
Effects of dyslexia on undergraduate students' writing product and processes

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Abstract

This quasi-experimental study was designed to assess the effects of dyslexia on the writing of 60 undergraduate students, half of whom had been assessed as dyslexic. All participants completed intelligence tests and a battery of spelling, decoding and working memory tests. These tests showed that students with dyslexia had significantly lower phonological/spelling ability but equivalent levels of verbal and non-verbal intelligence. Participants were then given 45 minutes to plan and write an article for the university newspaper discussing the legalisation of euthanasia. To identify the cognitive processes occurring during writing, half the participants were asked to complete the triple task (Olive et al.) while producing the texts. Keystrokes were also recorded using Scriptlog. The results showed that dyslexic students produced significantly shorter, poorer quality texts (even after spelling had been corrected), and that they paused for significantly longer between and within words. Analysis of the relationships between cognitive processes and text quality showed that whereas non-dyslexic writers produced better quality text the less they continued generating content during text production, dyslexic writers wrote better the more they continued generating content during text production. Mediation analyses indicated that the effect of dyslexia on quality was partially but not fully mediated by spelling ability and its effect on word-level pauses. We will argue that, over and above their spelling difficulties, adult writers with dyslexia have difficulties implementing their content plans during writing, and suggest that younger writers therefore need support not just with spelling but also with higher level writing processes.

Keywords: Writing, dyslexia, spelling, planning

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