

# **Can preschoolers use probability to infer others desires?**

**Tiffany Doan**

University of Waterloo, Waterloo, Ontario, Canada

**Ori Friedman**

University of Waterloo, Waterloo, Ontario, Canada

**Stephanie Denison**

University of Waterloo , Waterloo, Ontario, Canada

## **Abstract**

Probability influences our social inferences. Here, we explored whether preschoolers use probabilistic information to infer others desires. Sixty 3-year-olds were shown stories where one character went to a gumball machine with mostly red gumballs and just a few purple ones and another character went to a machine with the reverse distribution. Both characters received a red gumball. Children in one between-subjects condition were asked who wanted a red gumball and children in a control condition were asked who knew they would get a red gumball. Children mostly selected the character who went to the machine with more red gumballs when asked about desires but not when asked about knowledge. This suggests that 3-year-olds can use proportions to infer others desires.