Decision Processes Colloquia

Monday, March 18, 2024

Where: F 70 JMHH

When: 12:00 – 1:20 pm

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Massive Field Quasi-Experiments with Continuous Treatment Variables Reveal Inverted-U Causal Links Between Mood and Prosocial Decisions

ABSTRACT:

For 50 years, there has been a controversy over the true causal relationship between mood and prosocial choices. A first view predicts that more positive moods will *boost* prosocial choices (because decision makers will feel more energized and perceive that the "effort" cost of helping others is lower). But a second view predicts the opposite – that more positive moods will *reduce* prosocial choices (because decision makers will perceive a smaller "warm glow" mood boost benefit from helping others). These two views appear contradictory. However, we show that if both prior views are synthesized together using the law of diminishing marginal utility, it implies an inverted-U-shaped continuous causal relationship between more positive mood triggers and prosocial choices. To test this inverted-U hypothesis, we use a novel approach that we call *revelation-curve*. A revelation-curve is a massive field quasi-experiment in which *all* naturally occurring values of a plausibly exogenous continuous treatment variable are simultaneously analyzed, to reveal the full natural continuous causal relationship between a treatment variable and an outcome variable – without assuming anything about the functional form of this relationship (in contrast to the few prior studies of continuous causal relationships, which impose strong functional-form assumptions like linearity). By reporting results from three revelation-curves, for the first time, we identify full natural continuous causal relationships between three plausibly exogenous mood triggers (sunlight amount, news valence, and stock market returns) and potentially lifesaving prosocial behaviors. All three revelation-curves reveal inverted-U causal relationships: more positive mood triggers first *boost* prosocial behavior, and then *reduce* prosocial behavior. Forecasters were unable to predict these inverted-U causal relationships. Our findings not only resolve a 50-year controversy, but also uncover important insights that policymakers and leaders can use to boost prosocial choices and potentially save lives.

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