

UC Merced

Proceedings of the Annual Meeting of the Cognitive Science Society

Title

Implicit Association in Mathematics and Science

Permalink

<https://escholarship.org/uc/item/1rd2t9mm>

Journal

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

Authors

Chernykhovskaya, Yuliya

Jennings, Carolyn

Tabatabaeian, Maryam

Publication Date

2015

Peer reviewed

Implicit Association in Mathematics and Science

Yuliya Chernykhovskaya

University of California, Merced, Merced, CA, USA

Carolyn Jennings

University of California, Merced, California, United States

Maryam Tabatabaeian

University of California Merced, merced, California, United States

Abstract: Previous work using the Implicit Association Test (IAT) has revealed an implicit association between academic disciplines and gender (Nosek et al., 2002). Namely, participants appear to have an implicit association between men and science, and women and the humanities. The purpose of this research is to examine whether the former implicit association is rooted in an association between men and mathematics or math-heavy fields. This might explain the fact of relatively low representation by women in math-heavy sciences, and relatively high representation by women in areas of science that do not require advanced mathematical training. One hypothesis is that this difference in representation can be at least partially explained by an implicit association between math or math-intensive fields and men. We hypothesize that subjects will exhibit an implicit association between women and non-math intensive sciences, and men and math-intensive sciences. This research is conducted using mouse-tracking on Amazon Mechanical Turk.