Selecting and evaluating evidence: The garden of forking information paths

Alice Liefgreen
University College London, London, United Kingdom

Toby Pilditch
University College London, London, United Kingdom

David Lagnado
University College London, London, United Kingdom

Abstract

In order to make accurate inferences and judgments, one needs to not only be able to aptly evaluate and integrate information, but be able to seek and acquire the right information in the first place. The present work explored human information acquisition and evaluation in a novel probability context and utilising a more naturalistic criminal investigation scenario. Focus was placed on exploring the relationship between searching for information, evaluating it and integrating it within ones belief model in order to make a causal judgement. Results indicated that although participants search choices approximated those of informed Bayesian OED models, belief updating accuracy systematically decreased throughout the task. Findings suggested a dichotomy between information evaluation and belief integration, questioning the descriptive abilities of OED principles to account for these processes. The implications of these finding in relation to the psychological literature of human inquiry are discussed.