

## **UC Merced**

### **Proceedings of the Annual Meeting of the Cognitive Science Society**

#### **Title**

Toddlers and preschoolers use relational concepts to solve problems

#### **Permalink**

<https://escholarship.org/uc/item/13s972sz>

#### **Journal**

Proceedings of the Annual Meeting of the Cognitive Science Society, 42(0)

#### **Authors**

Goddu, Mariel

Gopnik, Alison

#### **Publication Date**

2020

Peer reviewed

# **Toddlers and preschoolers use relational concepts to solve problems**

**Mariel Goddu**

UC Berkeley, Berkeley, California, United States

**Alison Gopnik**

University of California at Berkeley, Berkeley, California, United States

## **Abstract**

Contrary to decades of previous research, one recent study suggests that preschoolers can rapidly learn and transfer a variety of relational concepts (e.g., bigger than; smaller than; opposite of) when those relations are operationalized as the beginning and ending states of causal transformations performed by agents (Goddu, Lombrozo, & Gopnik, in press). Without causal framing, children reverted from relational reasoning to object matching, consistent with findings from many previous (non-causal) paradigms. Here, we investigate whether three-year-olds (Experiment 1) and 24- to 30-month-old toddlers (Experiment 2) are able to learn and apply relational concepts in a behavioral task where they themselves must intervene to solve a problem using relational reasoning. Results indicate that children as young as two years of age are able to rapidly learn and generalize relational concepts and use them productively to solve new problems.