

Inattentive Inference

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ABSTRACT

Most information structures have multiple unobserved causes. Learning about a specific cause requires taking into account other causes in the signal structure. For example, a principal who infers an agent's effort from his performance needs to factor in other inputs such as luck. A failure to consider alternatives generates misattribution to the cause of interest. Using a series of laboratory and online experiments, this paper demonstrates that people are inattentive to alternative causes, leading to excessively sensitive and overprecise beliefs. This neglect is driven by people's unawareness about the need to take into account other sources of randomness in a signal structure. Higher effort is typically insufficient to overcome this unawareness, but contextual cues that shift attention to the neglected part of the problem reduce the bias. The evidence from more than twenty treatments is consistent with a model in which automatic, simplified representations of an updating problem form the basis for how new information is processed.