

Comparing the Impact of Social Proof and Freedom of Choice on Attitudes toward AI – Abstract

Sameha Alshakhsi ¹, Areej Babiker ¹, Dena Al-Thani ¹, Christian Montag ² and Raian Ali ¹

¹ College of Science and Engineering, Hamad Bin Khalifa University, Doha, Qatar

² Department of Molecular Psychology, Institute of Psychology and Education, Ulm University, Ulm, Germany

Abstract

The study of users' attitudes toward Artificial Intelligence (AI) systems holds significance for both societal and economic reasons. This research focuses on two key factors that we claim influence user attitudes towards AI: social proof, which refers to the system's previous successful use by others without major issues, and freedom of choice, indicating the availability of alternatives not requiring interaction with AI systems (e.g., interacting with humans or manual supervision). We conducted an online study with 323 participants of Arab nationality from the Gulf Cooperation Council (GCC) region and 316 participants from the UK. Participants were presented with four scenarios, each accompanied by illustrations, to represent the presence or absence of each of the two factors. For each scenario, participants were asked a series of questions assessing their trust, belief in the system's contribution to well-being, perceived risks, belief that the system will lead to positive changes, and ethical implications. The results, in both cultural frameworks, clearly demonstrated that the presence of either factor had a statistically significant positive impact compared to its absence, as evidenced by increased trust, perceived enhancement of well-being, positive changes, and lower perceived risks and ethical implications. Notably, when one was present without the other, the scenario with freedom of choice but no social proof had a more positive impact on attitude than the scenario with only social proof but with no freedom of choice.

Our findings highlight the significance of the two studied factors when producing, marketing, and operating AI. The results also show the importance of providing alternatives to AI and underscore that relying on others' adoption of AI does not diminish the need for these alternatives. The validity of our results across diverse cultural frameworks, specifically within the Arab GCC and the United Kingdom (UK), enhances the robustness of our findings. This contribution is particularly noteworthy in addressing the replication crisis prevalent in psychological research, characterized by a predominant reliance on WEIRD (Western, Educated, Industrialized, Rich, and Democratic) samples.

Keywords

Attitude towards AI, Social Proof, Freedom of Choice, Human Factors

Acknowledgement

This publication was made possible by the NPRP 14 Cluster Grant Number NPRP 14C-0916-210015 from the Qatar National Research Fund (a member of Qatar Foundation). The findings herein reflect the work and are solely the responsibility of the authors.

In: Kiemute Oyibo, Wenzhen Xu, Elena Vlahu-Gjorgievska (eds.): The Adjunct Proceedings of the 19th International Conference on Persuasive Technology, April 10, 2024, Wollongong, Australia

EMAIL: {saal32183, arbabiker, dalthani, raali2} @hbku.edu.qa (Sameha Alshakhsi, Areej Babiker, Dena Al-Thani, Raian Ali); christian.montag@uni-ulm.de (Christian Montag)

ORCID: 0000-0002-2138-4731(Sameha Alshakhsi); 0000-0002-8105-1664 (Areej Babiker); 0000-0002-1474-2692 (Dena Al-Thani), 0000-0001-8112-0837 (Christian Montag), 0000-0002-5285-7829 (Raian Ali)



© 2020 Copyright for this paper by its authors.
Use permitted under Creative Commons License Attribution 4.0 International (CC BY 4.0).

CEUR Workshop Proceedings (CEUR-WS.org)