

UC Merced

Proceedings of the Annual Meeting of the Cognitive Science Society

Title

Evidence for Distinct Factive and Non-Factive Mentalization Systems in Adults and Infants

Permalink

<https://escholarship.org/uc/item/92v791vv>

Journal

Proceedings of the Annual Meeting of the Cognitive Science Society, 47(0)

Authors

Kispl, Anna

Kovacs, Agnes

Publication Date

2025

Copyright Information

This work is made available under the terms of a Creative Commons Attribution License, available at <https://creativecommons.org/licenses/by/4.0/>

Peer reviewed

Evidence for Distinct Factive and Non-Factive Mentalization Systems in Adults and Infants

Anna Kispál

Central European University, Vienna, Austria

Agnes Kovacs

CEU, Budapest, Hungary

Abstract

Despite extensive research on mentalization, few studies target the representations and the cognitive systems that underlie different mental state attributions. In two eye-tracking experiments with adults ($n=32$) and 19-month-old infants ($n=24$), we examined whether factive (knowledge, ignorance) and non-factive (false belief, true belief) mental state attributions belong to separate representational systems, relying on the assumption that transfer within-system should occur faster than between-systems. Participants watched animated videos of an agent tracking a hidden ball that could hide in two locations, requiring mental state attribution updates from non-factive to either another non-factive or to a factive mental state. Saccadic reaction times (SRTs) to the ball's reappearance were measured. Results showed that both adults and infants had faster SRTs when updates occurred between two non-factive mental states compared to updates between a non-factive and a factive mental state. This supports the existence of distinct systems for factive and non-factive mental state attribution.