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Background . phonological awareness

Phonological awareness is an explicit linguistic competence that assumes a **crucial role in language development and in the reading/spelling learning process**, being these competences addressed by many professionals, such as educators, teachers, speech and language therapists/pathologists, and psychologists (Freitas,Alves & Costa, 2007).

The project ‘Phonological Awareness – instruments for clinical and educational intervention’ had as a main goal to turn available a phonological awareness assessment tool, in digital format, validated and standardized to Portuguese children between 3 and 9 years old.



Many studies were conducted to explore and identify the main features to be included in **ConF.IRA** (Phonological Awareness – Screening and Assessment Instrument Castro, Alves, Correia & Soares, *in prep.*).

Aim of the study

Until the current version, numerous exploratory studies were carried out, focused on the effect of (psycho)linguistics features as well as validity and reliability. The goal of this presentation is to describe the main steps of the development of ConFIRA towards its current version.

Research questions

- i.

The variables *age* and *schooling* interfere in the performance primed by each item of ConF.IRA?
- ii.

There is differences between children, regarding each item of ConF.IRA, independently of their age ranges?
- iii.

There is differences between the items of each groups of tasks of ConF,IRA in each group of age and schooling?

Hypothesis

- H₁

In each item, children’s performance increase as the age/schooling ranges
- H₂

There is differences between children’s performance in each item of ConF.IRA, independently of their age ranges
- H₃

In each age/schooling ranges, the items of each groups of tasks of ConF,IRA discriminate performances.

Results and Conclusions

Content validity . lexical representativity

Excluding pseudo-words, ConF.IRA matches in 67% the active lexical performance of Portuguese children from 3 yo (regarding PLEX5 Frota et al. 2012).

Results & Hypothesis Verification

- Results show better performances for schoolers than preschoolers, mainly bridging the 5 yo group to the 1st grade one (alphabetization effect).
- ✓

H₁ In each item, children’s performance increase as the age/schooling ranges.
- Statistical analysis show differences between children’s performance in each item
- ✓

H₂ In each item of ConF.IRA, there is differences between children performance in each item , independently of their age ranges
- Statistical analysis show that not all items discriminate performances
- ✗

H₃ In each age/schooling ranges, the items of each groups of tasks of ConF,IRA discriminate performances.
→ the items do not discriminate can be eliminated

Discussion & next steps

- Results show that it is crucial to invest in the different psychometric steps of language assessment tools, until get the right versions.
- Next step: to finalize the current extended version, reduce it to a screening one and standardize both.

References

Castro, A.,Alves, D. Correia, S. & Soares, C., (in preparation). ConFIRA: Consciência Fonológica - Instrumento de Rastreio e de Avaliação.
Freitas, M. J.,Alves, D., & Costa, T.. (2007) O Conhecimento da língua: desenvolver a Consciência Fonológica. Lisboa: Ministério da Educação/DGIDC.

Background . ConF.IRA

Correlations, validity and psychometry aspects

Table 2: ConFIRA's studies focused on (psycho)linguistics, methodological and psychometric aspects

Segmental awareness	Syllabic awareness	Word awareness	Other aspects
Ribeiro & Alves (2007)		Cardoso & Castro (2011)	Lopes & Castro (2009)*
Afonso & Correia (2008)	Santana & Castro (2008)		Alves, Castro & Correia (2010)* Santos, Pinheiro, & Castro (2010)* Antunes (2013)*
Vasco & Correia (2008)	Barriguita & Alves (2008)		Leitão (2013)*
Silva & Correia (2008)	Meireles & Alves (2008)		Alves, Castro, Correia & Soares (2015)*
Aparício & Correia (2008)	Jesus & Alves (2008)		Miranda, Castro & Alves (2015) [§] Videira, Castro & Alves (2015) [#] Martins & Alves (2016) [§]
	Isabel & Alves (2009)		Silva, Alves & Soares (2016) [#]
	Ribeiro & Alves (2009)		Ortega, Alves & Castro (2016) [#]

- **2008-2011**: tasks and phonological properties of the stimuli
(at segmental, syllabic and word levels).
- **2009-2015**: psychometric aspects as validity and reliability*
- **2015-2016**: pictographic properties of the stimuli[#]
- **2015-2016**: tool usability^{\$}.
- **ConF.IRA** is now adapted to the evidences of these studies and assumes them in terms of (psycho)linguistics, methodological and psychometric aspects, considering also the different professional needs observed, in order to be a valid instrument.

Methods

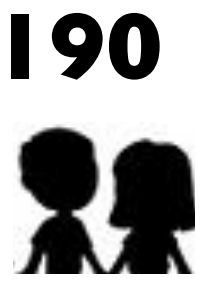
Task ConFIRA administration

Variables Schooling ranges (groups)
Age ranges (groups)
Phonological awareness performance (scores)

Data analysis Descriptive statistics analysis
ANOVA repeated measures

Participants

[sample from: Pereira, Fontes & Castro, 2013]



190 children between **3 and 8 years old (yo)**, with **typical language development**, participated in the different studies conducted under the project.

Table 1: Characterization of participants (age/schooling, sex and *n* of each)

AGE (yo) / SCOLARITY	N	SEX	
		F	M
3 yo	33	22	11
4 yo	33	18	15
5 yo	26	18	18
1st grade	29	14	15
2nd grade	29	18	11
3rd grade	30	19	11

Frota, S., Correia, S., Severino, C., Cruz, M., Vigário, M., & Cortês, S. (2012). PLEX5 - A production lexicon of child speech for European Portuguese / Um léxico Infantil para o Português Europeu. Lisboa: Laboratório de Fonética CLUL/FLUL.
Pereira, A. R., Fontes, R., & Castro, A. (2013). Contributo para a validação de um instrumento de avaliação de consciência fonológica em idade pré-escolar e escolar [Monografia de licenciatura]. Setúbal: Escola Superior de Saúde do Instituto Politécnico de Setúbal.