

L1 and L2 skills in Specific Reading Disorder

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Abstract

The aim of the present study was to investigate morphosyntactic skills in primary and secondary school students with specific reading disorder and their equivalents with good reading skills, in Greek as a first language (L1) and in French as a foreign language (L2). The results of the study revealed significant differences between the two groups on all morphosyntactic tasks in both languages. Our results support the predictive property of the level of the morphosyntactic skills attained in the L1 for the acquisition of the same skills in the L2 for both students with specific reading disorder and typically developing.

Key words: morphosyntactic skills, specific reading disorder, Greek as a first language (L1), French as a foreign language (L2).

Introduction

Research has shown that students with specific reading disorder (SRD) have limited morphosyntactic skills compared to students with good reading skills (GRS) in both their first (L1) and second/foreign (L2) languages (Andreou & Tsela, 2015; Casalis, Colé, & Sopo, 2004). Those research findings are based on the hypothesis that there is a close relation between the students' skills in their first language and those in their second/foreign language (Sparks, 2012). At the same time, researchers orientate themselves towards the study of cross-language skills transfer (Abu-Rabia & Shakkour, 2014) and the role of the characteristics of each language system (Seymour, Aro & Erskine, 2003).

Research has also shown that phonological awareness seems to play a significant role in the development of decoding skills, while phonological deficits seem to increase the risk of failure in reading acquisition (Hulme & Snowling, 2014). At the same time, various studies have highlighted that non phonological skills, such as morphological and syntactic awareness, can influence and predict reading ability (Carlisle, 2003). More specifically, research, in both alphabetic and logographic languages, has shown that students with SRD have limited morphosyntactic awareness skills in comparison to their peers with GRS irrespective of their phonological awareness level (Casalis et al., 2004).

Purpose of the study

The aim of the present study was to investigate morphosyntactic skills in primary and secondary school students with SRD and their equivalents with GRS, in Greek as a first language and in French as a foreign language. Furthermore, a basic objective was to examine whether morphosyntactic skills in L1 could predict morphosyntactic skills in L2 for both groups.

Method

The sample of the study consisted of one hundred and eight (N=108) students with GRS and one hundred and eight (N=108) students with SRD (average age 12,55 (SD 1,35). Both groups were assessed for their morphosyntactic skills in both languages with four tasks from the standardized for the Greek language tool “Learning Disabilities Reading Inventory” (Padeliadu & Antoniou, 2008) and four equivalent tasks from a non-standardized reading tool for the French language made for the purposes of the study.

The morphosyntactic tasks contained two morphological awareness tasks (verb conjugation and production of compound words) and two syntactic tasks (word order of sentences accompanied by pictures and without the help of pictures).

The comparisons between mean values were made based on the Least Significant Difference (LSD) criterion at a significance level of $P < 0,05$. The statistical analyses were made by the SPSS v.15.0 software.

Results and discussion

The results of the study revealed significant differences and correlations between the two groups on all morphosyntactic tasks in both languages: morphosyntactic abilities of students with SRD in both languages were weaker than those of students with good reading skills.

Students with SRD had a statistically significant lower performance than students with GRS in the morphosyntactic tasks in both Greek and French. The low performance in morphosyntax can be attributed to the phonological deficit which students with SRD have, as has been previously shown by other studies (Hulme & Snowling, 2014). The phonological characteristics of morphemes are difficult for students with SRD and, consequently, they face difficulties in phonological processing (Casalis et al., 2004).

Table 1. Performance of students with SRD and with GRS in Greek and French in morphosyntactic tasks.

Group	Grade	Greek		French	
		Mean	SD	Mean	SD
GRS	5 th Elementary	93,60	7,95	76,85	9,47
	6 th Elementary	94,44	5,41	79,11	7,48
	1 st Secondary	95,17	5,05	82,45	6,99
	2 nd Secondary	95,22	5,10	84,44	7,84
	3 rd Secondary	95,32	5,07	86,57	8,54
SRD	5 th Elementary	47,08	7,72	17,90	4,97
	6 th Elementary	47,26	8,48	23,11	7,19
	1 st Secondary	47,58	6,37	24,80	7,01
	2 nd Secondary	47,64	6,62	25,37	7,81
	3 rd Secondary	47,92	6,41	29,17	6,18
	MSD _{0,05}	4,16		4,16	
GRS Total		94,76	5,81	81,41	8,65
SRD Total		47,48	7,03	23,63	7,49
	MSD _{0,05}	1,86		1,86	

GRS: Good Reading Skills, SRD: Specific Reading Disorder, Mean: Mean Value, SD: Standard Deviation, MSD: Minimum Significant Difference ($P<0,05$)

Table 2. Correlation of morphology and syntax in Greek with the respective skills in French in GRS and SRD students.

Group	Tests in Greek/French	Morphology	Syntax
GRS	Morphology	$r=0,708$	$r=0,699$
		$P<0,001^*$	$P<0,001^*$
	Syntax	$r=0,624$	$r=0,446$
		$P<0,001^*$	$P<0,001^*$
SRD	Morphology	$r=0,248$	$r=0,254$
		$P=0,010^*$	$P=0,008^*$
	Syntax	$r=0,499$	$r=0,393$
		$P<0,001^*$	$P<0,001^*$

GRS: Good Reading Skills, SRD: Specific Reading Disorder, *Statistically Significant difference

In addition, the results of the present study come to agreement with previous research findings which showed that students with SRD, irrespective of their level of phonological awareness, have limited morphological awareness compared to their peers with GRS (Casalis et al., 2004). The morphological tasks in this study also contained words with phonological transparency which may not have been the reason for the difficulties the students faced and their low overall performance. Furthermore, the transparency degree of the Greek language (shallow system) and the French language (deep system) influenced and determined the performances of both groups (Seymour et al., 2003). The unpronounceable endings which characterize the morphology of the French language and the great number of correlation between phonemes and graphemes in French can be especially difficult for students (Ziegler & Goswami, 2005). Finally, our results revealed that the deficits appeared in a morphosyntactic task in one language were transferred analogically to the same task in the other language in both groups, which shows that difficulties in the morphology and syntax in L1 can have an immediate and severe impact on the L2 especially for students with SRD (Abu-Rabia & Shakkour, 2014; Sparks, 2012).

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