Novel labels modify visual attention in 2-year-old children

Alexander LaTourrette
Northwestern University, Evanston, Illinois, United States

Miriam A. Novack
Northwestern University, Evanston, Illinois, United States

Sandra Waxman
Northwestern University, Evanston, Illinois, United States

Abstract

Labeling objects enhances fundamental cognitive capacities like categorization, individuation, and memory in young children. However, the mechanism by which labels support these cognitive processes remains unknown. One possibility is that providing a label for an object changes childrens online visual processing of that object. To address this, we considered several indices of visual attention, asking whether 2-year-old children attend to an object differently if it is labeled (Look at the dax) than if it is paired with a non-labeling phrase (Look at that). We find that 2-year-old childrens visual fixations are longer when objects are paired with a labeling phrase, rather than a non-labeling phrase. Indeed, after hearing a label, children showed a sustained increase in fixation duration. However, the number of fixations children made did not change as a function of labeling. This illustrates an attentional mechanism by which language might enhance learning in 2-year-old children.