

BAR-ILAN UNIVERSITY

**Multiple dimensions of affix spelling
complexity: Analyzing the performance of
children with dyslexia and typically developing
controls**

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Abstract

This study examined affix letter spelling among 6th grade Hebrew-speaking children with dyslexia compared with chronological age-matched and reading level-matched controls. As different languages are characterized by multiple dimensions of affix spelling complexity, we specifically targeted the following unique dimensions relevant to Hebrew: (i) affix envelope transparency; (ii) affix letter prevalence; (iii) internal morpho-phonological competition; (iv) overtness of the phonological-orthographic link; and (v) phono-morpho-orthographic consistency. The research instrument was a spelling task of 244 words containing affix letters, covering all non-root morphological roles, both inflectional and derivational. Results show that for both frequent and infrequent words, 6th graders with dyslexia perform similarly to reading age-matched controls when spelling involves morphological competition or when the phonological morphological and orthographic link is inconsistent. In frequent words the similarity in performance between the groups extends to the overt phonology criterion as well. In addition, 6th graders with dyslexia were assisted by affix letter prevalence but not by demarcation of the affix envelop, compared with reading age-matched controls. Regarding these criteria, the discrepancy between regular and irregular affix spelling was different among dyslexic children and non-dyslexic controls. These findings indicate that morphological knowledge in dyslexia is not a unified system, and while some morph-orthographic regularities are acquired more easily, other morpho-orthographic regularities are quite challenging.