

SCIENCE & TECHNOLOGY

Robots, AI Not as Welcomed in Nations Where Income Inequity is High

Businesses should consider the results of a new study that shows workers in countries with greater income inequality are more likely to perceive robots and artificial intelligence as job threats.

By Robert Wells | August 24, 2022



Service robots are a type of technology that's expected to be coming soon to industries, including hospitality. Image credit: Adobe Stock

Robots are becoming more ubiquitous in the workplace but that doesn't mean people are accepting them.

In a new study by researchers with the University of Central Florida, workers in countries with greater amounts of income and social inequality were found to be more likely to perceive robots and artificial intelligence as job threats.

This means in countries such as Sweden, Denmark, Finland and the Netherlands, robots could be met with more open arms than in countries such as Spain or Greece, where there is more income inequality.

The study, which examined countries in Europe, was published recently in the journal *Technology, Mind and Behavior*.

The study focused on European countries, but study co-author Mindy Shoss, a professor in UCF's [Department of Psychology](#), says the findings could also help better understand the issue in America.

“The U.S. always ranks pretty high on inequality and societal inequality,” the researcher says. “Given that, I would suspect that there probably are, on average, similar negative views of AI and robot technology in the U.S.”

Shoss says that in highly unequal societies there are greater inequalities in income, health and education, as well as more attention given to where people stand on the social ladder. This leads to anxiety and uncertainty about income, status, and job security.

“Countries that have more people in unequal standing, on average, tend to see these technologies more as a threat,” she says.

The study used data from the regularly conducted Eurobarometer public opinion survey to examine if there was an association between workers viewing AI and robots as threats and country inequality. More than 13,000 respondents from 28 European Union member states were included in their analysis. The data were collected during March 2017.

The researchers found a positive association between income inequality, as operationalized by an economic measure known as the Gini index, and perceptions that AI and robots pose threats of general job loss.

Shoss, who studies organizational psychology, became interested in the research through her work with the [hospitality industry](#) and the technology that’s coming to that sector, such as service robots.

“We’re at this point in society where there are companies making AI and robotics and marketing them for the workforce,” Shoss says.

“There’s a lot of potential of these technologies to help make work better by doing dangerous tasks or giving people more flexibility, but there’s also some risk involved in these technologies,” she says. “And the implication from our research is that if you’re going to try to develop robots or AI technology in a highly unequal society, there might be more barriers to getting people to adopt that kind of technology.”

Shoss says that based on these findings, inequalities should be taken into account when designing and implementing technology, including addressing ways advanced technology could improve workers’ jobs or incomes, in order to increase acceptance.

Katherine Ciarlante ’19MS, a doctoral student in [industrial and organizational](#) psychology who earned her master’s in the same subject at UCF, was the study’s co-author.

The research was funded by the National Institute Occupational Safety and Health under the Centers for Disease Control and Prevention.

Shoss earned her doctoral degree in industrial and organizational psychology from the University of Houston. She joined UCF’s Department of Psychology, part of the [College of Sciences](#), in 2015.

Study title: Are Robots/AI Viewed as More of a Workforce Threat in Unequal Societies? Evidence From the Eurobarometer Survey

MORE TOPICS

College of Sciences

Department of Psychology

RELATED STORIES