

UC Merced

Proceedings of the Annual Meeting of the Cognitive Science Society

Title

Cognitive diversity in context: US-China developmental trajectories on 4 tasks in 3-12yos

Permalink

<https://escholarship.org/uc/item/4vj3p5x3>

Journal

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

Authors

Carstensen, Alexandra

Cao, Anjie

Tan, Alvin Wei Ming

et al.

Publication Date

2023

Peer reviewed

Cognitive diversity in context: US-China developmental trajectories on 4 tasks in 3-12yos

Alexandra Carstensen

UC San Diego, La Jolla, California, United States

Anjie Cao

Stanford, Stanford, California, United States

Alvin Tan

Stanford University, Stanford, California, United States

Di Liu

Beijing Normal University, Beijing, China

Yichun Liu

Fudan University, Shanghai, China

Minh Bui

California State University, Fullerton, Fullerton, California, United States

Jiayi Wang-Zhao

Harvard University, Cambridge, Massachusetts, United States

Qi Han

Stanford University, Stanford, California, United States

Caren Walker

University of California San Diego, La Jolla, California, United States

Michael Frank

Stanford University, Stanford, California, United States

Abstract

Early abstract reasoning follows qualitatively different developmental trajectories in the US and China (Carstensen et al., 2019), but the causal mechanisms for these differences are unknown. Existing accounts implicate several potential factors that differ between the US and China, including language (Hoyos et al., 2016), executive function (Richland et al., 2010), visual attention (Christie et al., 2020), and social reasoning (Jurkat et al., 2022). While there is extensive work documenting both language and executive function in US and Chinese children, much less is known about the development of cross-cultural differences in visual attention and social reasoning. We document abstract reasoning about relations (Ambiguous cRMTS, Carstensen et al., 2019) alongside the potential moderating factors of visual attention (Free Description; Imada et al., 2013), and social reasoning (Causal Attribution, Seiver et al., 2013; Uniqueness Preference, Kim & Markus, 1999) in a cross-sectional sample of 240 3-12-year-olds, and observe both similarities and differences.