

Construction and Validation of a Phonological Awareness Test Battery for Nursery School Pre-Reading Children.

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ABSTRACT

We have constructed and tried to validate a comprehensive phonological awareness tests battery. One characteristic of this battery was to use attractive pictorial material enhancing task compliance. A longitudinal study design was used. A sample of children has realized phonological tests at the end of nursery school. At first grade, the same children were given spelling and reading tests. Normative data for the most predictive tasks of future success in reading and spelling acquisition are presented.

INTRODUCTION

For preschool-level French speaking children, validated comprehensive phonological awareness test batteries are still lacking.

The aims of this study are as follows:

- to construct and validate a comprehensive phonological awareness test batteries;
- to use attractive pictorial material enhancing task compliance, and using epi- and meta-phonological processes;
- to determine the most predictive tasks of future success in reading and spelling acquisition;
- to collect the normative data for these tasks.

METHODS

1. Participants

- 64 prereader children;
- native monolingual French speakers;
- no history of oral and speech motor difficulties.

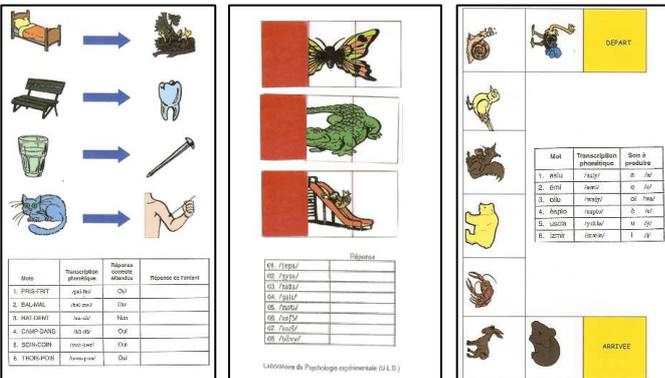
2. Procedure

- A longitudinal desing.

3. Tasks

- At the end of nursery school:
 - tests of intellectual efficiency (Raven, EVIP, BELEC);
 - different phonological awareness tests (BELEC, N-EEL);
 - the phonological tests battery.

Rhyme detection: Syllable deletion: Phoneme identification:



The image shows three sets of task materials. The first set, 'Rhyme detection', shows pairs of images (e.g., a bed and a tree, a bench and a tooth) with arrows indicating a matching task. The second set, 'Syllable deletion', shows images of a butterfly, a frog, and a train with a red box covering the first syllable. The third set, 'Phoneme identification', shows a grid of images (snail, bear, cat, etc.) with a table for recording responses.

Item	Transcription phonétique	Réponses attendues	Réponses au test
1. PRIG-FRET	prɛʁ frɛt	OUI	
2. BALANAL	balan al	OUI	
3. HAN-DANT	nan dɑ̃	NON	
4. COMP-DANS	ɑ̃p dɑ̃	OUI	
5. BONN-COIN	bɔ̃n kɔ̃	OUI	
6. THONN-PON	ʁɔ̃n pɔ̃	OUI	

Item	Transcription phonétique	Réponses attendues	Réponses au test
1. BOUTON	bɔ̃tɔ̃	OUI	
2. BOUTON	bɔ̃tɔ̃	OUI	
3. BOUTON	bɔ̃tɔ̃	OUI	
4. BOUTON	bɔ̃tɔ̃	OUI	
5. BOUTON	bɔ̃tɔ̃	OUI	
6. BOUTON	bɔ̃tɔ̃	OUI	

Mat	Transcription phonétique	Sorti à produire
1. BOUTON	bɔ̃tɔ̃	ɑ̃ / ʁ
2. BOUTON	bɔ̃tɔ̃	ɑ̃ / ʁ
3. BOUTON	bɔ̃tɔ̃	ɑ̃ / ʁ
4. BOUTON	bɔ̃tɔ̃	ɑ̃ / ʁ
5. BOUTON	bɔ̃tɔ̃	ɑ̃ / ʁ
6. BOUTON	bɔ̃tɔ̃	ɑ̃ / ʁ

A composite score has been calculated by phonological units

- At first grade
 - reading and spelling tests.

RESULTS

Correlation between phonological awareness tasks and reading and spelling tasks.

Tasks	Reading	Spelling
Rhyme awareness	.04	.31*
Syllable awareness	.36*	.48*
Phoneme awareness	.41*	.48*

*p < .05

The most predictive tasks of future success in reading and spelling acquisition.

	SPELLING	READING
Rhyme	Detection	/
Syllable	Reversal	Detection tasks Identification Deletion (initial) Blending
Phoneme	Deletion (initial)	Identification (initial) Localization Deletion (initial)

Correlation between the experimental phonological awareness tasks and published phonological awareness tasks by BELEC and N-EEL

Our battery	Rhyme detect.	Initial syll. deletion	Syll. revers.	Initial phon. ident.	Initial phon. deletion
Belec					
N-eel					
Rhyme Detect.	.70**				
Initial syll. deletion		-.09			
Syll revers.			.49**		
Initial phon. ident.				.70**	
Initial phon. deletion					.52**

** p < .001

DISCUSSION

The present longitudinal findings show a relationship between different phonological awareness measures in kindergarten and reading and spelling development in first grade.

Our study, in line with some previous studies (e.g., Muter et al., 1998), showed that rime awareness capacities in kindergarten are only predictive for later spelling but not reading abilities.

The originality of the present study is to determine the most predictive tasks of future success in reading and spelling acquisition.

This battery seems to show satisfactory external validity.