# The effect of a French intervention on children's spelling of morphosyntactic agreement

Natalia Bilici, Sonja Ugen, Constanze Weth (University of Luxembourg)

**Pretest:** 

verb

preadj

S 50

noun



#### **Context:**

Multilingual education: Luxembourg is officially trilingual: Luxembourgish, German and French. Children learn to read and write in **German** from 1<sup>st</sup> grade on. Written **French** is added to the curriculum in grade 3. **Luxembourgish** remains the language of communication throughout primary school.

Due to a high percentage of immigration (50,3% in 2013) many other languages are spoken by the pupils: Portuguese, French, Italian, Slavic...

#### **Method:**

# Intervention: 2 experimental groups 337 grade 5 children (mean age = 12 years) Intervention group Control group Language structures training Comprehension Pre-test

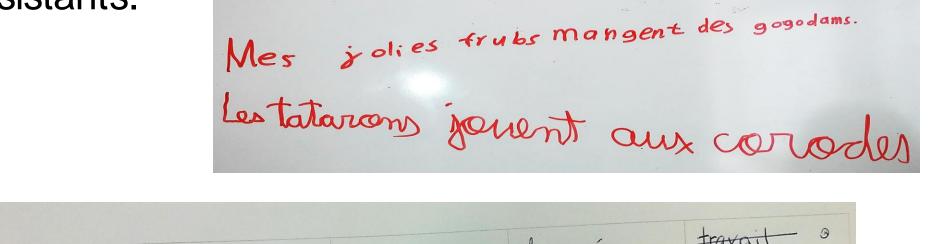
Intervention

6 sessions x 20 minutes

During the intervention session, pupils:

- analysed French agreement with the method of "balles d'accord"<sup>1</sup>;
- wrote small dictations and examined their spellings within the syntagmatic and paradigmatic paradigms ("phrase dictée du jour")<sup>1</sup>;
- wrote pseudowords, trying to realize plural spelling based on pure syntactic criteria.

The intervention was performed by trained student assistants.



V travaillent

travaille @

### Design of pre- and posttest:

	Word category			
	noun	verb	adjective	
frequent	les train <u>s</u>	les parents raconte <u><b>nt</b></u>	les pauvre <u>s</u> chiens	les avions bleu <u>s</u>
pseudoword	les prasse <u>s</u>	les insectes amote <u><b>nt</b></u>	les dabe <u><b>s</b></u> fleurs	les jouets tavre <u>s</u>
			before noun	after noun
		Position		

Children were asked to fill in words within preprinted sentences containing gaps. The words contained target spellings and filler items.

The dictations were presented via audio CD recorded by two different female native speakers.

## **Hypotheses:**

- 1. Concerning the **pretest**, the difficulty patterns established for pupils with French as first school language will be confirmed for children who acquire French as second written language.
- 2. An intervention, training morphosyntactic structures:
- (a) will lead to improvement of spelling of the intervention group.
- (b) improve children's spelling related to syntactic regularities.

#### References:

- <sup>1</sup> Brissaud, C., Cogis, D. (2011). Comment enseigner l'orthographe aujourd'hui? Paris, Hatier.
- <sup>2</sup> Fayol, M., Totereau, C., Barrouillet, P. (2006). Disentangling the impact of semantic and formal factors in the acquisition of number inflections: Noun, adjective and verb agreement in written French. Reading and Writing, 19(7), 717–736.

Contact: natalia.bilici@uni.lu

#### Aim:

Orthography encodes not only phonological but also morphosyntactic information. French nominal plural is marked by <-s> and verbal plural by <-nt>.
As both markers are silent (only marked in writing), children have difficulties to acquire and spell them correctly even by the end of primary school.

Spelling performance depends on the semantic motivation of every word category, syntactic position as well as their frequency<sup>2</sup>.

Aims:

- (1) to verify if the difficulty patterns of morphosyntactic information found for French monolinguals are confirmed for pupils acquiring French as second written language;
- (2) to improve their spelling competence by carrying out an intervention which fosters morphosyntactic processing.

— INTERV\_GR\_Freq\_Words

— CONTR\_GR\_Freq\_Words

-- INTERV\_GR\_Pseudo\_Words

CONTR\_GR\_Pseudo\_Words

postadj

#### **Results:**

#### *effect of frequency* ( $F_{1,315} = 396.33$ , p = .0001)

- words > pseudowords
- Children's spelling performance decreases when no semantic information is available, especially for verbs.

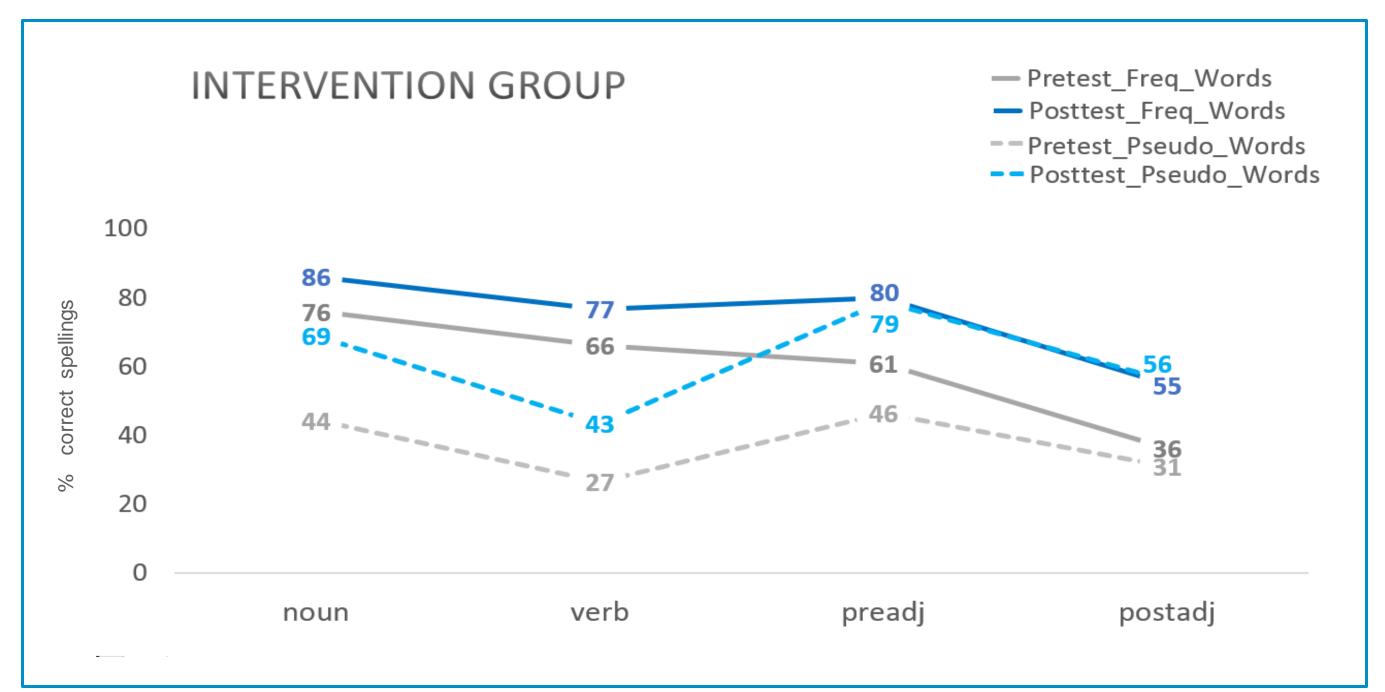
#### **effect of word category** ( $F_{3,945}$ = 133.92, p = .0001)

noun > prenominal adjective > verb > postnominal adjective

#### interaction category \* frequency $(F_{3,945}=102.86, p=.0001)$

- words: noun > verb > prenominal adj.> postnominal adj.
- pseudowords: noun > prenominal adj.> verb > postnominal adj.
- Children seem to heavily rely on semantics to inflect verbs as their performance is better for frequent verb than for pseudoverbs.

#### **Effect of the intervention:**

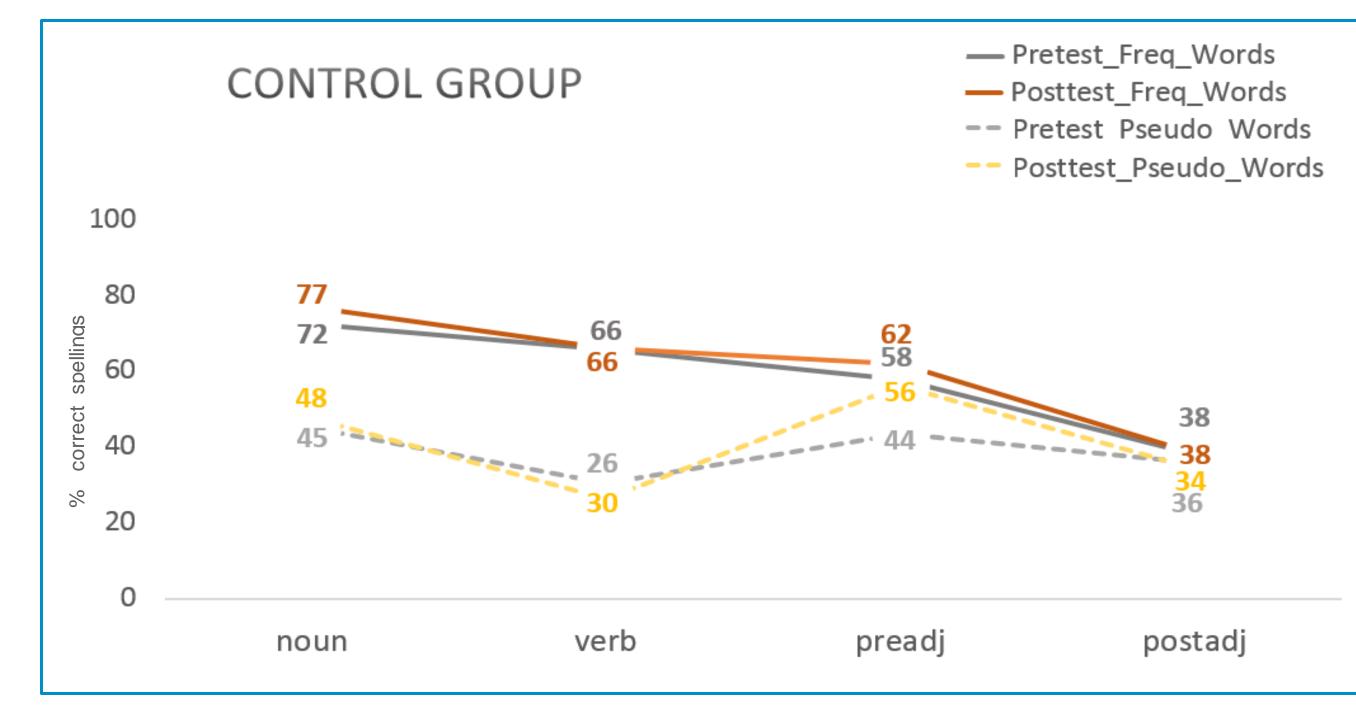




Both groups improved their spelling skills in the posttest.

#### interaction intervention \* group ( $F_{1.305} = 56,94, p = .0001$ )

The increase of performance in the posttest was larger for the intervention group for frequent words and for pseudowords in comparison to the control group.



#### interaction frequency \* intervention \* group ( $F_{1,915}$ = 13,82, p = .0001)

- Concerning the performance on pseudowords only:
  - the intervention group became more sensitive to syntactic regularities independently of semantics.
  - the performance on verbs and postnominal adjectives still remains the lowest (effect of position).

#### **Conclusions:**

- 1. The pretest shows that children acquiring French as second written language show similar difficulty patterns as French monolinguals after 4 years of schooling. The morphosyntactic difficulties under study are thus specific to the acquisition of writing skills. The sequence of difficulty (noun > verb > prenominal adjective > postnominal adjective) only confirms for frequent words. Performance on pseudowords show that pupils use the <-s> marker more frequently than the <-nt> plural marker.
- 2a. The intervention group improved significantly in their spelling in comparison with the control group in all words and pseudowords categories and positions.
- 2b. The performance of the intervention group on pseudowords show that the training improved children's spelling according to syntactic regularities.