UC Merced

Proceedings of the Annual Meeting of the Cognitive Science Society

Title

Where Responsibility Lies in Human-AI decision making: The Role of Knowledge and Importance

Permalink

https://escholarship.org/uc/item/3zs454bq

Journal

Proceedings of the Annual Meeting of the Cognitive Science Society, 47(0)

Authors

TSUMURA, Takahiro

Yamada, Seiji

Publication Date

2025

Copyright Information

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

Peer reviewed

eScholarship.org Powered by the California Digital Library
University of California

Where Responsibility Lies in Human-AI decision making: The Role of Knowledge and Importance

Takahiro TSUMURA
Toyo University, Kita-ku, Tokyo, Japan

Seiji Yamada
National Institute of Informatics, Tokyo, Japan

Abstract

As AI and robots are used in society, the relationship between people and AI/robots is becoming increasingly important; when AI/robots assist people, there is a need to focus on where responsibility for the results of the assistance goes. This study focused on the importance of prior knowledge and topics about AI/robots to investigate who is held accountable when AI/robot assistance fails. The experiment was conducted in a three-factor mixed design, and the ANOVA analysis was based on data from 588 participants. Results showed that prior knowledge about AI/robots increased their pursuit of responsibility toward them and their developer/provider. Additionally, shared responsibility for the AI/robot developer or provider increased when the topic was very important to that person. This study helps to reduce the risk for AI/robots developers or providers when they assist people by clarifying who is responsible for failures that occur when AI/robots assist people in different situations.

In D. Barner, N.R. Bramley, A. Ruggeri and C.M. Walker (Eds.), *Proceedings of the 47th Annual Conference of the Cognitive Science Society* ©2025 the author(s). This work is licensed under a Creative Commons Attribution 4.0 International License (CC BY).