

EFFECTS OF SPOKEN WORD RECOGNITION AT SCHOOL ENTRY ON TEXT COMPREHENSION IN GRADE 3 ARE MEDIATED THROUGH LEXICAL QUALITY

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Good text comprehension rests partly on the quality of lexical representations, i.e. reliable and tightly integrated representations of the phonological and orthographical properties of words. Little is known, however, about how the development of lexical quality is related to accurate spoken word recognition. Accurate spoken word recognition might help beginning readers to build lexical representations of words, thereby facilitating the acquisition of word reading and text comprehension skills. The aim of the present study was to investigate more precisely the development of spoken word recognition and its contribution to the development of reading comprehension.

Following these considerations, the present research employed a longitudinal design to examine how the accuracy of spoken word recognition skills develops in beginning readers, and whether the effects of spoken word recognition on later text comprehension skills are mediated through the quality of phonological and orthographical representations of printed words. A sample of 346 German primary school children was tested at school entry for their spoken word recognition. At the end of Grade 1, Grade 2, and Grade 3, spoken word recognition and the quality of phonological and orthographical representations were assessed with computerised tests. In addition, at the end of Grade 3, text comprehension was assessed with a standardised German reading test. Parallel tests were constructed for measuring the quality of phonological and orthographical representations and corresponding spoken word recognition skills. For all predictors, different but parallel item sets were used at different times of measurement.

Latent growth curve modelling indicated that spoken word recognition skill increased through the early years of primary school, following a quadratic trend. While spoken word recognition skill improved substantially between the beginning of Grade 1 and the end of Grade 2, only marginal gains were observed between the end of Grade 2 and the end of Grade 3. Hierarchical linear models indicated that text comprehension at the end of Grade 3 was predicted by spoken word recognition at the beginning of Grade 1. Most importantly, this effect was mediated through lexical quality (phonological and orthographical representations) at the end of Grades 1 and 2.

These results underscore the importance of pre-school language skills, especially the ability to process spoken language, for the development of lexical quality and, as a consequence, of reading comprehension skills.