

# 19 Semantic Abilities of Greek-speaking Students with Learning Difficulties

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## 19.1 Abstract

The aim of this study is to profile the semantic abilities of students with learning difficulties in a narrative context. More specifically, specific case studies of Greek-speaking students will be presented where students narrate stories orally. These narratives are analyzed in terms of the participants' semantic abilities with the use of PRISM-L and PRISM-G profiling tools which are being adapted in the Greek language. The findings are discussed in terms of intervention implications regarding special education.

**Keywords:** Semantic abilities, PRISM-G, PRISM-L, learning difficulties

## 19.2 Introduction

Research evidence demonstrates links between language difficulties and learning difficulties [1, 2, 3]. Someone's ability to tell a story involves a number of higher level skills such as language and cognitive skills [4]. More specifically, the ability to tell a well-structured story involves the ability to sequence events, to use specific and precise words, to understand cause-effect relationships, etc. [5]. Research shows that, compared to typically developing students, students with learning difficulties have difficulties in storytelling [6]. Difficulties may be evident in comprehending and depicting structural parts of a story, such as story grammar elements, or in expressive semantic and morphosyntactic skills. Weak narrative skills may affect academic school performance [7]. Thus, the aim of this study is to profile the semantic skills of two students with learning difficulties during story-telling.

## 19.3 Methodology

### 19.3.1 Sample

The narrative speech samples were collected from two participants. Participant A was a 13-year-old boy diagnosed with learning difficulties while participant P was a 13-year-old girl diagnosed with ADHD and learning difficulties.

### 19.3.2 Material and Procedure

The speech samples were collected through story-telling. More precisely, the participants were asked to narrate the Red Riding Hood story. The collected samples were analyzed with the use of PRISM [8], which was adapted into Greek [9]. PRISM comprises two distinct profiles. The first concerns profiling the relationship between semantics and the mental lexicon (PRISM-L) and the second profiles semantic abilities at a grammatical level (PRISM-G) that is thematic-role structures. PRISM-L includes a list of 61 semantic fields, which consist of 239 semantic sub-fields. This list can be used to delineate the lexical range as well as the semantic areas an individual might use. The semantic fields, moreover, are presented in the list in an acquisition order.

On the other hand, PRISM-G includes five developmental stages, with specific thematic sequences (e.g., Actor + Activity, etc.), and semantic relationships (e.g., addition, cause, etc.). It can be used to describe the order-of-mention of clauses, as well.

## 19.4 Results

Regarding participant A, during the narration of the story, he produced 84 content words with a type-token ratio (TTR) of 0.44. These words came from 16 out of 61 (26%) semantic fields, namely man, moving, food, language, making/doing, time, etc. Of these semantic fields, the one with the smallest lexical range was the semantic field of animals while one of the fields with the greatest range was that of verbs expressing movement. Concerning PRISM-G, participant A produced mainly clauses with three (43%) and four or more (28%) semantic elements, which could place him at Stages III and IV. The most frequent combination in Stage III was that of an actor + dynamic verb + a theme/goal element (33%). Concerning the connection between the clauses, there was coordination of two or three clauses (55.5%) and subordination (44.5%). Finally, regarding the order-of-mention of the clauses produced, in one case the order of the clauses was reversed.

With reference to participant P, she produced 58 content words, with a TTR of 0.6, which came from 18 out of 61 (29.5%) semantic fields. The semantic fields covered were mostly man, body, moving, furniture, food, make/do, etc. Of these semantic fields, the one with the smallest lexical range was animals while the ones with the largest range were body and moving. Regarding PRISM-G, participant P produced clauses with three (29%) and four or more (29%) semantic elements. The thematic structures produced mostly included various combinations of an actor + dynamic verb + other semantic elements. As for the connection between the clauses, participant P used coordination of one, two or more clauses (42%) and subordination (33%) while in some cases there was no connection between the clauses. Finally, the order-of-mention of the clauses depicted the order of events of the Red Riding Hood story.

## 19.5 Conclusions

Overall, it can be seen that both students used less than 30% of the available semantic fields while the lexical range of some of these fields was small. Regarding the thematic structures produced, both students used structures of four or more thematic elements but these represented a small part of the structures produced in general. Therefore, it seems that these students face semantic difficulties at a lexical and at a thematic structure level and they could benefit from a focused intervention in these areas.

## 19.6 References

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