

Cross-domain variation in children's causal reasoning

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Abstract: How do children use covariation information to infer causation? In this series of studies, we consider how the same 2 X 2 covariation pattern is interpreted by 4 and 6 year old children to explain a cause. In the first study, two dolls played on two activities where their behavior covaried by doll or activity. Children were asked to explain the cause of the dolls' behavior and predict future behavior. In the second study, we presented the same covariation data but instead framed it in terms of physical causality, i.e., the dolls were treated as physical objects that either stuck or did not stick to the activities. Preliminary results reveal that children think differently about physical and psychological causes, even with the same covariation pattern. Additionally, they appear to reason about probabilistic data much more naturally in the psychological than the physical domain.