

THE HONG KONG POLYTECHNIC UNIVERSITY DEPARTMENT OF MANAGEMENT AND MARKETING

Departmental Research Seminar

Undersum Bias
By

Prof. Dan Schley
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Date : 24 Mar 2025 (MON)
Time : 10:30 am – 12 noon
Venue : M802, PolyU

Abstract

People must rely on relatively intuitive processes to navigate complex information environments to make decisions. One common mental task is to keep a running total – that is, to form an estimate of the sum of positive-number series (e.g., mentally tracking expenses, calories). Despite the ubiquity of this behavior, relatively little is known about how the mind forms intuitive representations of numeric series. We find that decision-makers systematically underestimate the sums of series in both contextualized and uncontextualized judgments. This undersum bias occurs largely independent of limitations in working memory capacity and motivated cognitions, and likely results from a systematic error in the encoding of numeric series. We show that this tendency to underestimate series can lead to overspending and overconsumption, and discuss managerial implications of this phenomenon.

Prof. Dan Schley's general research interests revolve around the integration of psychology and economics within marketing. His substantive work often straddles between experimental approaches (e.g., A/B testing) and complex statistical modeling. Prof. Schley studies the determinants of individuals' judgments and decision making (JDM), primarily with regard to how the mind processes seemingly objective information. For example, numbers should be objective, but people treat numbers in a very subjective manner. By understanding the subjectivity of our objective world, we can better develop theories and applicable tools to guide people through complicated choices. Prof. Schley's PhD was in Psychometrics, and before that he was trained as an Econometrician. As such, he sees the world through the lens of a methodologist. In recent years he has reconnected with his roots as a methodologist to build a variety of tools empirical researchers including tools to validate core underlying of assumptions of experiments, means of automatically identifying confoundingness, and new versions of mediation models that better fit with developments in Econometrics and Statistics.

All interested are welcome.



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