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Proceedings of the Annual Meeting of the Cognitive Science Society

Title

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Journal

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

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Publication Date

2023

Peer reviewed

Counterfactuals and mental time travel

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Abstract

There is debate about when children can think counterfactually about doubly-determined events (McCormack et al., 2018; Nyhout, Henke, & Ganea, 2017). We tested whether counterfactual thinking about past events, requiring mental time travel, was harder than thinking about ongoing events. 68 3- to 6-year-olds saw a box which lit up when activator blocks were placed on it. In doubly-determined current trials, a red and a blue block (both activators) were placed on the box which lit up. Children were asked “If we had not put the red block on the machine, would the light still be on now?” (Correct “yes”). In doubly-determined past trials, blocks were removed before questioning. Five- and six-year-olds found both versions easy. Three- to four-year-olds performed poorly. Four- to five-year-olds performed better than chance on current trials ($p=.001$), but at chance on past trials ($p>.999$). We relate this to Hoerl and McCormack’s (2018) dual systems perspective.