

Exploring Individual Differences in Preschooler's Causal Reasoning Skills in the Physical and Digital Domains

Jessie-Raye Bauer

University of Texas at Austin

Amy Booth

University of Texas at Austin

Cristine Legare

University of Texas at Austin

Abstract: Do children reason about causal events differently in physically 'live' and digital domains? To answer this question, we introduced 35 3-year-olds to the traditional live version and a newly developed digital version of the "blicket detector" task. In both formats, the "blicket detector" first produced an interesting event (e.g., lit up) when a distinctive object (e.g., cylindrical block) touched its surface, but then failed to do so when a different object (e.g., triangular block) did so. After both blocks then simultaneously touched (and activated) the "blicket detector," children were asked to identify the 'causal' block. Children's performance correlated significantly across the physical and digital trials ($r = .4$, $p = .02$). Not only does this study further our understanding of children's causal reasoning skills in the digital domain, it introduces a major methodological advance with the development of a highly efficient and reliable digital version of the "blicket" task.