## The effect of training morphosyntactic markers in German and in French on multilingual fifth-graders' spelling

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## Résumé

Many studies focussing on spelling in French and German languages show that, even by the end of the primary school, pupils have difficulties to encode morphosyntactic information in their writing. Particularly problematic are, for instance, capitalisation of nouns in German (Betzel 2014) or plural markers in French (Fayol et al. 2006), because they are inaudible and require knowledge that goes beyond simple phoneme-grapheme correspondences. Our paper presents how multilingual learners deal with silent morphosyntactic markers in French and German and shows the effects of an intervention training on children's spelling performance. In total our study included 228 multilingual fifth graders (mean age 11 years) with four years instruction in German and two years instruction in French. They were assigned to an intervention (n=137) and to a control group (n=91) based on the results of a spelling test in French and German. This was done by creating performance groups that were, in a second step, attributed to one of the experimental groups taking their performance into account (quasi-randomised procedure).

The French test consisted of three word categories of different difficulty (nouns, verbs, adjectives). For adjectives only, position (pre- vs. post-nominal) was also manipulated. The German test focussed on three lexical-semantic characteristics (concrete nouns, abstract nouns, nominalizations) and four syntactical positions (determinant+noun, determinant+adjective+noun, adjective+noun, noun) frequent words and pseudo-words. Additionally, word frequency was manipulated within each language (frequent words vs. pseudowords). These difficulty levels have been based on the literature published on monolingual learners (French: Totereau et al. (2014), German: Funke (2005); Guenther (2007); Betzel (2014)).

The children participated in 12 intervention sessions of 20 minutes each (six in German and six in French, the order was counterbalanced). Children of the intervention group were trained to improve their morphosyntactic awareness and thus spelling performance of French plurals and German capitalization. The control group received the same amount of language input than the intervention group, but they were trained on another aspect of language i.e. listening comprehension.

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Results from the pre-test show that multilingual children acquiring German and French show similar difficulty patterns as German or French monolinguals. The post-test shows that the intervention group improved significantly in both their German and French spelling in comparison to the control group in all word and pseudo-word categories and positions. The intervention group's performance increased especially on pseudo-words, indicating that the training had an effect on children's spelling according to syntactic regularities. The study results are specifically important to better understand the learning processes of morphosyntactic spelling in primary school. The implications on the teaching methods will be discussed.

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**Mots-Clés:** morphosyntactic structures, intervention study, explicit teaching, spelling skills, French, German