

## CELF®-5 Case Study

- Receptive/Expressive Language Disorder

- Pragmatic Language Disorder

Tyler, age 6:5



### History and Referral

Tyler was a kindergarten student struggling to keep up with his peers. Tyler's teacher reported that he had difficulty maintaining attention during group discussions and seldom raised his hand to answer questions. When called on to respond, Tyler routinely answered with "Huh?" or "What?" Even when Tyler was paying attention, he often had difficulty following multiple-step directions (e.g., Put away your book, get your coat, and line up for recess.). He also had difficulty following directions that required making an inference. For example, when told, "Get your book and come to reading time," Tyler was confused about which book he should take out of his desk. Tyler did not play with his classmates; rather, he stood to the side and watched the other children play. Tyler may have been hesitant to play with other children because he appeared frustrated when children asked him to repeat what he said or when they said, "I don't understand you." Tyler's teacher requested that the school's multidisciplinary team meet to develop an intervention plan. During the meeting, the speech-language pathologist suggested the teacher and parents complete the Observational Rating Scale (ORS).

His parents and teacher completed the ORS Listening and Speaking sections prior to assessment with standardized measures. Both the teacher's and parents' ratings indicated that Tyler had language difficulties. Although Tyler's parents rated his problem behaviours as occurring less frequently than his teacher rated the behaviours, comparison of the rating profiles indicated that the teacher and parents agreed that the areas of greatest concern included:

1. Tyler's difficulty understanding what people were saying
2. Tyler's difficulty expressing himself, especially when describing events in sequential order
3. Tyler's inability to clarify what he meant if people did not understand him
4. Tyler becoming easily upset when people did not understand him

The discrepancies in the observed frequencies of problem behaviours might be explained by how Tyler felt in the classroom when others did not understand him. Tyler's parents also agreed with the teacher's initial concern that Tyler had difficulty paying attention and that Tyler's stuttering hindered his communication with others.

### Referral Questions

Based on information provided in the ORS and a lack of response to intervention, Tyler was referred for a complete speech and language evaluation to determine the following:

1. Does the student manifest a language impairment?
2. If a language impairment is present, what are the patterns of strengths and weaknesses?
3. Based on the profile, what implications do the strengths and weaknesses have on the student's ability to access his education?
4. What intervention recommendations can be derived from the student's profile?

## Test Results

The following scores were obtained from administration of CELF–5.

### Case Study Overview of CELF–5 Scores for Tyler

Core Language and Index Score	Scaled Score	Confidence Interval	Percentile Rank	Confidence Interval
Core Language Score	64	59–69	1	0.3–2
Receptive Language Index	61	55–67	.5	0.1–1
Expressive Language Index	70	64–76	2	1–5
Language Content Index	61	56–66	.5	0.2–1
Language Structure Index	65	60–70	1	0.4–2

Test Scores	Scaled Score	Confidence Interval	Percentile Rank	Confidence Interval
Sentence Comprehension	1	1–3	0.1	<.01–1
Linguistic Concepts	1	1–2	0.1	<0.1–0.4
Word Structure	7	5–9	16	5–37
Word Classes	4	2–6	2	0.4–9
Following Directions	5	3–7	5	1–16
Formulated Sentences	4	2–6	2	0.4–9
Recalling Sentences	3	2–4	1	0.4–2
Understanding Spoken Paragraphs	5	3–7	5	1–16
Pragmatics Profile	3	2–4	1	0.4–2

The Core Language Score of 64 (confidence interval of 59–69) placed Tyler’s overall performance in the very low range. The Receptive Language Index score of 61 (confidence interval of 55–67) is in the very low range, and the Expressive Language Index of 70 (confidence interval of 64–76) is in the low range. The difference of 9 standard score points between the Receptive Language Index and Expressive Language Index scores is significant ( $p < 0.05$ ), indicating that the student’s difficulties are greatest for interpreting spoken language. The Language Content Index score of 61 (confidence interval of 56–66) and the Language Structure Index score of 65 (confidence interval of 60–70) are both in the very low range and do not differ significantly. The profile of the Index scores indicates a severe language disorder that affects receptive and expressive modalities and linguistic aspects of content and structure similarly.

The test scaled scores covered a range from very low (i.e., 1) for Sentence Comprehension and Linguistic Concepts to slightly below average (i.e., 7) for Word Structure, which represented a relative strength for Tyler and supported why Tyler is able to correctly produce short, simple grammatical

sentences most of the time. By comparison, Tyler had difficulty with forming, as well as understanding, compound and complex sentences. This may be attributed to Tyler’s difficulties with linguistic concepts (e.g., before, after, next to) and word classes/relationships (e.g., banana and apple go together because they are fruit, cat and kitten go together because one is a younger version of the other). Tyler also demonstrated difficulties with listening comprehension tasks, such as following verbal directions (e.g., Point to the big spotted dog.) and answering questions about a story he had just heard (e.g., What is this story about?).

In addition to the linguistic tests, the Pragmatics Profile was completed, and ratings resulted in a scaled score of 3, indicating performance in the very low range. The majority of the ratings indicated that the expected pragmatics behaviours occurred sometimes, but a few ritual behaviours occurred frequently. Pragmatics behaviours that Tyler had the most difficulty with included: inappropriately giving and asking for directions, not asking for clarification if he is confused about a situation, not being able to coordinate gaze, and misinterpreting facial cues/expressions.

## Recommendations and Follow-up

Analysis of Tyler's responses on CELF-5, in conjunction with information obtained from Tyler's kindergarten teacher and parents, provided the SLP with insights that enabled her to develop objectives for intervention. For example, her responses to the items for Understanding Spoken Paragraphs indicated that he required few prompts to recall facts in familiar and simply stated sentences. In contrast, Tyler had great difficulty answering questions that included combinations of two or three stated facts, and he failed to answer any questions that required interpretation of the topic or inferences about reasons, outcomes, or feelings. In this case, Tyler's listening comprehension difficulties may have been due to poor understanding of concepts and vocabulary, lack of inference skills, and an inability to attend in situations where listening is important. Based on analysis of Tyler's responses, one of the

objectives for intervention might be to develop Tyler's ability to recognize and perceive relationships among high frequency words and to form associations (e.g., markers and pencils are both associated with writing/markings on paper; shoes and socks are both associated with feet/footwear). A second objective might be to develop Tyler's ability to go beyond the stated facts by making simple inferences. For example, introduce Tyler to picture stories, such as A Boy, A Dog, and a Frog (Mayer, 1967) and discuss what the characters may be thinking and feeling based on their facial expressions and body language. Also, discuss each story event that has just occurred and then ask Tyler to predict what may happen next. Based on the teacher's and parents' comments that Tyler had problems paying attention, is to consider a follow-up assessment for attention deficit hyperactivity disorder.



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