

ARE PARENTS AND TEACHERS CONCERNED ENOUGH ABOUT CHILDREN'S SPEECH ?



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Léonor Piron¹, Andrea MacLeod², Christelle Maillart¹



IDENTIFICATION OF SPEECH-SOUND DISORDERS IN FRENCH-SPEAKING PRESCHOOLERS: THE UTILITY OF PARENT'S AND TEACHER'S CONCERNS AND THEIR CORRESPONDENCE TO STANDARDIZED ASSESSMENT

INTRODUCTION

Speech sound disorders (SSD) are associated with developmental language disorders (DLD), with difficulties in communication, social participation, literacy, and learning [1-6]. SSD and their effects may have long-lasting repercussions, as adults with a history of SSD may still face social limitations, and encounter difficulties in achieving key life goals (e.g. employment) [7].

An early identification process is therefore highly necessary to prevent these consequences in children with SSD [2].

In this sense, parents' and teachers' concerns about speech sound development have already proven to be very useful measures in prior studies in English language [3,4]. These measures have shown interesting correspondences with standardized tests [4]. Their interest and validity for screening SSD merits further study.

GOALS

- To determine the usefulness of parents' and teachers' concerns for the identification of SSD in French-speaking preschoolers
- To contribute to current advances in the early diagnosis of SSD in French-speaking children

METHODS

192 preschoolers

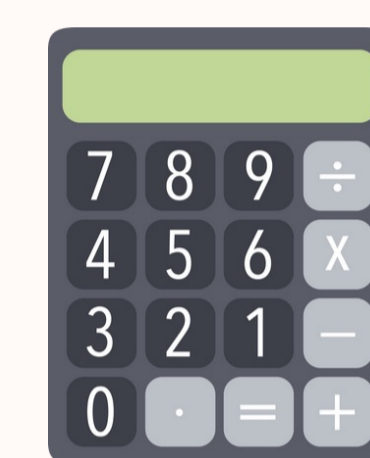
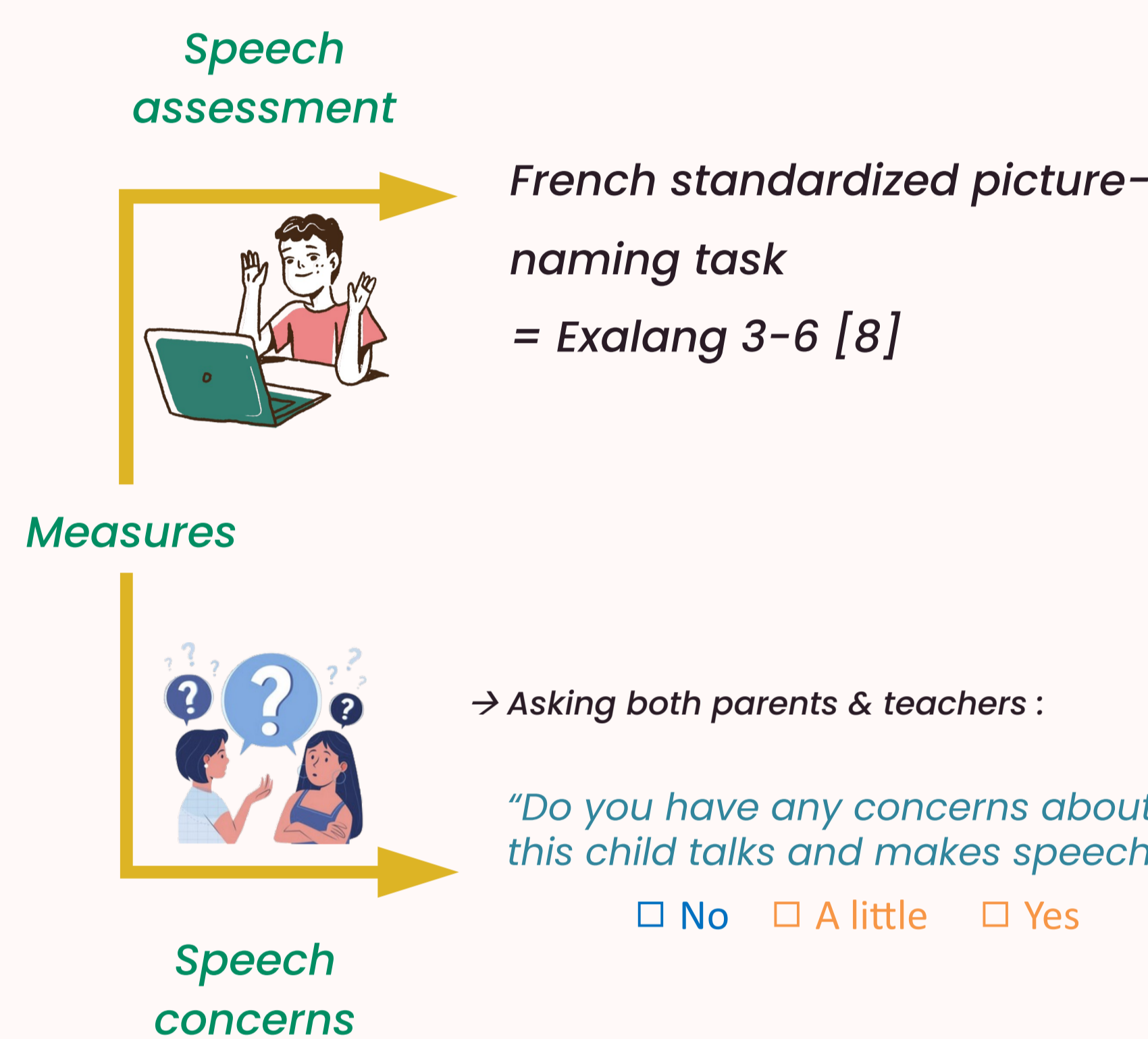
Monolingual French-speakers

→ Tested for

- IQ,
- Audition,
- Medical & linguistic history,
- Lexical & Morphosyntactic level

35 to 67 months

X192 → Exclusion = multilingual, hearing loss ≥ 25 dB, IQ \leq P16



- Correspondence between measures
- Spearman correlations
 - Sensitivity and specificity* analyses

Binary scales have been created for analysis purpose : SSD/no SSD

3 variables	SSD	No SSD
Standardized score	Scores \leq -1SD	Scores $>$ -1SD
Parental concerns	"Yes" or "a little"	"No"
Teacher's concerns	"Yes" or "a little"	"No"

RESULTS

Figure 1: Spearman correlations between standardized test's result, parent's concern and teacher's concern

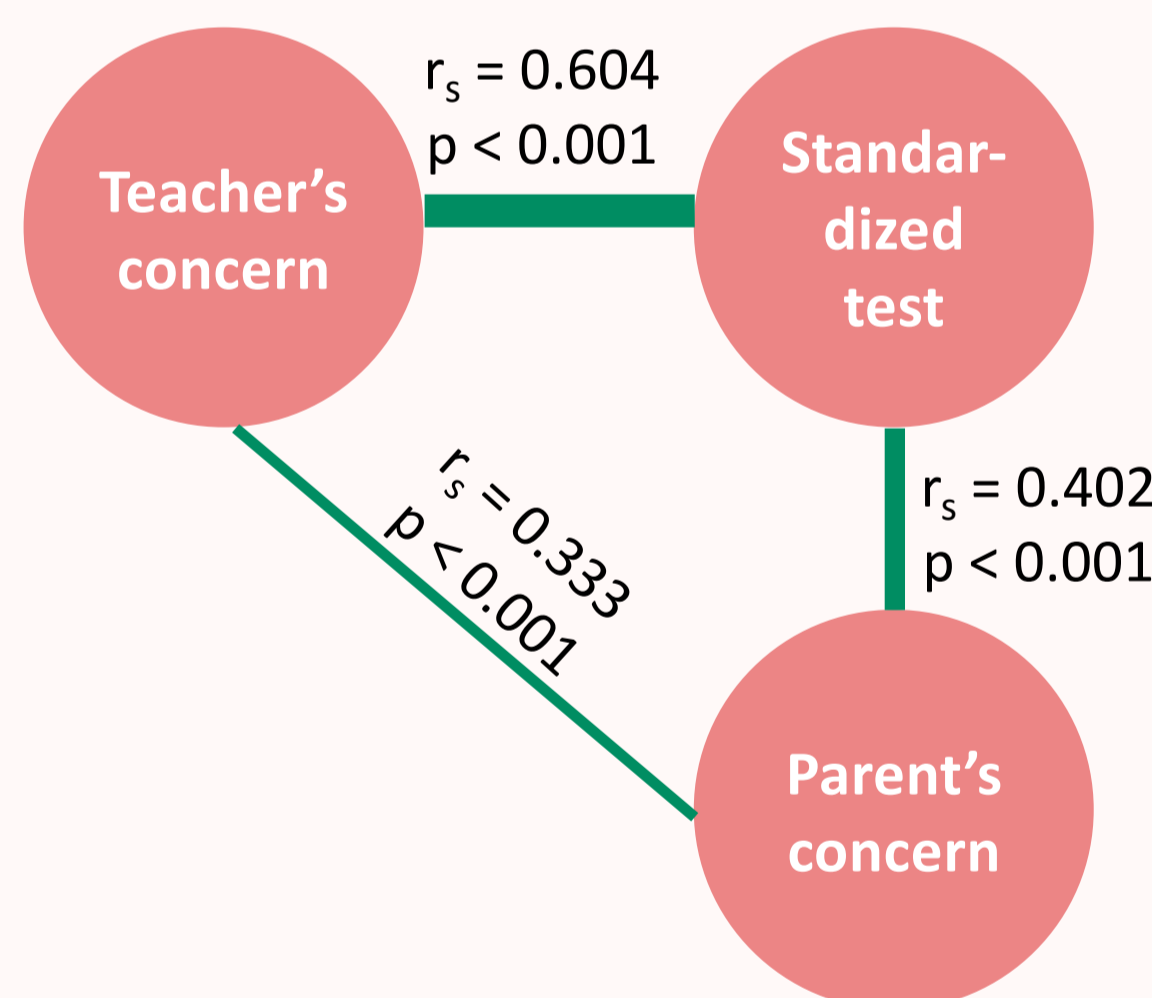


Figure 2: Sensitivity and specificity of parent's and teacher's concerns in comparison to standardized test for all children

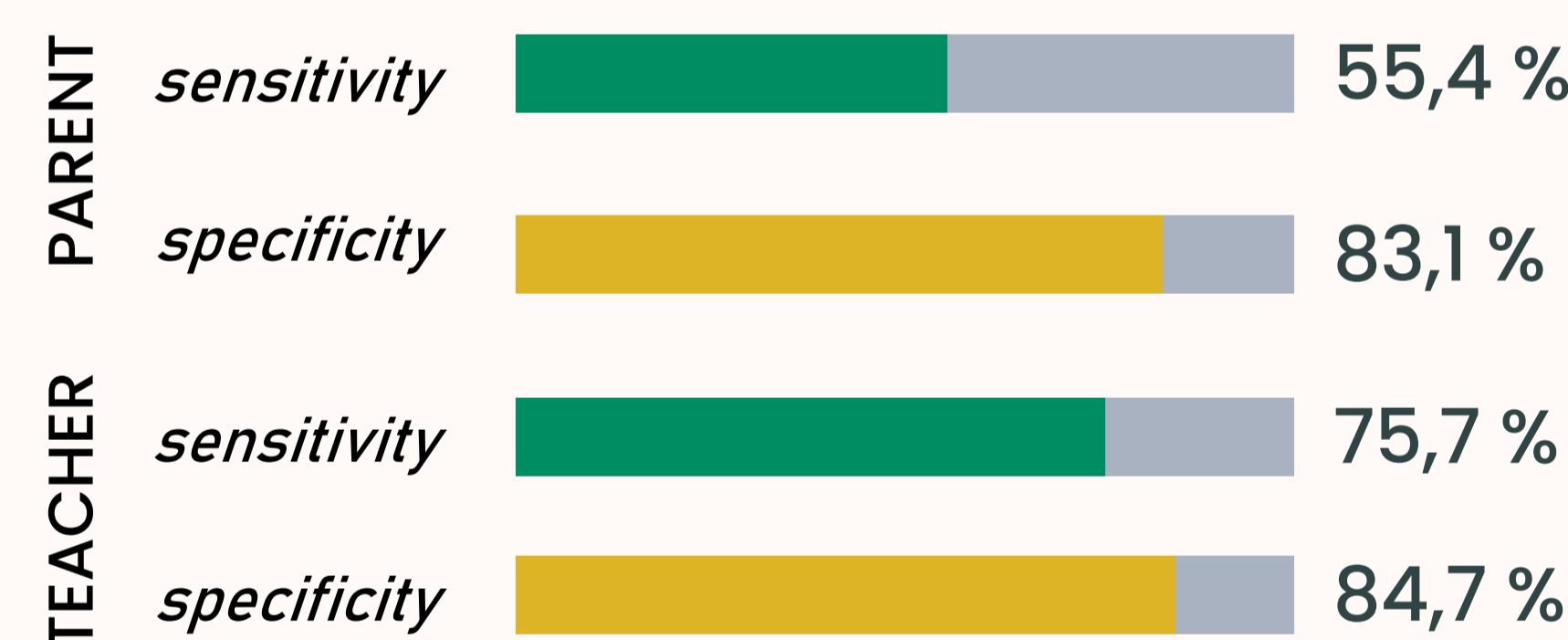
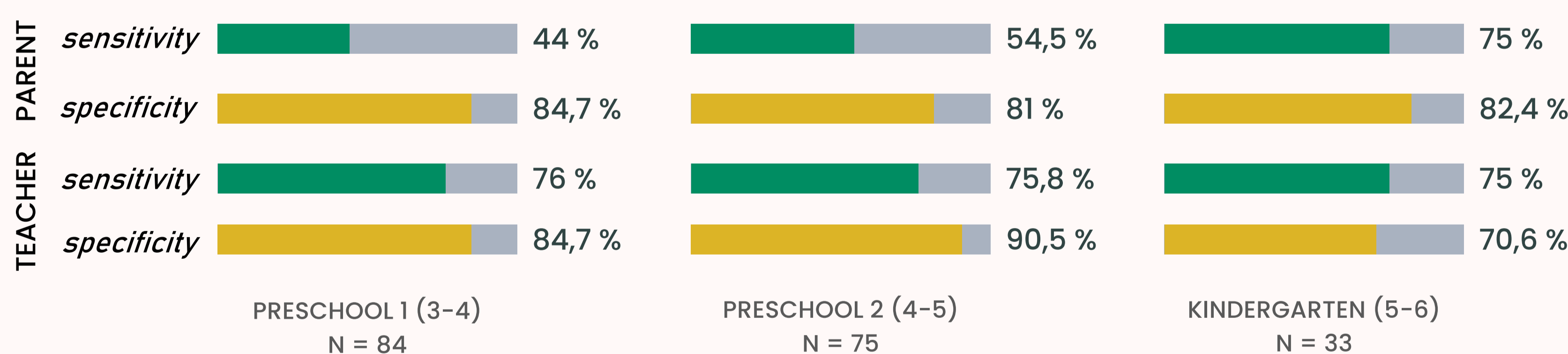


Figure 3: Sensitivity and specificity of parent's and teacher's concerns in comparison to standardized test, according to children's grade



DISCUSSION POINTS

In comparison to a similar Australian study [4]:

In our results

- ✓ Parent's and teacher's concerns → predictive
- ✓ Teacher's correlation > parent's correlation with the test
- ✓ Teacher's and parent's concerns are mildly correlated
- ✗ teacher's specificity \approx parent's specificity
- ✗ teacher's sensitivity > parent's sensitivity

In our methods

- ✗ Our study includes fewer SSD children than [4].
- ✗ We have children as young as 2;11 years old, vs. 4 years old in [4].
- ✗ Belgian school system also differs from the Australian one.

Parental sensitivity is globally low and enhances over grades. It is possible that, in comparison with teachers:

- (1) parents have \neq expectations/representations of children's speech development
- (2) parents tend to understand their child better [9].

Teachers' specificity moves over grades and is lower in kindergarten → This can be explained by

- (1) a smaller number of children,
- (2) The imminent entry into elementary school for kindergartners.

Parents' and teachers' concern are predictive measures, in comparison to a standardized test. Both types of concern appeared to be specific, but teacher's concern was found to be more sensitive than parental concern.

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*FOOTNOTE

Sensitivity = the ability of a test to detect a true positive, being based on the true positive rate, reflecting a test's ability to correctly identify all people who have a condition [10]

Specificity = the ability of a test to detect a true negative, being based on the true negative rate, correctly identifying people who do not have a condition [10]

AFFILIATIONS & CONTACT

¹ Speech and Language Pathology Department, RUCHE Research Unit, University of Liege, Belgium

² Faculty of Rehabilitation Medicine - Communication Sciences & Disorders, University of Alberta, Canada

Contact : leonor.piron@uliege.be, PhD candidate, FRESH (F.N.R.S.) Grant