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The effect of orthographic relationships, lexical status and contextual constraint on visual word recognition: Evidence from event-related potentials

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Abstract

Readers rely on sentence context to generate predictions about the upcoming words so that processing of their visual forms is less necessary. Consequently, processing of an orthographic neighbor of a strongly predicted word is facilitated by that context (as indicated by a reduced N400 ERP amplitude), regardless of the perceived item's lexicality (i.e., whether it is a real word or a pseudoword). The current study investigated whether lexicality becomes important when the sentence context is less helpful in generating predictions. Our findings indicate that in weakly constraining sentences, the lexical status of a word impacts word recognition processes as indicated by a left anterior negativity, suggesting that readers rely on sublexical properties of words in the absence of strong expectations.