

Research Spotlight

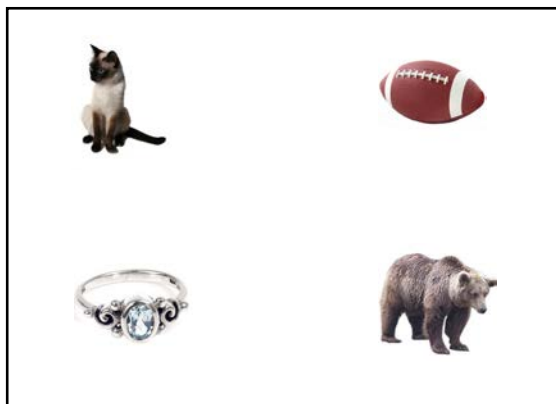
The I-Spy Game and The Matching Game



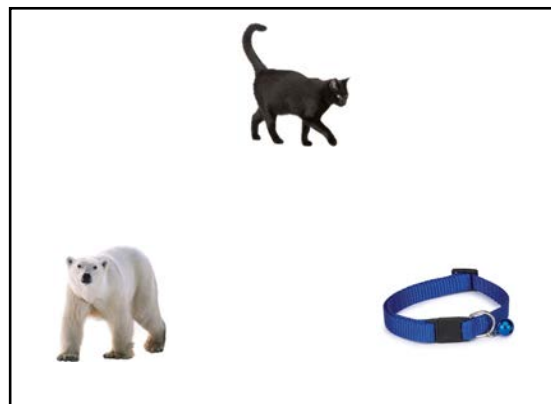
Children learn from the world around them, despite the world being really cluttered. At any given moment children are surrounded by more information than what they can possibly process. Dr. Catarina Vales, a new postdoctoral researcher working with Dr. Anna Fisher, is exploring the knowledge children use to decide where to focus their attention. In her project, the research team is interested in one source of knowledge – semantic knowledge – that might help children orient their attention. Semantic knowledge refers to word meanings (e.g., knowing that the word “cat” refers to the animal cat) and how words are related to one another (e.g., knowing that “cat” and “bear” are both animals, or knowing that “cat” and “mouse” share a thematic relation). Over the preschool years, children’s knowledge of the meaning of words and how they are interconnected deepens, potentially allowing children to attend to their environment in “smarter” ways.

Dr. Vales is investigating the idea that the relationships among words influence how children direct their attention. To do so, preschoolers and kindergartners complete two games across three sessions. In the **I-Spy Game**, which they play twice, children are asked whether a given target is in an array of pictures (e.g., “Is there a cat on this screen?”). Across screens, sometimes a related item (e.g., “bear” or “mouse”) is also present and sometimes it is not (see screen shot below, left). If children have the knowledge that “cat” and “bear” are related, they should be more likely to notice the “bear” in the array, taking longer to locate the “cat”.

Because children’s knowledge is changing so quickly, researchers also want to make sure that the relations they are testing in the **I-Spy Game** are known by the children. They assess that knowledge in the **Matching Game**. In the **Matching Game**, researchers show children a picture at the top of the screen, and ask them which of two options goes with that picture (see screen shot below, right). For example, children might see a cat at the top and a bear and a cat collar at the bottom. If children have the knowledge that “cat” and “bear” go together because they are animals, they will choose the picture of the bear.



Screen shot of the I-Spy Game



Screen shot of the Matching Game