Reading comprehension and its component skills in children with SLI and children with dyslexia

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Abstract
Reading comprehension involves word decoding and oral language comprehension (Hoover and Gough, 1990). Young readers with dyslexia are at risk for reading-comprehension impairment. Reading-comprehension impairment also happens in children without word-reading deficits, and about 30% of these children is language-impaired. Reading comprehension involves higher-order skills of working memory, inferencing, and comprehension monitoring (Cain & Oakhill, 2007). This study aims to examine whether Chinese children with specific language impairment (SLI) and children with dyslexia demonstrate difficulties in these skills.

Ninety-five eight-year-old Primary 2 children participated in this study. Using norm-referenced measures, these children were diagnosed as either normal (n=42), SLI (n=28), dyslexia (N=10), or SLI-dyslexia (n=19) at the end of Primary 1. The children completed tasks examining word reading, reading comprehension, written grammar, working memory, comprehension monitoring and literal and inferential reading comprehension of texts in which word and grammar levels were controlled.

Age and Ravens were used as covariates in all MANOVA and ANOVA analyses. In both word reading and reading comprehension, the normal group outperformed the three atypical groups and the SLI group scored higher than the dyslexic group. In word reading, the SLI and the dyslexia group performed better than the co-morbid group, and in reading comprehension, only the SLI group performed better than the co-morbid group. For written grammar, the normal group again performed better than the three atypical groups, and the SLI and dyslexia group outperformed the co-morbid group. For literal and inferential comprehension, the normal group performed better than the SLI and co-morbid group, and the same pattern of results was found for comprehension monitoring and working memory.

The dyslexia group did not perform worse than the normal group in these higher-order skills. These results suggest different focus of reading comprehension intervention for children with SLI and children with dyslexia. (Project funded by Hong Kong RGC755110)