Speed of Reading Texts in Arabic and Hebrew

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Abstract

We examined text reading by Arabic and Hebrew adults, together with measures of single word and nonword reading, letter naming, and visual processing. Participants read complex and simpler texts aloud and silently in their first language. Arabic speakers also performed some of the tasks in Hebrew. We measured reading speed and its relationships with component abilities. The results show that Arabic speakers read complex texts in Arabic more slowly than Hebrew readers read in Hebrew. Arabic speakers read complex texts in Hebrew more slowly than complex texts in Arabic, even though they performed the letter naming and visual tasks equivalently in the two languages. The groups reveal different patterns of relationships between the measures of components of reading and speed of reading aloud. For both, the best predictor is efficiency of reading single words, with speed of letter naming adding to the prediction in Hebrew, but not in Arabic. No variable had a significant contribution to the prediction of speed of silent reading. The results suggest that even though lower level processes such as letter and word identification may be simpler to perform in Hebrew than in Arabic, higher level processes required to comprehend a complex text, are faster in the first language of the participants. Both the characteristics of the text, such as its structural and semantic complexity, and the characteristics of the orthography play a role in the quality of reading. The relationship between the top-down and bottom-up components of reading is dynamic, and specific to orthographic factors and the sociolinguistic environment of the readers.