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**Is there evidence of an allophonic mode of speech perception in
dyslexic children**

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Recent studies have suggested that dyslexics perceive phonemic categories in a less categorical fashion than individuals of average reading ability due to increased within-category discrimination ('allophonic' mode of perception). In the present study, 62 dyslexic and 51 typically-developing (TD) children aged between 6;6 and 13;7 years old were tested on the perception of a /pi-bi/ continuum using an adaptive identification task presented in clear and in background noise, and a fixed-level discrimination task presented in clear. They also undertook a battery of tests of reading, IQ, phonological awareness, phonological short-term memory and word perception in noise. The gradient of the identification function was significantly weaker for the dyslexic than TD group in clear, but the two groups did not differ in the noisy condition. In the discrimination test, there was no evidence of increased within-category discrimination in the dyslexic group but the TD group showed better cross-category discrimination. These results do not support the existence of an allophonic model of speech perception in dyslexic children. Also, they do not support the view that dyslexic children are more affected by noise as a result of more poorly specified phonemic categories. [Work supported by Wellcome Trust].