



A Loss Mindset Helps People Make More Rational Decisions: Evidence from the Default Bias, Sunk Cost Bias, and Outcome Bias

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Theoretical Background

Past effort on “de-biasing people”:

- Take an outsider’s perspective
- Consider the opposite decision
- Motivational and training interventions
- Shortcoming: focus on one bias at a time
- Goal: identify an intervention that can target multiple biases simultaneously

Gains vs. losses and decision-making:

- People are more risk-seeking when choosing between losses
- Past research: options are gains/losses (or framed as such)
- This research: gain vs. loss as a contextual mindset that can affect decisions

Hypothesis:

- **Gain mindset:**
- People experiencing gains think intuitively and are more prone to decision-making biases
- **Loss mindset:**
- People experiencing losses think analytically and are less prone to decision-making biases

Potential Mechanism:

- Experienced losses may induce:
 - **Negative affect**, making people more likely to engage in systematic processing
 - **Perceived resource scarcity**, so people make decisions more carefully
 - **Perceived accountability**, prompting more diligent information processing

Research Design Overview

Participants: Full-time managers from Prolific

Scenario:

- Participants assumed the role of board members attending a board meeting
- Review the company’s financial performance & make a strategic decision

Gain-loss manipulation:

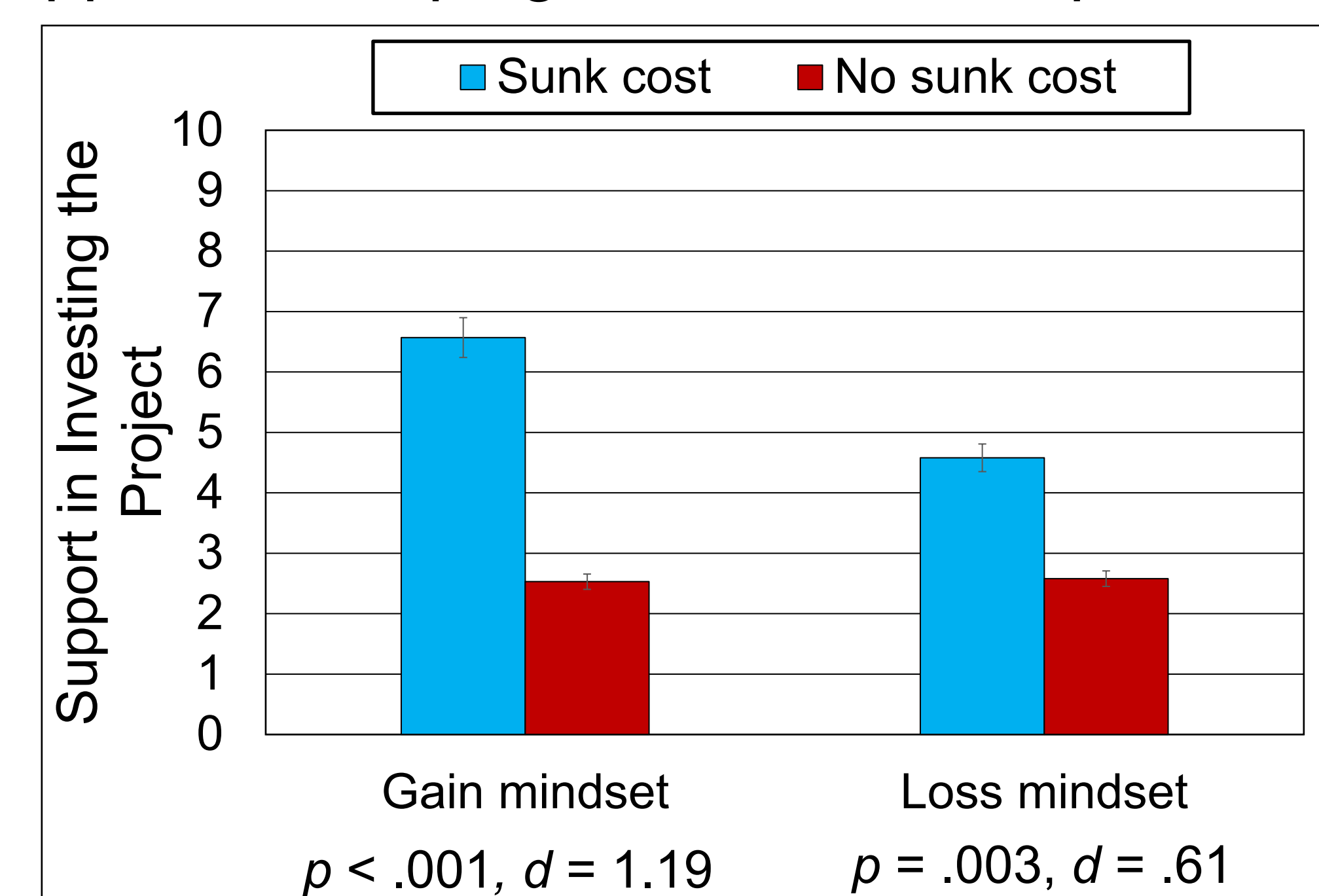
- The company’s increasing or decreasing last quarter’s financial performance (gains vs. losses)
- Performance justified with specific reasons

A loss mindset reduces sunk cost bias

Method:

- **Context:** Investment of the last \$1 billion in research funds in building a radar-blank plane; a competitor has developed a superior radar-blank plane
- **Decision:** Whether participants support investing the last \$1 billion
- **Sunk cost condition:** had spent 90% of research funds on the project
- **Control condition:** No investment in the project

Dependent measure: Whether participants support developing the radar-blank plane

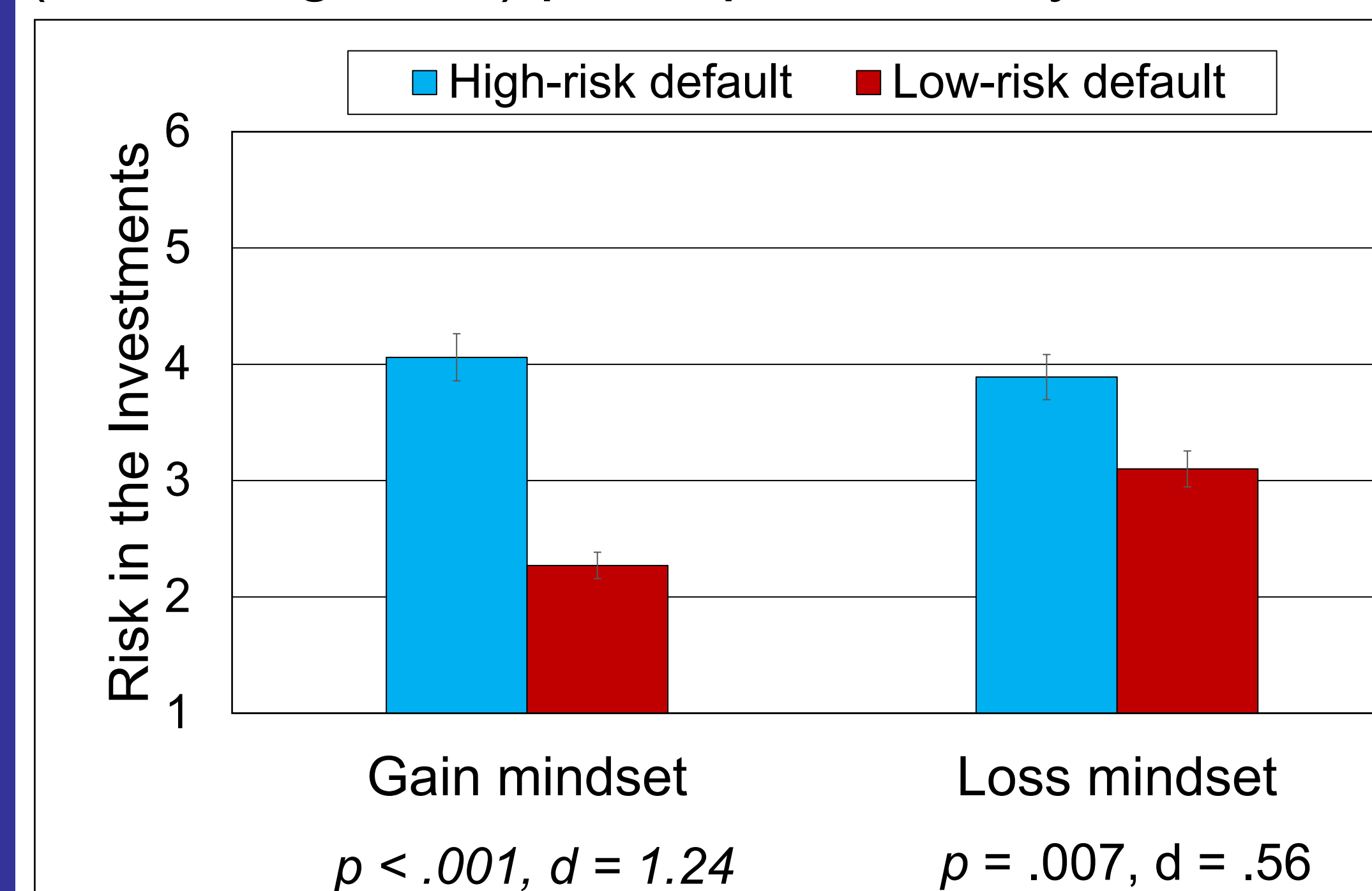


A loss mindset reduces the default bias

Method:

- **Context:** A substantial chunk of assets were invested in either a high-risk stock or the low-risk Treasury Bill; the board is choosing among several investment options
- **Decision:** Which option participants choose to invest in for the new portfolio
- **High-risk default:** a large chunk of assets invested in a high-risk stock
- **Low-risk default:** a large chunk of assets invested in the low-risk Treasury Bill

Dependent measure: The investment option (low to high risk) participants finally chose

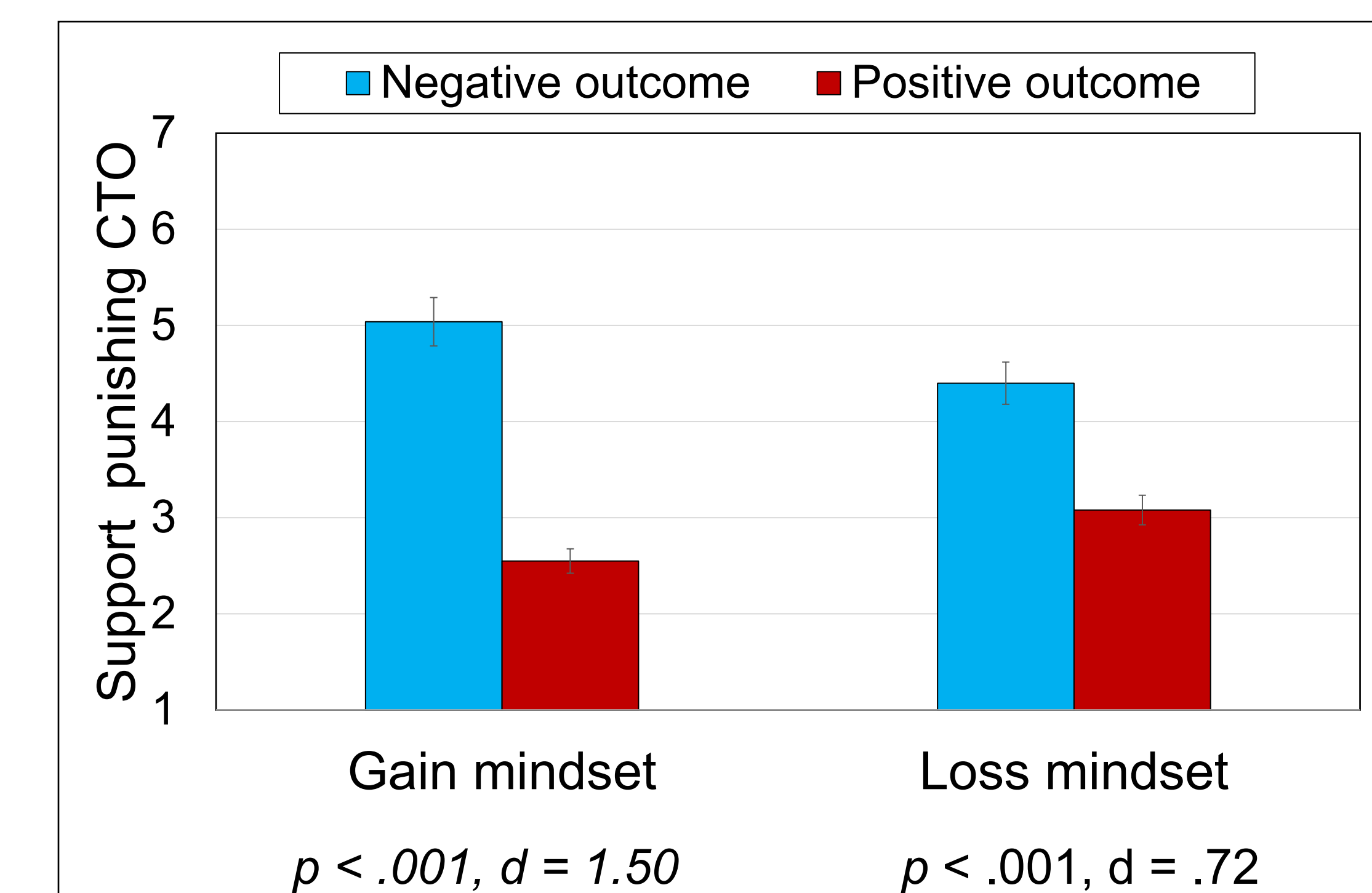


A loss mindset reduces the outcome bias

Method:

- **Context:** An electric car caught fire possibly due to a battery fault or a customer’s fault; CTO decides to not issue a recall to test the batteries
- **Decision:** Whether to punish the CTO for not recalling all electric vehicles
- **Negative outcome:** a new incident happened
- **Positive outcome:** no incidents happened

Dependent measure: Whether participants support punishing the CTO



Conclusion (Assumptions revisited)

- ✓ A loss mindset substantially reduced the extent to which participants exhibited sunk cost bias, default bias, and outcome bias;
- ✓ The effect size of each bias was approximately cut in half in the loss mindset condition, showing a loss mindset helps rational decision-making

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