UC Merced

Proceedings of the Annual Meeting of the Cognitive Science Society

Title

Cognitive Reflection Test Performance with Arial and Sans Forgetica Font

Permalink

https://escholarship.org/uc/item/5p34d9rg

Journal

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

Authors

Cui, Lucy Harrison, Lindsay Anne Liu, Jereth

Publication Date

2023

Peer reviewed

Cognitive Reflection Test Performance with Arial and Sans Forgetica Font

Lucy Cui

UCLA, Los Angeles, California, United States

Lindsay Harrison

University of California, Los Angeles, Los Angeles, California, United States

Jereth Liu

Geffen Academy at UCLA, Los Angeles, California, United States

Abstract

Many studies have failed to replicate the disfluency effect (i.e. disfluent font better than fluent font) on Cognitive Reflection Test (CRT) performance shown in Alter et al. (2007). Those studies manipulated perceptual disfluency using color, style, size, and/or typefaces. The new Sans Forgetica (SF) typeface, designed to promote desirable difficulty, creates perceptual disfluency through fragmented letters, which make it difficult for readers to use good continuation and perceptual completion to identify letters. Here, we compare CRT performance and font legibility ratings when CRT problems are presented in SF or in Arial. Bayes Factors on solution rates show moderate evidence of SF not improving CRT performance. After solving CRT problems, participants who solved the problems in SF rated Arial to be harder to read than participants who solved the problems in Arial, suggesting that after prolong use of SF, participants viewed Arial as being closer in legibility to SF.