

From the assessment of speech samples to intervention in Language Impairment of European Portuguese speaking children

Ana Castro ^{1,2} Catarina Dôro ^{1,3} Carolina Marques ^{1,4}

¹ Escola Superior de Saúde – Instituto Politécnico de Setúbal (ESS/IPS) ² CLUNL/FCSH - Universidade NOVA de Lisboa

³ Relicário de Sons ⁴ MR Terapias

Background

Children with language impairment, such as Specific Language Impairment (SLI), or what is coming to be known as Developmental Language Disorders (DSD), show differences in the pace and patterns of their language acquisition. SLI can affect modules of language to a different extent. Lexical, phonological, morphological, syntactic, semantic and pragmatic domains can be affected isolated or conjointly, in different language structures (Rapin, 1996; Leonard, 1998, 2014; Botting & Conti-Ramsden, 2004; Friedmann & Novogrodsky, 2008, a.o.).

Only an accurate linguistic profile of the child, based on daily life linguistic performance, allows a full understanding of its (dis)abilities. Ideally, the assessment must combine data collected from standardized tests with language samples analysis, using, for example, a tool such as *LARSP - Language Assessment, Remediation and Screening Procedure* (Crystal, Fletcher & Garman, 1976). This procedure has been adapted to European Portuguese (Castro, Marques & Dôro, 2017) and enables the clinicians to appraise the strengths and weaknesses of the discourse of a child, as well as to locate it in a developmental scale of morphosyntactic development.

Aim of the study

→ to show that a characterization of the morphosyntactic competences of children with language impairment, using an *LARSP - Language Assessment, Remediation and Screening Procedure* for European Portuguese (LARSP-PE) (Castro, Marques & Dôro, 2017), allows a clearer insight into their (dis)abilities in terms of language development

Methods

Language sample collection

- narrative telling - *Frog, where are you?* [Mayer, 1969]
- adult-child interaction in clinical context

Transcription

CHAT format [MacWhinney, 2000]

Analysis

LARSP-PE types of utterances and morphosyntactic categories

types of ungrammaticality (morphosyntactic errors)

Participants

4 European Portuguese speaking children diagnosed with SLI, 2 mainly on the phonological domain (PhoSli) and 2 on the syntactic domain (SynSli) [Friedmann & Novogrodsky, 2008]

Table 1 . Characterization of participants (sex, age and LI diagnosis)

	SEX	AGE	LI diagnosis
D	M	4;11	PhoSli
A	M	6;4	PhoSli
R	M	6;8	SynSli
B	M	7;11	SynSli

Questions

- Do SLI children show different patterns on language development comparing to their typically developing peers?
- Do SynSli children show more ungrammatical sentences and morpho-syntactic errors, such as in agreement, functional words and word order, than PhoSli children?

Data and Results

Table 2 . Utterances type

	D	A	R	B	
UNANALISED	unintelligible	4	1	3	0
	symbolic noise or interjection	3	2	0	1
	ungrammatical or deviant repeated	2	4	2	11
PROBLE MATIC	incomplete	1	0	0	0
	ambiguous	6	4	3	1
	stereotypes	0	0	0	0
	ANALYSED	1	1	0	1
	TOTAL	61	26	55	35
	78	38	63	49	

Discussion

→ Results show that language sample analysis, summarized in a LARSP profile, accounts for a characterization of different language modular deficits.

→ Morphosyntactic language profiling must be compared with other language domain profiles in order to clarify the nature of (specific?) deficits.

PhoSli & SynSli children

* less complex structures, at sentence, phrase and word-levels, than typically developing children

PhoSli children

* grammatical errors are mainly a different lexical selection of a preposition [due to phonemic substitutions /n/ → /d/?]

SynSli children

* higher number of ungrammatical sentences

* more difficulties with functional categories and morphological inflections

Table 3 . Type of ungrammaticality

	D	A	R	B
preposition - different lexical selection (phonemic substitution)	2	2	1	4
lack of functional elements				
determiner		1	1	1
nominal agreement (plural)		1		1
clitic object pronoun (replaced by strong pronoun)				1
verb/verbal inflection				3
preposition				2
pronouns reference				1

Conclusions

LARSP-PE is a valuable tool for the assessment of Language Impairment since it allows to characterize systematically the spontaneous speech of children and can provide a more precise and accurate diagnosis and guidance to intervention.