UC Merced

Proceedings of the Annual Meeting of the Cognitive Science Society

Title

Data Shows Human Behavior is Not Random, period.

Permalink

https://escholarship.org/uc/item/5kb7x33x

Journal

Proceedings of the Annual Meeting of the Cognitive Science Society, 38(0)

Author

Kennedy, William G.

Publication Date

2016

Peer reviewed

Data Shows Human Behavior is Not Random, period.

William G. Kennedy
George Mason University

Abstract: Simulations of many people's decisions are used in public health and safety as well as to support policymaking. These simulations rely on creditable models of individual decision-making. An obvious approach is to develop a list of plausible actions and to then evaluate the benefits of each in the current situation to make the decision. However, such evaluations can be implausible, e.g., zero-intelligence traders in economics, or impracticable because the approach is computationally intensive for large-scale simulations. As a result, a commonly used approach is to select randomly from the plausible actions. Without data on how people would actually chose, a random number from a uniform distribution over the plausible options is often used to represent the unknown cognition. However, we claim that substituting a uniform random distribution for how people make decisions is making very strong claims about the process and we will present data demonstrating it is simply wrong.