

**Meaningful Mediation:
Strengthening the Weakest Link in Causal Inference from Experiments**

ABSTRACT

Mediation analysis is a preferred method to test process theories and to make causal inferences in disciplines such as marketing and social psychology. When used in the context of experiments, it aims to identify the influence that some intervention has on an outcome via a mediator. The weakest link in mediation analysis then is the association between mediator and outcome, because it is correlational. This study describes five conditions that this weakest link needs to satisfy in order to make valid causal inferences based on mediation analysis. Two Monte Carlo experiments reveal the major biases (size, significance, sign), to valid causal inferences when conditions are not satisfied, notably when not addressing measurement error in the mediator, omitted variable bias, distinctiveness of constructs, and statistical power. A literature survey of published mediation studies in marketing and social psychology journals finds almost complete neglect of all but the first condition, and that current reporting practices impede insight into the causal process of interest, and knowledge-accumulation across studies. Recommendations are offered for conducting and reporting mediation analysis in order to make more valid causal inferences.