THE HONG KONG POLYTECHNIC UNIVERSITY DEPARTMENT OF MANAGEMENT AND MARKETING Departmental Research Seminar



Resistance to Medical Artificial Intelligence: Aversion to Algorithms or Positively Biased Evaluation of Humans? By

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Date : 2 Mar 2023 (THU) Time : 10:30 am - 12 pm Venue : Online via Zoom

Abstract

Algorithms outperform humans in many domains and are forecasted to replace as much as 47% of US employment over the next two decades. Algorithms already exhibit comparable or better performance than humans in tasks ranging from finance to fraud detection to oncology to poetry to paralegal work. Still, people exhibit a costly preference to rely on themselves or other humans relative to algorithms for a variety of judgments, decisions, and services. I report experiments exploring psychological barriers to the adoption of algorithms in the context of medical decision making (e.g., stress level screening, emergency triage, skin cancer detection). These studies show how psychological biases make patients more likely to use healthcare when providers are humans than algorithms. Furthermore, the psychological biases suggest that the preference for human healthcare providers may be driven by biased evaluations of self and other humans. Not by a prejudiced perception of algorithms. Rather than reflect algorithm aversion, patients' preference for humans may reflect an unrealistically positive view of human decision making. My theoretical reinterpretation of the phenomenon reconciles conflicting findings in the broader consumer literature regarding the adoption of algorithms, and it makes new predictions about when people will prefer to rely or resist relying on algorithms for a variety of judgments and decisions.

Prof. Carey Morewedge is a Professor of Marketing and Everett W. Lord Distinguished Faculty Scholar in the Questrom School of Business at Boston University. He is also a visiting fellow of the Shorenstein Center on Media, Politics, and Technology at the Harvard Kennedy School. His research examines judgment and decision making with two substantive foci: psychological biases (i.e., their causes, consequences, interventions), and how people perceive value (e.g., preferences, utility, WTP/WTA, new technologies).

Prof. Morewedge has published more than 60 articles and chapters in journals including *Science, Trends in Cognitive Sciences, Psychological Science, Nature Human Behavior, Journal of Consumer Research, Journal of Marketing Research, Management Science, Journal of Experimental Psychology: General, and the Journal of Personality and Social Psychology.* His popular writing has appeared outlets including *The New York Times* and *Harvard Business Review*. He has received more than \$2.4 million in external research funding and awards for his work, including the 2010 Wegner Theoretical Innovation Prize from the Society for Personality and Social Psychology, the 2022 Best Paper award from the *Journal of Consumer Research*, recognition as a *MSI Scholar*, an Idea of the Year from *The New York Times*, and inclusion in Poets and Quant's Top 40 under 40 Business School Professors.



All interested are welcome. The Hong Kong

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