We Have Trust Issues

Jade Driggs[1]
Faculty: Lisa Vangsness[1]
[1]*Department of Psychology, Fairmount College of Liberal Arts and Sciences*

Automation undoubtedly will have a continued presence in our everyday lives. The incorporation of automation in applications such as self-driving vehicles, vehicle assembly lines, assisted surgery, and autopilot in next-generation military aircraft, drives a critical need to understand the factors of an automated system which persuade or lead the human operator to trust or distrust the system. Understanding these factors will aid in calibrating peoples' use of automation. The present study measured Trust in Automation (TIA) before and after completing a conjunction visual search task with an automated system, as well as Propensity to Trust (PTT) machines for 80 participants. Findings indicated a significant change in TIA scores over time, as well as a significant influence of PTT on average TIA scores. The results have implications for how individuals calibrate their trust after repeated interactions with an automated system.