Research suggests that toddlers can learn from even a short reading of a picture book.

A total of 132 children from three different age groups (18 months, 24 months and 30 months) participated in two studies to determine if age influenced a toddler’s ability to learn how to construct a simple rattle from a picture-book reading.

In the first study, conducted by psychologist Gabrielle Simcock, and co-author and psychologist Judy DeLoache, PhD, University of Virginia, two groups of children ages 18, 24 and 30-months, were given one of two picture books. One contained six colour photographs and the other contained coloured pencil drawings that were reproductions of the photograph. At the end of the reading, the children were asked to construct a rattle using the items in front of them. The study revealed that many of the children were able to imitate the actions depicted and described in the book.

"This research shows that very young children can learn to perform novel actions with novel objects from a brief picture book reading interaction. This common form of interaction that takes place very early in children's lives, may provide an important source of information to them about the world around them," said lead author, Gabrielle Simcock, PhD, University of Queensland.

The iconicity (similarity between the actual object and the likeness presented in the book) of the pictures in the books had the most influence on the youngest children's reenactment. The 18-month toddlers were less able to follow the directions given in the book containing coloured-pencil drawings than when they were when given directions from the books containing life-like colour photographs. Due to the age-related difference in the reenactment with the two versions of the picture book, Simcock and DeLoache selected a new group of 24 and 30-month old toddlers to study their reactions to black and white line drawings of the same picture book.

The second study showed that the second group of toddlers performed relatively poorly when given the black and white images compared to the first group of toddlers who were given colour photographs, proving that children are more influenced by iconic images.

"The results expand our understanding of the development of pictorial competence in the second year of life and point to an interaction between symbolic and general representational capacities in the performance of very young children," said Simcock.

Originally created for Talk To Your Baby as APA press release October 2006.