UC Merced

Proceedings of the Annual Meeting of the Cognitive Science Society

Title

A Question of Beliefs. Metacognitive Judgments about Fake News Detection

Permalink

https://escholarship.org/uc/item/5dn5d4tn

Journal

Proceedings of the Annual Meeting of the Cognitive Science Society, 46(0)

Authors

Cremille, Nora Mattes, Björn Pieschl, Stephanie

Publication Date

2024

Copyright Information

This work is made available under the terms of a Creative Commons Attribution License, available at <u>https://creativecommons.org/licenses/by/4.0/</u>

Peer reviewed

A Question of Beliefs. Metacognitive Judgments about Fake News Detection

Nora Cremille

Technische Universität Darmstadt, Darmstadt, Hessen, Germany

Björn Mattes

Technische Universität Darmstadt, Darmstadt, Hesse, Germany

Stephanie Pieschl

Technische Universität Darmstadt, Darmstadt, Germany

Abstract

Undetected fake news can influence opinions and behaviors. Therefore, it is crucial to understand under which conditions people can detect fake news, and how aware they are of their detection performance. Building upon a study on phishing emails (Canfield et al., 2019), we investigated metacognition for both fake and legitimate news, along with related individual and task factors. In a single-factor within-subjects design, 175 participants read 19 sampled legitimate and 19 automatically generated fake news in random order. They were tasked with detecting fake news and providing metacognitive confidence judgments. Overall, participants displayed overconfidence with 68% correct detection and 73% confidence. However, they showed better calibration and resolution for fake news compared to legitimate news. Notably, there was a tendency for participants to misjudge legitimate news at high confidence levels. Prior knowledge positively impacted performance, whereas agreement with fake and disagreement with legitimate news resulted in performance falling below random.