## P Pearson

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\text { CELF }{ }^{@} \text {-5 Case Study }
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- Receptive Language Disorder
- Language content difficulties

Lily, age 7:8



## History and Referral

Lily was age 7:8 and had recently relocated from a different state. Prior to the move, Lily was diagnosed with a mild-to-moderate language disorder and had received intervention services for four months. Lily's diagnosis was based on a criterionreferenced measure, language sampling, classroom work samples, and teacher and parent reports. In her new school, Lily's teacher and parents were concerned that she was struggling academically. The teacher also noted instances of Lily's delayed fine and gross motor skills development. For example, Lily's teacher stated that Lily had difficulty identifying and writing letters and numbers. Additionally, Lily's parents stated that she, "often trips or bumps into things, and is generally clumsy."

## Referral Questions

After reviewing Lily's present level of academic achievement and functional performance, the classroom teacher and the school reading specialist requested that Lily be administered a standardized measure to get a more complete profile of her language skills and to determine the following:

1. Did the student manifest a language impairment?
2. If a language impairment is present, what are the patterns of strengths and weaknesses?
3. What implications does the profile of strengths and weaknesses have on the student's ability to access her education?
4. Does the student continue to qualify for speech and language intervention services?

## Test Results

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

| Core Language and <br> Index Score | Standard Score | Confidence Interval | Percentile Rank | Confidence Interval |
| :--- | :---: | :---: | :---: | :---: |
| Core Language Score | 84 | $77-91$ | 14 | $6-27$ |
| Receptive Language <br> Index | 63 | $55-71$ | 1 | $0.1-3$ |
| Expressive Language <br> Index | 96 | $90-102$ | 39 | $25-55$ |
| Language Content <br> Index | 74 | $67-81$ | 4 | $1-10$ |
| Language Structure <br> Index | 83 | $76-90$ | 13 | $5-25$ |


| Test Scores | Scaled Score | Confidence Interval | Percentile Rank | Confidence Interval |
| :--- | :---: | :---: | :---: | :---: |
| Sentence <br> Comprehension | 1 | $1-3$ | 0.1 | $<0.1-1$ |
| Linguistic Concepts | 6 | $4-8$ | 9 | $2-25$ |
| Word Structure | 10 | $8-12$ | 50 | $25-75$ |
| Word Classes | 2 | $1-4$ | 0.4 | $<0.4-2$ |
| Following Directions | 8 | $7-9$ | 25 | $16-37$ |
| Formulated Sentences | 10 | $8-12$ | 50 | $25-75$ |
| Recalling Sentences | 8 | $6-10$ | 25 | $9-50$ |

The Core Language Score of 84 (confidence interval of 77-91) placed the student's overall performance in the below average range. The Receptive Language Index score of 63 (confidence interval of 55-71) is in the very low range, indicating difficulties in interpreting spoken information. The Expressive Language Index score of 96 (confidence interval of 90-102) placed the student's performance in the average range. The 33-point difference between the Receptive Language Index and Expressive Language Index scores occurs rarely and is clinically significant ( $p<0.05$ ). The Language Content Index score of 74 (confidence interval of 67-81) indicates performance in the low range, indicating difficulties in creating meanings for the linguistic stimuli. The Language Structure Index score of 83 (confidence interval of 76-90) placed the student's performance in the below average range. The 9-point difference between the Language Content Index and Language Structure Index scores is significant ( $p<$ 0.05), indicating relatively greater difficulties
with language content (semantics) than with language form (structure).

The test scaled scores range from a low of 1 to a high of 10. Scores for Word Structure (10), Formulated Sentences (10), Understanding Spoken Paragraphs (9), Following Directions (8), and Recalling Sentences (8) are in the average range and indicate areas of relative strength for Lily. In comparison, scores for Sentence Comprehension (1) and Word Classes (2) are in the very low range and indicated areas of weakness. The results underscored Lily's difficulties in creating meanings for spoken sentences and perceiving relationships and associations among words.

Analysis of the response pattern for Sentence Comprehension items indicated that sentences with embedded relative clauses (i.e., who) were matched correctly to the picture stimuli. In contrast, sentences with coordination (e.g., She is climbing and he is swinging.) and subordinated clauses
(e.g., The boy gathers the apples after they have fallen to the ground.) tended to be misinterpreted. Lily's poor performance may have resulted from visual-perceptual deficits that interfered with the perception of salient details in the test stimuli. Alternatively, the scattered distribution of accurate and inaccurate responses and no ceiling being reached on this test suggests that Lily's attention may have fluctuated- indicating a possible need to review Lily's behavior on other tests. For example, analysis of Lily's response pattern for Understanding Spoken Paragraphs indicates that for all paragraphs, factual questions usually resulted in more errors or,"I forgot," responses than inferential questions. This pattern also suggests that Lily's attention may have fluctuated, but that contextual cues may have made it relatively easier for her to respond to inferential
questions than to factual questions. The examiner indicated that although Lily was positive and cooperative throughout testing, she was intermittently distractible and offtask during administration of several tests.

The response pattern to items on the Word Classes test is consistent with difficulties in the acquisition and analysis of word meanings that are basic for forming associations. Because administration of this test was discontinued relatively early (ceiling Item 15), it is difficult to determine if Lily's difficulties with forming associations is tied specifically to semantic class (e.g., foot and hand are body parts) or if she has difficulty with other types of associations, such as object functions (e.g., hammer and nail), synonyms (e.g., silent and quiet), and word opposites (e.g., smooth and rough).

## Recommendations and Follow-up

Based upon assessment information, Lily would benefit from structured language tasks and practice to address her weakness in the areas of receptive language. Goals and objectives should be specifically targeted toward (a) comprehension of sentences of increasing length and complexity, and (b) increasing knowledge of word meanings and word associations.

In terms of follow-up, it would be important to administer the ORS to assess Lily's classroom language behaviors specifically and to identify areas of concern. The classroom ratings may provide a better understanding of interactions between classroom expectations and Lily's current linguistic abilities. Because Lily performed poorly on tests requiring her to attend to differences in visual stimuli, and past teacher and parent reports state concerns with problems identifying and writing letters and numbers (perhaps due to poor visual acuity) and general clumsiness (perhaps due to poor attentional skills), she should be referred for further motor skill testing and a visual acuity examination.


