Young Children's Causal Thinking: Rule Reasoning

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Aiming at understanding young children's causal thinking in order to clarify the current issues of developmental psychology, this study traced 80 young children's causal inference focusing on the rule reasoning of physical causality. Researcher modified the current design (the marble-ramp apparatus) and extended the dimensions of research including generating and using of rules. Besides, to understand whether rule reasoning possesses the generality cross domains, researcher employed children's theory of mind and made correlative analysis. Results revealed that: (1) 3-year-olds could already draw causal conclusion from evident clues and make prediction for relative effects by using specific rules. In addition, they employed if-then conditional reasoning and showed their breakthrough with the growing of their age. Around 5 years, young children were able to employ the if-if-if-then hierarchical rule effectively. (2) Rule reasoning seemed to have the generality cross domains. However, the correlations varied in different dimensions. Besides, rather than using rules, generating rules in the level of if-then, had stronger positive correlation between performance on theory-of-mind and on physical causality tasks.

Keywords: causal thinking, conditional reasoning, rule reasoning, theory of mind