South Carolina Researchers Examine Linguistic Contributions to Word-Level Spelling Accuracy in Children

Dr. Krystal Werfel, assistant professor of communication sciences and disorders in the University of South Carolina’s Arnold School of Public Health, has completed a study on the linguistic contributions to word-level spelling accuracy in elementary school children with and without specific language impairment. She and her colleagues published their paper in the American Journal of Speech-Language Pathology.

According to previous research, children with specific language impairment are more likely than those with typical language to experience difficulties in word-level spelling accuracy. The present study aimed to better understand how linguistic knowledge influences spelling accuracy in second to fourth grade children both with and without specific language impairment.

Dr. Werfel and her team assessed phonological awareness, morphological knowledge, orthographic pattern knowledge, mental grapheme representation knowledge, and vocabulary knowledge for 32 children with specific language impairment and 32 children with typical language. Their analysis revealed that mental grapheme representation knowledge was a significant predictor for both groups of children. Further, phonological awareness was a significant predictor for the group with specific language impairment, and morphological knowledge was a significant predictor for children with typical language.

“The results suggest that spelling instruction and intervention for children with specific language impairment should take linguistic knowledge into account and explicitly relate linguistic knowledge to spelling,” Werfel says. “Additionally, future research should consider if instructional targets for children with specific language impairment should differ from targets for children with typical language and if these findings represent a delay or a disorder in spelling acquisition for children with specific language impairment.”