CELF®-5 Case Study

The following case study illustrates interpretation of CELF-5 Metalinguistics test and Index scores. This case study presents interpretation of CELF-5 Metalinguistics test and Index scores in conjunction with CELF-5 test and Index scores.

David, age 11:6





History and Referral

David is age 11:6 and in the sixth grade. He received a diagnosis of autism spectrum disorder at age 4 and has been receiving speech-language services since that time. He has made significant progress in terms of basic language skills, but still has trouble interacting with peers, understanding non-literal and ambiguous language, and inferring information that isn't stated explicitly, either orally or in text. He is due for a re-evaluation to determine continued eligibility for special education services, including speech-language services.

Re-Evaluation Questions

The speech-language pathologist decided to administer CELF-5 and CELF-5 Metalinguistics to determine the following:

- I. What are the patterns of strengths and weaknesses in the student's communication skills?
- 2. What implications does the profile of strengths and weaknesses have on the student's ability to access his education?
- 3. What intervention recommendations can be derived from the student's profile?



Test Results

The following scores were obtained from the administration of CELF-5.

An Overview of David's CELF-5 Scores

Core Language and Index Score	Standard Score	Confidence Interval	(90% Level) Percentile Rank	Confidence Interval
Core Language Score	85	80–90	16	9–25
Receptive Language Index	82	77–87	12	6–19
Expressive Language Index	87	82–92	19	12–30
Language Content Index	85	79–91	16	8–27
Language Memory Index	85	79–91	16	8–27

Test Scores	Scaled Score	Confidence Interval	(90% Level) Percentile Rank	Confidence Interval
Word Classes	9	7–11	37	16–63
Following Directions	7	6–8	16	9–25
Formulated Sentences	7	5–9	16	5–37
Recalling Sentences	9	8–10	37	25–50
Understanding Spoken Paragraphs	6	4–8	9	2–25
Word Definitions	9	7–11	37	16–63
Sentence Assembly	8	7–9	25	16–37
Semantic Relationships	5	4–6	5	2–9
Pragmatics Profile	2	I-3	0.4	0.1-1

David's Core Language Score of 85 (confidence interval of 80–90) is within the borderline/marginal/at risk range. The Receptive Language Index score of 82 (confidence interval of 77–87), the Language Content Index score of 85 (confidence interval of 79–91), and the Language Memory Index score of 85 (confidence interval of 79–91) are also all in the borderline/marginal/at risk range. The Expressive Language Index score of 87 (confidence interval of 82–92) is the only Index score within the average range of language performance.

Individual test scaled scores indicated weaknesses in several areas. Both the Understanding Spoken Paragraphs and Semantic Relationships tests involve more complex language skills, such as inferencing. David's Pragmatics Profile score was the lowest of any individual test score (2), and reflects his struggle to interact with others in an appropriate way.

The CELF-5 Metalinguistics was also administered, and the following scores were obtained:

Test Results

The speech-language pathologist administered CELF-5 and David's scores were as follows:

An Overview of David's Metalinguistics Scores

Core Language and Index Score	Standard Score	Confidence Interval	(90% Level) Percentile Rank	Confidence Interval
Total Metalinguistics Index	71	64–78	3	I–7
Meta-Pragmatics Index	73	63–83	4	I–I3
Meta-Semantics Index	71	64–78	3	1–7

Test Scores	Scaled Score	Confidence Interval	(90% Level) Percentile Rank	Confidence Interval
Metalinguistics Profile	5	4–6	5	2–9
Making Inferences	3	I–6	I	0.1–9
Conversation Skills	7	5–9	16	5–37
Multiple Meanings	5	4–6	5	2–9
Figurative Language	4	2–6	2	0.4–9

All of David's Index scores are within the low/moderate range of severity—the Total Metalinguistic Index Score is 71 (confidence interval of 64–78); his Meta-Pragmatics Index Score is 73 (confidence interval 63–83), and his Meta-Semantic Index score is 71 (confidence interval 63–79). The profile of Index scores indicates weakness in the ability to use content and context to make appropriate inferences, participate in conversations, and to process and understand ambiguity and idiomatic expressions.

Almost all of David's test scaled scores were in the low to very low range and ranged from 3 to 7. The Making Inferences test score was 3 and indicates an area of particular weakness. Analysis of David's response pattern for Making Inferences indicated that he has the most difficulty when making inferences in situations where emotions are in play. Additionally, the item analysis indicated that David tended to make inferences that were not related to the lead-in statements both on the multiple choice and openended responses.

Recommendations and Follow-up

Based on the information obtained on both CELF-5 and CELF-5 Metalinguistics, David continues to have weaknesses in the areas of pragmatics and metalinguistic competence and would benefit from goals and objectives specifically targeted towards these areas, such as resolving lexical and structural ambiguities, recognizing non-literal language, and using appropriate conversational language.



For more information about CELF-5, please visit

Pearsonclinical.co.uk/meta

Pearsonclinical.co.uk