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ABSTRACT We report two studies examining the role of psychological ownership (PO; Pierce, Kostava, & Dirks, 2003) in sunk cost effects. This expands traditional explanations that highlight loss aversion as a primary determinant for when people throw good money after bad (Arkes & Blumer, 1985). Mediation analyses support the notion that psychological ownership is a precursor to both feelings related to loss aversion as well as sunk costs.

Can the effects of sunk costs be explained by psychological ownership (PO)?

General Design

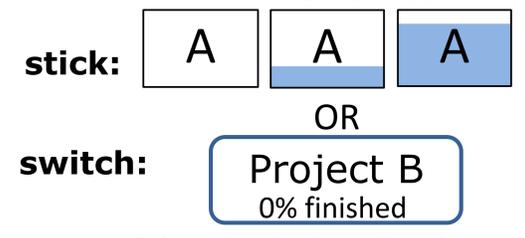
Step 1 Manipulation of Sunk Cost



Step 2 Project information

Project A will very likely fail. What will you do?

Step 3 Decision



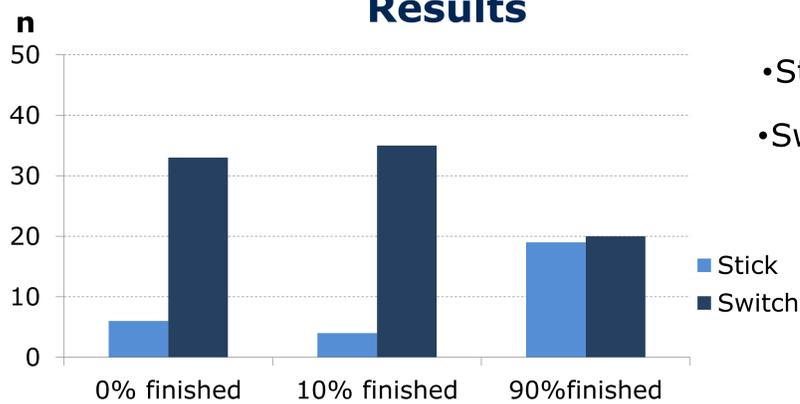
After Ss read about the projects' progress they were informed that Project A will very likely not be successful and asked to decide whether to stick with Project A or switch to Project B.

STUDY 1 (n = 117)

Step 1: Manipulation by level of progress

Participants were randomly assigned to one of three groups and exposed to the same project but with different levels of progress.

Results



$X^2(2, N=117) = 18.25, p < .001$

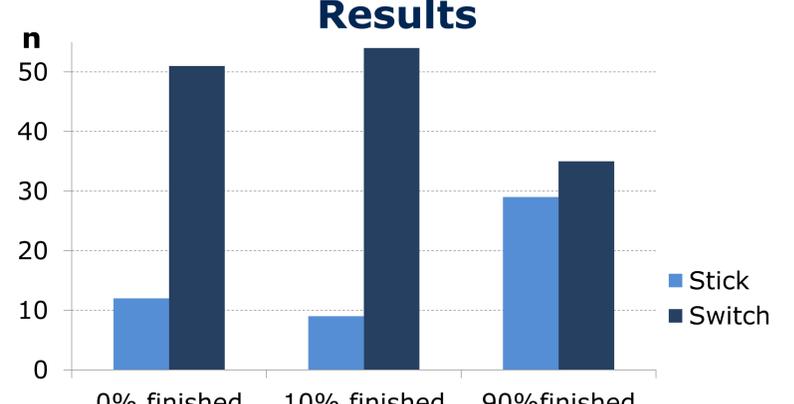
Figure 1: Decision to stick with project A or switch to project B for each group

STUDY 2 (n = 190)

Step 1: Manipulation by number of decisions

Participants were randomly assigned to one of the three groups and asked to decide which of 10 tasks should be done first to finish Project A. Each group could finalize the project only to a certain level.

Results



$X^2(2, N=190) = 18.3, p < .001$

Figure 2: Decision to stick with project A or switch to project B for each group

DV

- Stick with old project A
- or
- Switch to new project B

Mediation

- Psychological Ownership ($\alpha's > .83$)
 - Feelings (i.e., pain & pleasure) related to Loss Aversion ($\alpha's > .80$)
- 7 point scale: 1= weak, 7= strong

Study 1: sig. indirect effect
95% CI [0.08, 1.04]

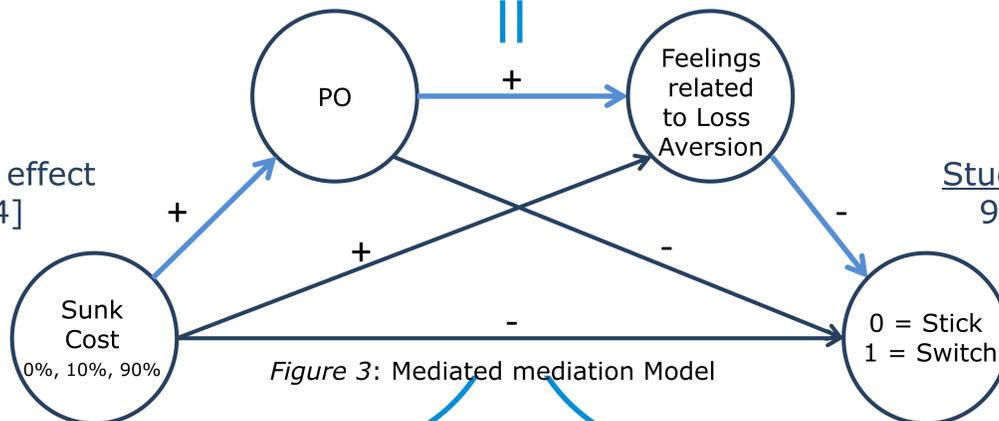


Figure 3: Mediated mediation Model

Study 2: sig. indirect effect
95% CI [0.02, 0.09]

Psychological Ownership and feelings related to Loss Aversion mediate the effects of sunk cost levels!

CONCLUSION Consistent with prior research on sunk costs, we found that participants were more likely to stick with Project A if larger investments were made (regarding money and number of decisions). Variations in both psychological ownership and loss aversion can explain these results. A mediation analysis suggests that higher levels of sunk costs increase psychological ownership, which in turn predicts stronger feelings related to loss aversion and participants' decisions.

REFERENCES

- Arkes, H. R., & Blumer, C. (1985). The psychology of sunk cost. *Organizational behavior and human decision processes*, 35(1), 124-140.
- Pierce, J. L., Kostava, T., & Dirks, K. T. (2003). The state of psychological ownership: Integrating and extending a century of research. [Review]. *Review of General Psychology*, 7(1), 84-107.