Decision Processes Colloquia

Monday, November 27, 2017

Where: 250 JMHH

When: 12:00 – 1:15 pm

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The Statistical Self-Fulfilling Selection Fallacy

ABSTRACT:

We identify a novel phenomenon --the statistical self-fulfilling selection fallacy (or "tripe-S fallacy")-- that maintains, and even strengthens, erroneous prior beliefs concerning the relationship(s) between variables that shape selection decisions (e.g., hiring decisions, school admissions, and law-enforcement tactics). Critically, the triple-S fallacy doesn't just hide the true nature of a relationship; it actually produces seemingly compelling evidence that supports people's initial perceptions. Depending on the situation, the triple-S fallacy can make uncorrelated variables appear positively correlated, strongly negatively correlated variables appear uncorrelated, weakly positively correlated variables appear strongly positively correlated, and even negatively correlated variables appear positively correlated. Moreover, the triple-S fallacy can occur in a variety of contexts, and is surprisingly robust to a host of factors and mitigating circumstances. In sum, this paper shows how small initial biases in selection processes can reinforce existing stereotypes and thereby promote discriminatory practices, even among well meaning decision makers who strive to be impartial.

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