

Numerous researchers (e.g., Cain, 2007; Tunmer, Nesdale, & Wright, 1987) have identified a relation between syntactic awareness (i.e., the ability to judge and manipulate word order) and word reading in children. Tunmer et al. (1987) explained this relation by suggesting that when children encounter an unknown written word, they rely on their syntactic awareness to analyze the word's surrounding context (e.g., the sentence of which it is a part). In a longitudinal study, Rego and Bryant (1993) found that children's syntactic awareness indeed predicted their use of context in reading. However, it might be that syntactic awareness, as measured in most studies to date, reflects an appreciation of words' meaning, and that it is such broader semantic skills that help children use context in reading rather than pure syntactic skills (Nation & Snowling, 2000). The objective of our study was thus to examine the role of semantics in the relation between syntactic awareness and use of context in word reading.

A total of 74 Grade 3 children completed both a syntactic awareness task (Nation & Snowling, 2000) and a contextual facilitation task (Nation & Snowling, 1998). In the syntactic awareness task, children were asked to reorder the words in scrambled sentences. Half of the sentences could be reordered based on both syntax and semantics (e.g., "the kangaroo the ball chased to the goal") and the other half could be reordered based on syntax only (e.g., "to the elephant showed the snake the lion"). In the contextual facilitation task, children were asked to read words first in isolation (i.e., alone) and then in context (i.e., within a sentence). Accuracy and reaction time were recorded, and the relative difference between reading in isolation and in context was calculated for each score (Nation & Snowling, 1998). Several control variables were also assessed: age, phonological awareness, vocabulary, working memory, non-verbal intelligence, word reading, and practice effect in word reading.

We conducted four separate hierarchical regression analyses to examine the relation between syntactic awareness (with versus without semantic cues) and use of context (as measured by both an increase in accuracy and a decrease in reaction time in contextual reading). Control variables were included as a first step in the regressions. Our results indicated that there was no relation between syntactic awareness without semantic cues and either measure of use of context. However, performance on the syntactic awareness items with semantic cues did predict use of context as measured by a decrease in reaction time (but not as measured by an increase in accuracy). These findings suggest that semantics play a central role in contextual facilitation and that syntactic awareness alone is not sufficient to foster the use of context in word reading.

References

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