

UC Merced

Proceedings of the Annual Meeting of the Cognitive Science Society

Title

Cultural differences in analogical reasoning

Permalink

<https://escholarship.org/uc/item/1wn5b52n>

Journal

Proceedings of the Annual Meeting of the Cognitive Science Society, 43(43)

ISSN

1069-7977

Authors

Singh, Amritpal M.P.

Su, Shikun

Jiang, Luyang

et al.

Publication Date

2021

Peer reviewed

Cultural differences in analogical reasoning

Amritpal Singh

Cornell University, Ithaca, New York, United States

Shikun Su

Cornell University, Ithaca, New York, United States

Luyang Jiang

Cornell University, Ithaca, New York, United States

Daniel Casasanto

Cornell University, Ithaca, New York, United States

Abstract

According to a long-standing dogma, Westerners are more capable of thinking abstractly than East Asians. Here, we challenge this generalization by comparing US and Chinese adults in a paradigm case of abstract thinking: analogy. Chinese and American participants completed the most difficult set of Raven's (2003) Standard Progressive Matrices (SPM), a widely used test of analogical reasoning. For each item, participants attempted to discern the analogical relationships between parts of an incomplete matrix to identify the correct way to complete it. Chinese participants produced significantly more correct answers on the SPM, indicating more successful analogical reasoning. We replicated this result with a second sample of Chinese participants. This cross-cultural difference remained significant when demographic factors were controlled. We predicted this difference, reasoning that East Asian's sensitivity to context gives them an advantage over Westerners in various kinds of abstract thinking.