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Impact of Socioeconomic Status on Trust in Artificial Intelligence

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TREO Talk Paper

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Abstract

Artificial intelligence (AI) will have a major impact on both our daily lifestyle and the job market. Although AI can bring a lot of benefits, people are still concerned with the development of AI in many aspects. To better utilize technology, the first thing is to trust the technology (Siau & Shen, 2003; Siau & Wang, 2018). Trust will also influence the use and acceptance of technologies such as mobile technologies and AI (Siau & Shen, 2006; Stephanidis et al. 2019). If people do not trust AI, they cannot capitalize on the advantages of AI to create more benefits (Wang & Siau, 2019; Siau & Wang, 2020). Socioeconomic status (SES) is the social standing or class of an individual or group. There are many ways to classify SES. The most common way is to combine the education level and income. This research focuses on finding the relationship between socioeconomic status (SES) and trust in AI. In this research, two dimensions are used to measure socioeconomic status. The two dimensions are the education level and income. Familiarity with technology, the perceived value of AI, and the perceived threat of AI are considered as three mediators of SES and trust in AI. Nine hypotheses are generated for this research to investigate the relationship between SES and trust in AI: a.) People with higher education levels are more familiar with technology; b.) People with higher incomes are more familiar with technology; c.) People with higher education levels have a higher perceived value of AI; d.) People with higher incomes have a higher perceived value of AI; e.) People with lower education levels perceive greater threat with AI; f.) People with lower income will perceive greater threat with AI; g.) Increased familiarity with technology will positively affect trust in AI; h.) Greater perceived value of AI will positively affect the trust in AI; and i.) Greater perceived threat of AI will negatively affect the trust in AI. This study will contribute to the development of theories on the relationships between familiarity and trust in technology, and the relationships among perceived value, perceived threat, and trust in technology. On the practical side, this research contributes to planning, designing, and implementation of AI.

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