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Abstract

To investigate orthographic priming, researchers have used lexical decision tasks where targets are primed by orthographically similar or dissimilar words or nonwords. Although results are mixed, similar word primes often produce interference while similar nonword primes often produce facilitation. In addition to lexicality, prime duration and word frequency also produce dissociative effects. To better understand these findings, we used three prime durations with the lexical decision task: 60, 250, and 400 ms. The data show that similar word primes produced interference for low-frequency targets at 60 and 250 ms and for high-frequency targets at 250 and 400 ms. Similar nonword primes produced facilitation for low-frequency targets at 250 ms and for high-frequency targets at 250 and 400 ms. Results are discussed in terms of the competition hypothesis, an alternative theory of orthographic priming based on word/nonword encoding and prime-target competition, and in terms of their implications for word recognition theories.