

Does Hindsight Bias Mediate Outcome Bias?

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Introduction

Hindsight bias (HSB) and Outcome bias (OCB) are often conflated, referred to simply as “outcome effects.” Few studies have examined their relationship, particularly whether judgments of likelihood/foreseeability (HSB) might mediate judgments of decision quality (OCB).

Blank et al (2015) found that foreseeability judgments concerning a decision to host the London Olympics did not mediate decision quality judgments, but Oeberst & Goeckenjan (2016) found that foreseeability did mediate judgments of negligence in a murder case.

We analyzed three (previously collected) datasets to determine if outcome *likelihood*, *decision criterion*, or outcome *foreseeability* mediates decision quality judgments in hindsight.

Summary

All studies found very large **direct** effects of outcome.

Study 1

Likelihood judgments did not mediate outcome bias
Criterion judgments did not mediate outcome bias

Study 2

Likelihood judgments partially mediated but direct effect larger
Criterion judgments did not mediate outcome bias

Study 3

Likelihood judgments partially mediated but direct effect larger
Surprise/Foreseeability did not mediate outcome bias.

Discussion

- Outcome bias can occur in the absence of any hindsight bias, and when likelihood judgments do mediate, the effect is much smaller than the direct effect of outcome.
- Foreseeability judgments did not mediate outcome bias. Judgments concerning the group decision to host the Olympics (Blank et al, 2015), or to pass anti-gun legislation (Study 3) may not capture the sense of culpability inherent in negligence judgments following a murder Oeberst et al, 2016)
- When attempting to de-bias decision quality judgments, care should be taken to address the correct root cause. None of the three potential mediators was solely or even mostly responsible for outcome bias.

• Blank, H., Diederholfen, B., & Musch, J. (2015). Looking back on the London Olympics: Independent outcome and hindsight effects in decision evaluation. *British Journal of Social Psychology, 54*, 798-807.

• Oeberst, A., & Goeckenjan, I. (2016). When being wise after the event results in injustice: Evidence for hindsight bias in judges' negligence assessments. *Psychology, Public Policy, and Law, 22*(3), 271.

Study 1*

Financial Investment (N = 87)

Scenario

Couple invests their life savings in a mutual fund that results in good (bad) outcome.

Measures

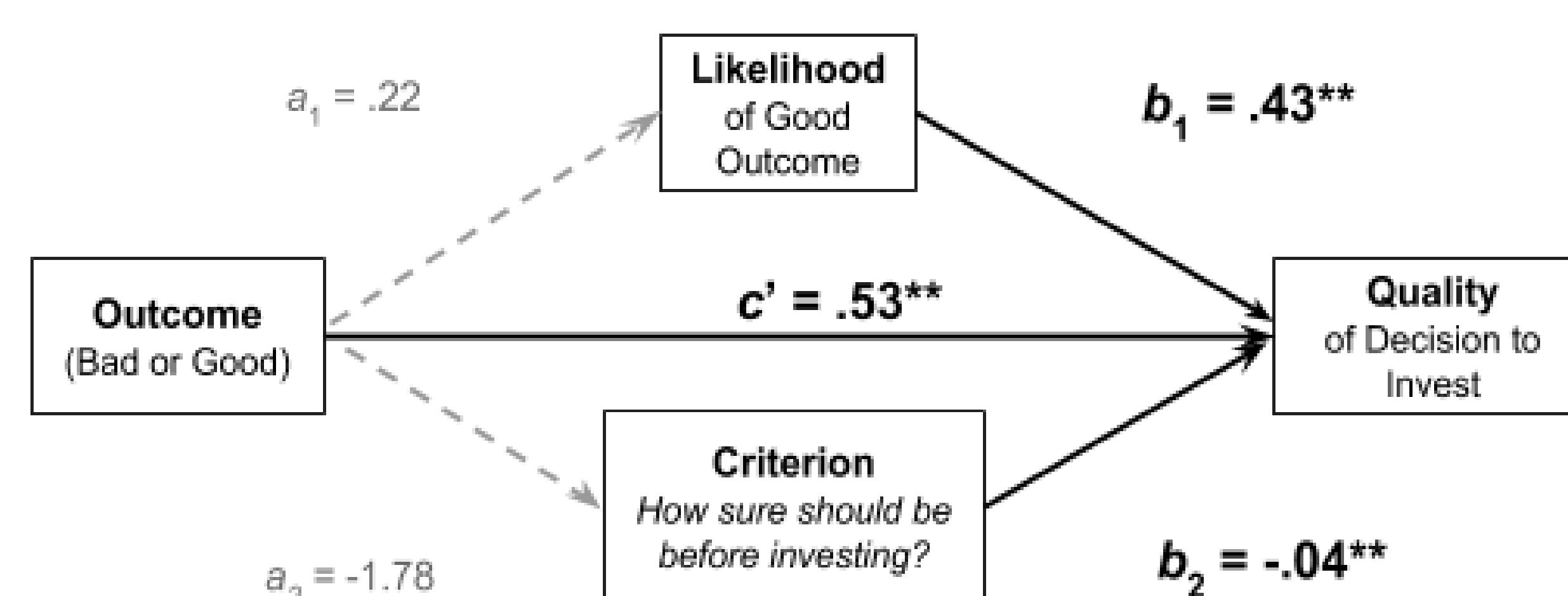
- *Quality*: of decision to invest
- *Likelihood*: that investment value will increase
- *Criterion*: How sure should be before investing?

Results

Direct effect of outcome on decision quality

- **Not mediated by likelihood judgments**
- **Not mediated by decision criterion**

• A second scenario concerning a decision to shoot a home invader produced almost identical results.



Study 2

Possible Child Abuse (N = 121)

Scenario

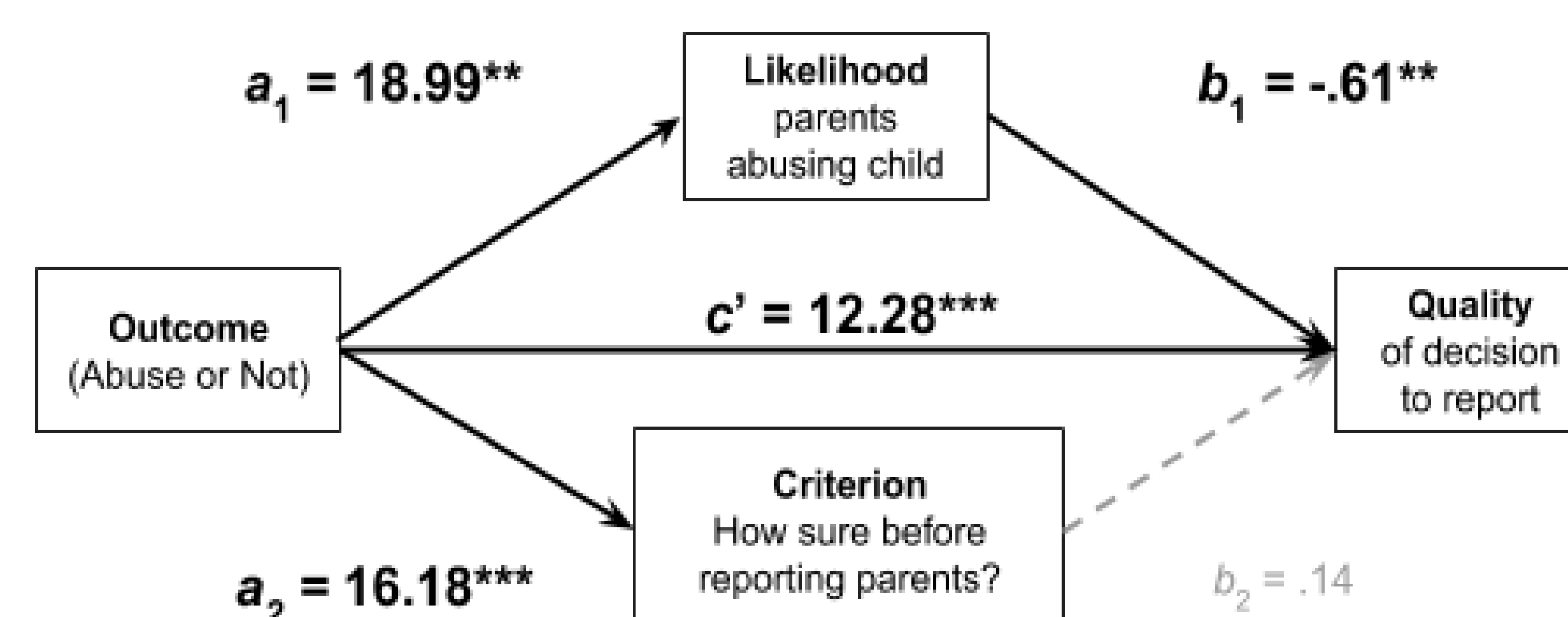
Social worker doesn't report child with broken arm, but parents actually are (aren't) abusive.

Measures

- *Quality*: of decision to not report
- *Likelihood*: that parents physically abusing child
- *Criterion*: How sure should be before reporting parents?

Results

- Direct effect of outcome on decision quality
- **Not mediated by likelihood judgments**
- **Not mediated by decision criterion**



Study 3

Gun Control Law (N = 79)

Scenario

Canada ostensibly passes strong gun control law. Gun-related deaths decrease, increase, or remain unchanged.

Measures

- *Quality*: of decision to pass the law
- *Likelihood*: that law will decrease gun violence
- *Foreseeability/Obviousness*: of the outcome

Results

- Direct effect of outcome on decision quality
- **Mediated by likelihood judgments, but small effect**
- **Not mediated by foreseeability**

