

UC Merced

Proceedings of the Annual Meeting of the Cognitive Science Society

Title

The Effect of Spatial Representations on Discounting Rates

Permalink

<https://escholarship.org/uc/item/4xj4r6cx>

Journal

Proceedings of the Annual Meeting of the Cognitive Science Society, 37(0)

Authors

Sell, Andrea J

Spehar-Fahey, Terry

Gagliardo, Michael

Publication Date

2015

Peer reviewed

The Effect of Spatial Representations on Discounting Rates

Andrea J. Sell

California Lutheran University, Thousand Oaks, CA, USA

Terry Spehar-Fahey

California Lutheran University, Thousand Oaks, CA, USA

Michael Gagliardo

California Lutheran University, Thousand Oaks, CA, USA

Abstract: Prior research suggests that discounting rates— how much interest a person requests for waiting a period of time before collecting benefits— are influenced by perceptions of time. Other research, however, suggests people understand time via spatial representations. Thus, the current research examined whether underlying spatial representations of time influence these rates. Interest rate preferences were assessed twice over a semester from forty students in either art or cognition courses after drawing a picture with perspective or no perspective. Results revealed that drawing pictures without perspective led to higher average interest rates than drawing pictures with perspective. Additionally, there was an interaction of session and course; cognitive students' rates increased substantially over time, while art students (i.e., students with practiced spatial representations) did not show this effect. These results are a preliminary step in suggesting that spatial priming can affect temporal representations, which in turn change discounting rates.