Spatial Biases for Learning Ordinal Stimuli in American and Israeli Preschoolers

Previous studies have found that like adults, preschoolers exhibit spatial-numerical associations that seem to be a result of culture. This study explores the idea that these associations are not limited to numerical information, but can be generalized to ordinal information. Three- and four-year-old American and Israeli children were given a spatial search task in which they were asked to utilize verbal labels to match the hiding locations of two monkeys. The labels were taught to the children in either a left-to-right or right-to-left manner. Results indicate that American children who received information in a left-to-right fashion during a labeling task were better able to use this information to find a hidden object than those who received the labels in a right-to-left fashion. The reverse was true of Israeli children. However, the Israeli children did not perform significantly better in the right-to-left condition. These findings suggest that culture biases spatial attention before the introduction of formal education, but that the cultural tendency for right-to-left attention patterns must overcome an inherent bias for attention to be distributed in a left-to-right direction.