People generate naïve theories to explain probabilistic outcomes even if their theory's predictive power is near zero

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Abstract

In this exploratory investigation, the basic paradigm manipulated diversity of contrasting evidence on inductive inferences drawn from a multi-item target. In prior research, it was shown that increasing the diversity of a contrast set led to lower generalization of a novel property that was probabilistically associated with the target (Bosch, 2020). In the present work, a significant majority of participants generated naïve theories or rules, e.g., "the bananas that cost points were fresher," to explain probabilistic outcomes, e.g., four out of six exemplars of bananas cost ten points (while the other two cost zero points) in a mock online game. This effect did not depend on accuracy or predictive power of the proffered explanation. Further, preliminary evidence suggests that greater diversity of the contrast set is associated with a greater likelihood to generate explanations. Implications for inductive reasoning, naïve theories, and causal inference are discussed.

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