

## **UC Merced**

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

#### **Title**

Do Children Match Described Probabilities? The Sampling Hypothesis and Risky Choice

#### **Permalink**

<https://escholarship.org/uc/item/2d35w9f4>

#### **Journal**

Proceedings of the Annual Meeting of the Cognitive Science Society, 45(45)

#### **Authors**

Thoma, Anna Isabel  
Schulze, Christin

#### **Publication Date**

2023

Peer reviewed

# Do Children Match Described Probabilities? The Sampling Hypothesis and Risky Choice

Anna Thoma

Max Planck Institute for Human Development, Berlin, Berlin, Germany

Christin Schulze

Max Planck Institute for Human Development, Berlin, Germany

## Abstract

We investigated how repeated choices develop in early childhood when outcome probabilities are known. Integrating previous findings from children's causal learning and adults' repeated choice behavior, we expected young children to probability match in a descriptive repeated choice paradigm and predicted that the perceived dependency between choices shapes the underlying sampling process. We recruited 201 children between 3 and 7 years and 100 adults to participate in a child-friendly guessing game with known outcome probabilities. We found that children across all age groups broadly diversified choices and that alternation dominated older children's choice behavior. We did not, however, replicate the findings that inspired this research. We discuss implications for studying a description–experience gap in repeated risky choice across development.