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Leftward Visuospatial Bias Predicts Childrens Reading Fluency

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Abstract

Neurotypical children have been shown to display a leftward visuospatial attention bias while children with dyslexia (i.e., children with a reading disorder characterized by slow and/or inaccurate word recognition) have been shown to display a relatively rightward visuospatial attention bias. Researchers have speculated that leftward bias in young children may be driven by their beginning reading education in languages read from left to right. Here, we investigated whether spatial bias may be related to the acquisition of reading skills among a sample of children in grades 1 to 3. We assessed the relationship between spatial bias (measured using the landmark task) and performance on (1) a rapid automatized naming test (a predictor of reading fluency) and (2) a word-identification test. We found that leftward bias predicts rapid automatized naming but not word identification. This finding has implications for understanding the potential role of spatial bias in reading and dyslexia.