

Implicit Evaluations Reflect Causal Information

Benedek Kurdi

Harvard University, Cambridge, Massachusetts, United States

Adam Morris

Harvard University, Cambridge, Massachusetts, United States

Fiery Cushman

Harvard University, Cambridge, Massachusetts, United States

Abstract

Evaluations along a positive-negative dimension can be measured either explicitly (via self-report) or implicitly (via response interference tasks). Whether implicit evaluations encode relational information (e.g., A causes B) or only co-occurrence information (AB) has been debated extensively. 1,082 participants observed a machine being activated by causally responsible stimuli and dispensing rewards in the presence of merely associated, but not causal, stimuli. Evaluations of causally responsible vs. associated stimuli were measured implicitly and explicitly. Explicit and implicit evaluations of causally responsible stimuli were more positive than those of associated stimuli, both in the presence (Study 1) and absence (Study 2) of verbal instructions about the operation of the machine. Study 3 eliminated temporal primacy and overshadowing as explanations of the effect. Supporting propositional theories, these findings suggest that implicit evaluations are sensitive not only to co-occurrence but also to relational information, whether conveyed verbally or learned solely from experience.