types of scores used in assessment

Note: Perspective as evaluation psychologist, documentation reviewer, and graduate student clinician trainer (i.e. producer, consumer, educator)

Report Components (typical)

- Reason for Referral
- Background / History
- Behavioral Observations
- Report of Findings
- Summary / Conclusions
- *Recommendations
- *Appendix of scores

*Not always there, but sure nice when they are.



Reason for referral

Why are they seeking evaluation? Self referred, parent referred, school official or agency referred?

Specific and detailed referral questions are easier for an evaluation to answer than vague referral questions

Particularly important if assessment time is limited

Background/History

- Relevant for documenting the impact of the possible disability on the individual's life
- History of previous testing and test scores
- Educational background
- Vocational background
- Health issues
- Developmental issues
- Social and emotional issues





Behavioral Observations

- What the client was like at the time of the evaluation
- Determination of whether or not to accept the test results as valid (effort, symptom validity, other interfering factors)

Report of Findings

- Cognitive / Linguistic Testing (abilities – client completes tasks, questions, problems)
- Academic Achievement Testing (skills – client completes tasks, questions, problems)
- Social / Emotional Testing (being – client and/or collateral reporter describes condition by answering questions)

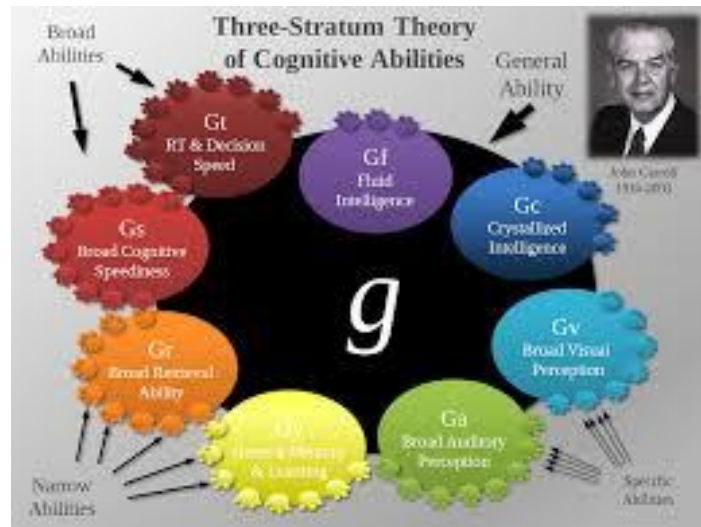
There can be overlap between these areas.

Summary/Conclusions

Tie together findings with the given diagnoses. Should not hold any surprises for an informed reader of the findings; Should provide an understandable rationale for diagnosis for a novice reader.

May also contain recommendations including accommodations – ideally these are matched to findings, but not always.

Cognitive and linguistic abilities



Crystallized knowledge

- Information acquired through education and experience.
- *On what continent is Argentina?*
- *What is hollow, has a head, and is struck with a stick to make music?*
- *What is a measure of the strength and direction of the linear relationship between two variables?*



Reasoning

Ability to reason, form concepts, and solve problems involving unfamiliar information or novel situations.

- *Square is to rectangle as circle is to _____?*
- *Blizzard is to flurry as rainstorm is to _____?*
- *Swagger is to gait as magnesium is to _____?*

15

16

Working memory

- Ability to mentally hold and manipulate information
- I am going to say some numbers. Then you say them backward. For example, if I say “3...4” you would say “4...3.”*

1...6...3...9

4...7...3...9...5...2

5...9...7...2...6...4...1...3

Executive functioning



Refers to a group of higher level, intentional self-regulatory processes that organize, direct, and manage more basic cognitive functions (e.g., learning), emotions, and behaviors.

- initiate behavior,
- inhibit competing actions or stimuli,
- select task goals,
- plan and organize approaches to problem-solving,
- shift strategies when necessary,
- regulate emotions,
- monitor and evaluate behavior.



In the context of higher education, critically important as students must develop strategies to manage challenging academics, lengthy readings, and long-term assignments in the context of large amounts of unstructured time and competing and enticing distractions.

Learning and memory

- Ability to encode and immediately recall information.
- Orally presented stories
- Orally presented word lists
- Visually presented designs
- Visually presented faces



Visual-spatial/constructional ability

Ability to perceive, analyze, synthesize, and construct with visual patterns.

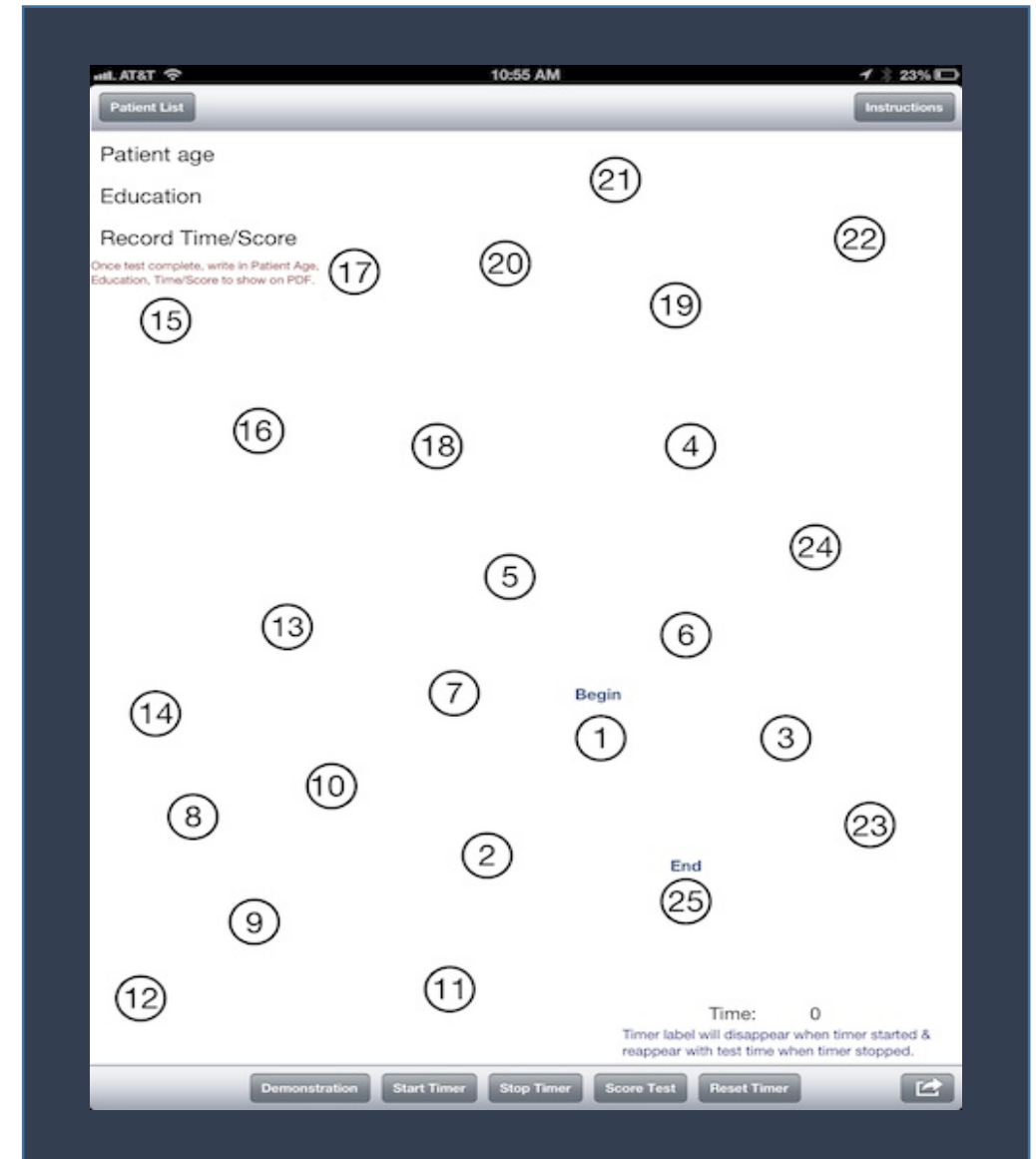


Spatial Relations 47

The image shows a grid of visual spatial reasoning puzzles. It consists of four rows, each with a target shape on the left and six numbered options (1-6) on the right. Row 1: Target is a red circle with a vertical line through its center. Options: 1. Red triangle, 2. Red semi-circle, 3. Red square, 4. Red triangle, 5. Red circle, 6. Red semi-circle. Row 2: Target is a green square divided vertically into two rectangles. Options: 1. Green rectangle, 2. Green rectangle, 3. Green square, 4. Green rectangle, 5. Green rectangle, 6. Green square. Row 3: Target is a red vertical rectangle divided into three horizontal sections. Options: 1. Red square, 2. Red triangle, 3. Red square, 4. Red semi-circle, 5. Red square, 6. Red semi-circle. Row 4: Target is a green triangle with a horizontal line near the top. Options: 1. Green diamond, 2. Green triangle, 3. Green trapezoid, 4. Green triangle, 5. Green diamond, 6. Green trapezoid.

Psychomotor speed

Ability to perform clerical scanning tasks involving a motor component quickly and accurately.



Phonemic awareness

Ability to identify, discriminate, and manipulate the sounds that make up language

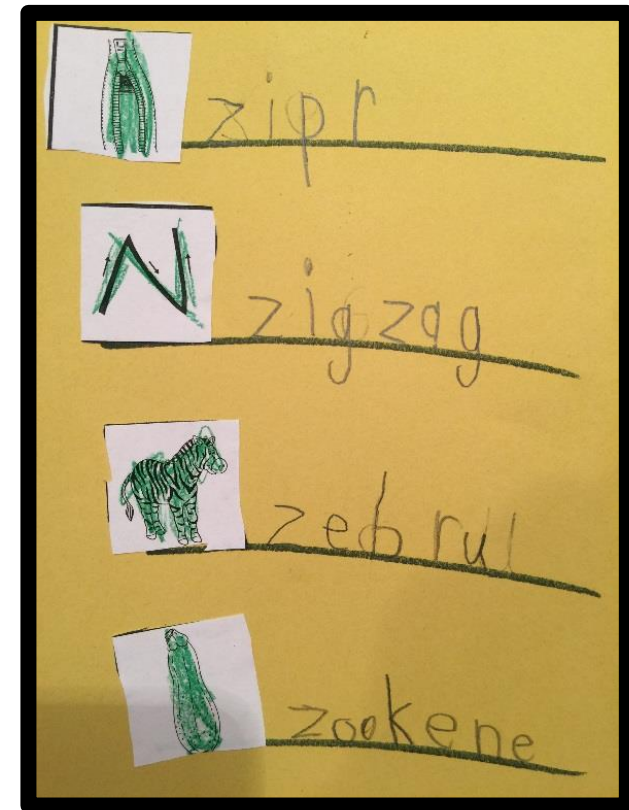
- Remove phonological segments from spoken words to form other words.
- Repeat nonwords that range in length.

Orthographic awareness

Speed and accuracy in matching printed number/letters, sensitivity to the details of printed words, and awareness of implicit spelling patterns.

wait
wheet
trousers
condence
senaters
applause
backwards

wate
wheat
trawsers
condense
senators
aplause
backwards

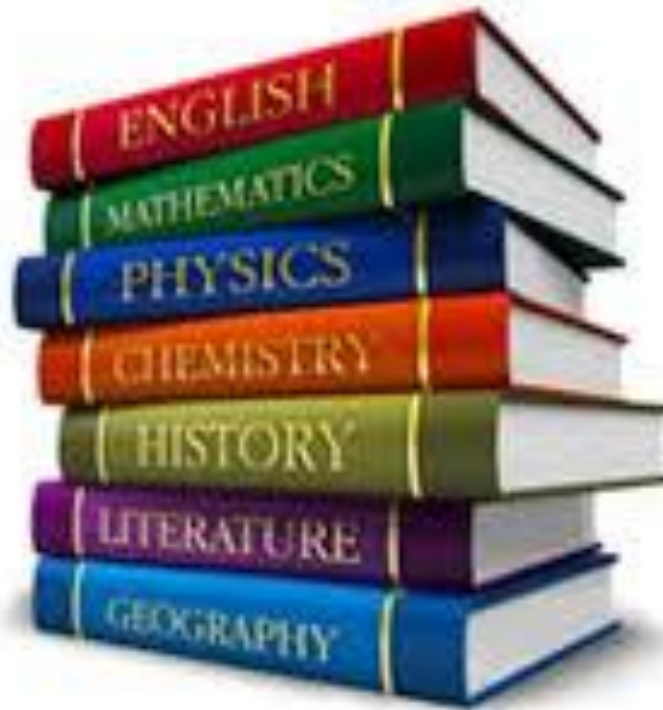


Rapid automatized naming

Ability to rapidly retrieve from memory familiar words in response to visual prompts.



ACADEMIC SKILLS



Academic Skills Assessment Framework

Reading, Written Expression, Mathematics

- Basic Skill – simple, untimed
- Application – utilization of basic skill in situation or context
- Fluency – speed and automaticity of basic skill; timed task

Reading decoding

On

Liff

Whole

Bish

Considerate

Fayed

Symbiotic

Mertholope



Reading comprehension

- The drums were pounding in the distance. We could _____ them.
- It is one thing to demonstrate that modern war is harmful to the species. It is another thing to do something about _____ it.

Reading fluency

Lamps give light.

Yes/No

Dogs speak Spanish.

Yes/No

Hats are worn on knees.

Yes/No

Trees are often tall.

Yes/No

Rain comes from clouds.

Yes/No

Balls are shaped like cubes.

Yes/No

Spelling

- Spell the word “caution.” The man approached the bear with caution. Caution.
- Spell the word “cribbles.”

Mechanics of writing

- Write one sentence about a boy going on vacation. Include the words “who went to the” in the middle of your sentence.
- Write a good sentence using the words “despite his sadness.”
- Write one good sentence describing what a merry-go-round looks like.

Writing Fluency

- Quickly write a sentence using the words *running*, *while* and *drink* that describes the picture



- Word count in time limited essay

Math calculation

$$1 + 1 = \underline{\quad}$$

$$8 - 3 = \underline{\quad}$$

$$49 + 14 = \underline{\quad}$$

$$7.05 \times 43 = \underline{\quad}$$

Math reasoning

- If Jeremy had 47 cards and gave half of them away to Tonya, how many did he have left?
- If Tom buys a new football for eight dollars and uses a 10% off coupon, what amount does he have to pay?

Math fluency

$$1 + 1 = \underline{\quad}$$

$$5 - 3 = \underline{\quad}$$

$$5 \times 4 = \underline{\quad}$$

$$2 + 9 = \underline{\quad}$$

$$8 - 2 = \underline{\quad}$$

$$5 \times 3 = \underline{\quad}$$



Social Emotional Measures

- Used for assessing psychological state, personality, social interactions
- Common measures: BASC-3, PAI, CAARS, MMPI-2, MCMI-IV, ADOS-2, SCID-V, clinical interview
- Most are self-report
- Some are collateral report
- Few are structured interview

Types of scores

Norm-referenced tests

compare students with their same age or grade peers.

Scores are compared with a reference group to determine how a student performed.



Types of scores

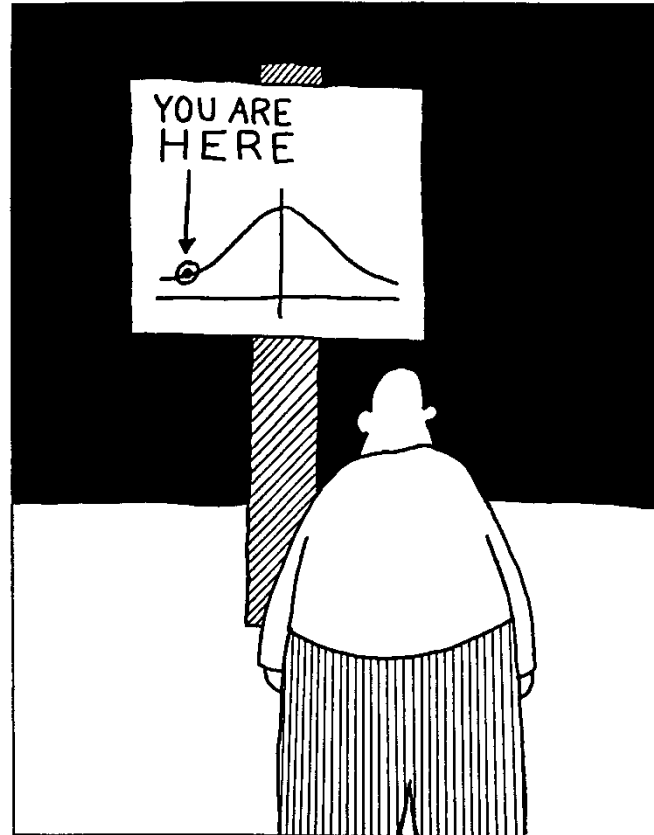
- Raw score = # correct
- Z-score = $(\text{raw score} - \text{mean})/\text{SD}$
- T-score = $10z + 50$
- Scaled score = $3z + 10$
- Standard score = $15z + 100$

Do you want to be HERE?

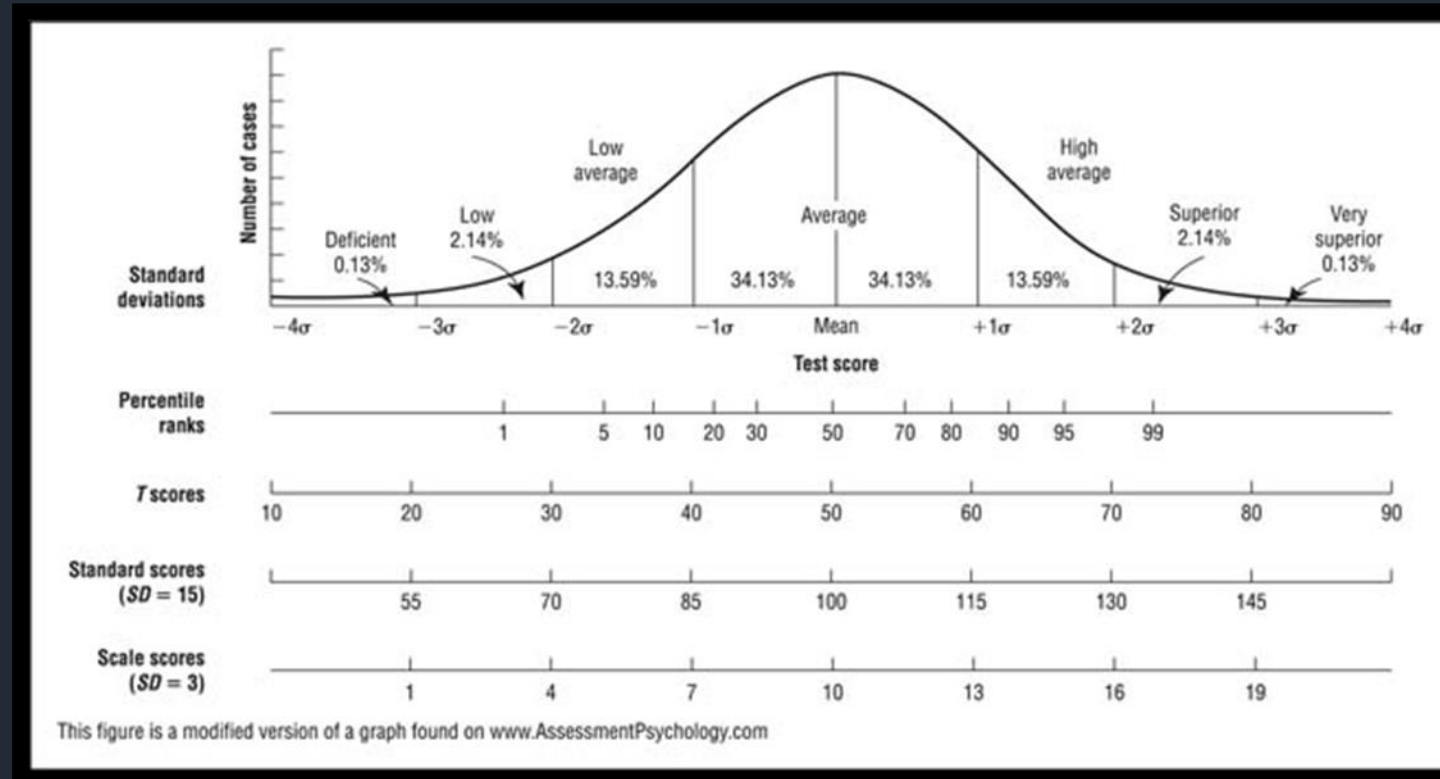
Depends on what is being measured.....

Ability? Depressive symptoms?
Debt?

CEREBELLA by Ryan Feeley



Types of scores



Norm-referenced scores in practice

COGNITIVE, LINGUISTIC, ACADEMIC, ADAPTIVE							
Qualitative Descriptors	Impaired	Below Average	Low Average	Average	High Average	Superior	Very Superior
%ile rank	< 2	2 – 8	9 – 23	25 – 73	75 – 90	91 – 97	≥ 98
Standard score	< 70	70 – 79	80 – 89	90 – 109	110 – 119	120 – 129	≥ 130
Scaled score	< 4	4 – 6	6 – 8	8 – 12	12 – 14	14 – 16	≥ 16
T-score	< 30	30 – 36	37 – 43	43 – 56	57 – 63	63 – 69	≥ 70

Norm-referenced scores in practice

<u>TEST RESULTS</u>		
<u>Intellectual Functioning</u>		
<u>WAIS-IV Scores</u>		
	Standard/(scaled) score	Percentile Rank
Verbal Comprehension Index	125	95 th
Similarities	(14)	91 st
Vocabulary	(15)	95 th
Information	(14)	91 st
Perceptual Reasoning Index	98	45 th
Block Design	(9)	37 th
Matrix Reasoning	(11)	63 rd
Visual Puzzles	(9)	37 th
Visual Puzzles – with extra time	(11)	63 rd
Working Memory Index	95	37 th
Digit Span	(8)	25 th
Arithmetic	(10)	50 th
Processing Speed Index	111	77 th
Symbol Search	(11)	63 rd
Coding	(13)	84 th
Full Scale IQ*	102	55 th

My humble opinion: Percentile is the easiest to interpret, but be sure to consider what is being measured and directionality.

Other Considerations

Some issues will not necessarily manifest on formal cognitive/linguistic/academic tests or in the testing environment

- Executive functioning or distractibility

- Emotional functioning

As such, test scores should not be the be all and end all in disability determination and other evidence must be considered

- School failure, retention, underachievement, or disparity between time spent on studies and results

- Psychiatric hospitalizations

(the aforementioned pieces of evidence are objectively documentable and support the self report of difficulties)

Questions and Discussion

