MedicalXpress

Is your toddler ready for reading lessons?

January 6 2016

Credit: Peter Griffin/public domain

Even before they can read, children as young as 3 years of age are beginning to understand how a written word is different than a simple drawing—a nuance that could provide an important early indicator for children who may need extra help with reading lessons, suggests new research from Washington University in St. Louis.

"Our results show that children have some knowledge about the fundamental properties of writing from a surprisingly early age," said study co-author Rebecca Treiman, PhD, the Burke & Elizabeth High Baker Professor of Child Developmental Psychology in Arts & Sciences.

"Based on the results, it may be possible to determine at an early age which children are progressing well in the learning of emergent literacy skills and which children may need extra attention," Treiman said.

Forthcoming in the journal *Child Development*, the study is based on two experiments with 114 children ages 3-to-5 years who had not yet received any formal instruction in reading or writing.

The children were tested to see how well they understood that a written word, such as dog, has one specific pronunciation ("dog") as compared with a simple drawing of a dog, which could be correctly labeled as the image of a dog, a puppy or even a pet named Spot.

In the first test, researchers read the written word "dog" to the children.

Later, when a puppet employed in the experiment read the word "dog" as "puppy," many children picked up on the mistake. In a similar task with drawings, children were more likely to say that the puppet was correct in using the alternative label.

The different results in the writing and drawing conditions indicate that even young pre-readers have some understanding that a written word stands for one specific linguistic unit in a way that a drawing does not. While a written word should be read the same way each time, it is sometimes appropriate to use different labels for a drawing, the researchers explain.

Most children don't begin formal instruction in reading and writing until

they turn 5 and enter kindergarten, but these findings suggest that children as young as 3 may be tested to see how well their understanding of basic language concepts is progressing.

"Our finding that preschool-age children who cannot yet read have some understanding that written words represent specific words in a way that drawings do not indicates that young children's knowledge about the inner structure of writing—how it functions as a symbol—is more sophisticated than previously thought," said study co-author Lori Markson, PhD, associate professor in the Department of Psychological and Brain Sciences in Arts & Sciences.

The results are surprising given that some literacy development theories have suggested that pre-readers treat written words as representing meanings directly, as pictures do.

More recent research, however, shows that parents often speak differently about pictures than they do about letters and words, helping even very small children begin to understand the writing something is in many ways similar to saying it.

"Such experiences may help children to learn, even before they can read, that writing conveys meaning in a different way than drawing does," Markson said.

While dozens of research studies have shown that reading to young children helps them build a stronger cognitive foundation for later reading and writing, this study is one of the first to offer a simple method for benchmarking how well children are progressing in their understanding of basic concepts about how writing works as a symbol.

This understanding may be crucial to later success in formal reading and writing instruction.

Provided by Washington University in St. Louis