Psychological Ownership and Loss Aversion as Determinants of Sunk Cost Effects

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ABSTRACT We report two studies examining the role of psychological ownership (P.O., 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 (e.g., Arkes & Blumer, 1985). A mediation analysis in both studies found support for the notion that psychological ownership is a precursor to both loss aversion and sunk costs.

Can the effects of sunk costs be explained by psychological ownership (P.O.)?

General Design

1. Random Assignment to one of the following scenarios

Project A 0% finished | Project A 10 % finished | Project A 90% finished

2. Project information & Decision

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

stick: A | A | A

OR

switch: Project B 0% finished

After Ss read about the project 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.

Measurement of mediators:
- Psychological Ownership, α > .83
- Loss Aversion, α > .80

STUDY 1 (n = 117)

Manipulation of Sunk Costs by level of progress

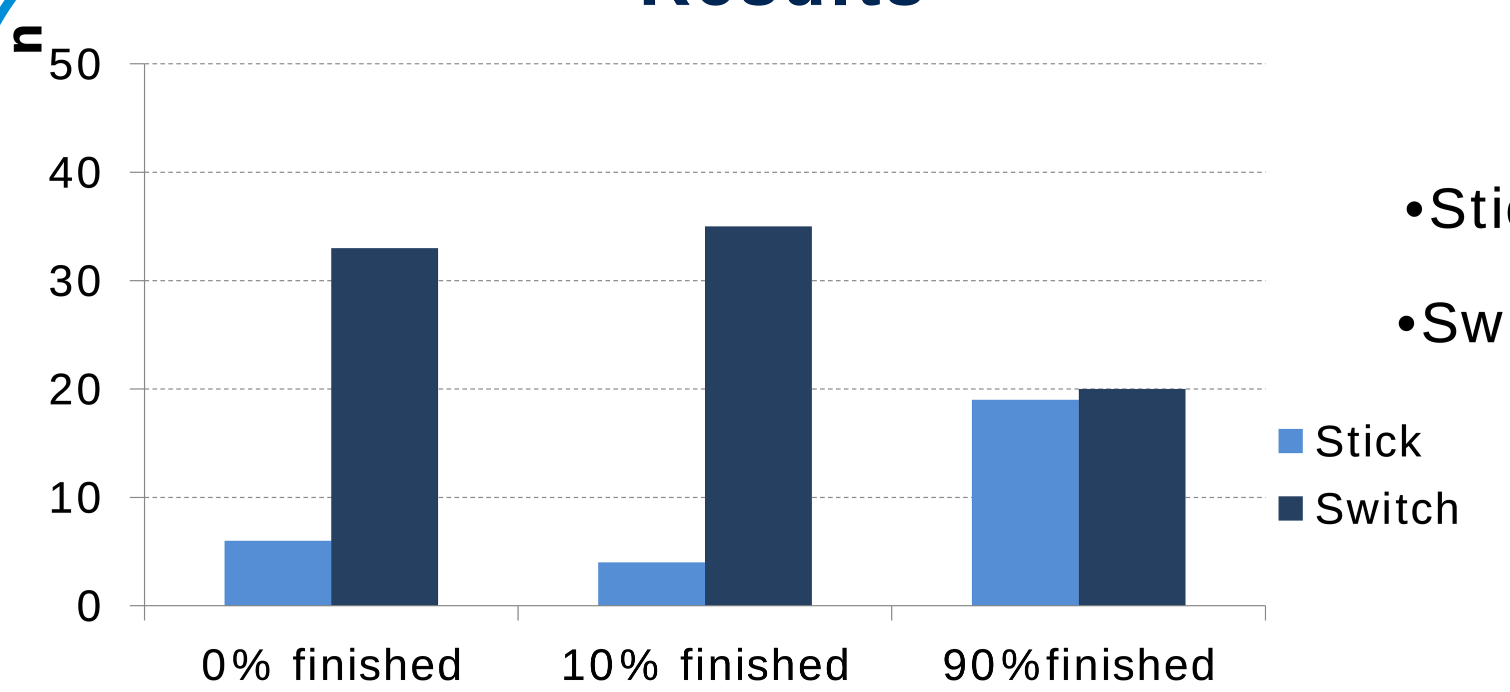
Participants were randomly assigned to one of three groups and exposed to the same project but with different levels of progress.

STUDY 2 (n = 190)

Manipulation of Sunk Costs by number of decisions

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

Results (Study 1)

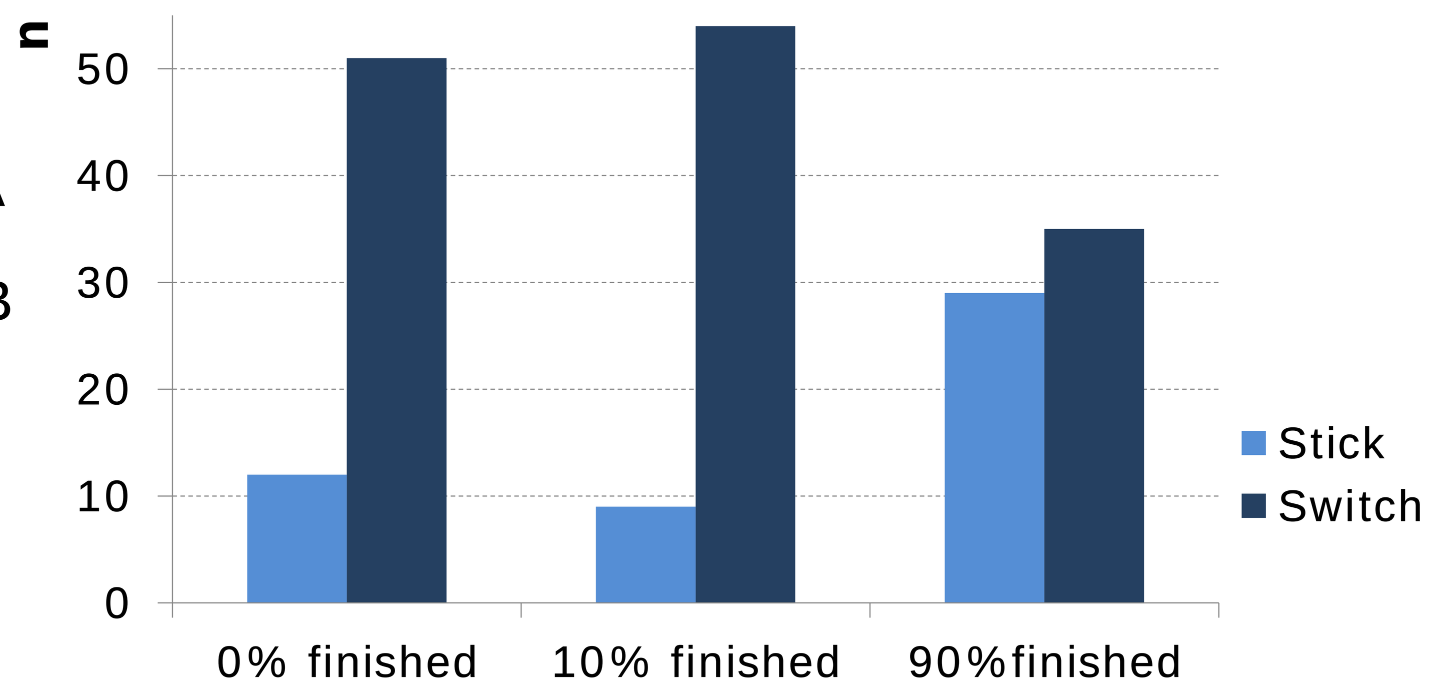


$X^2(2, N=117) = 18.25, p < .001$

DV

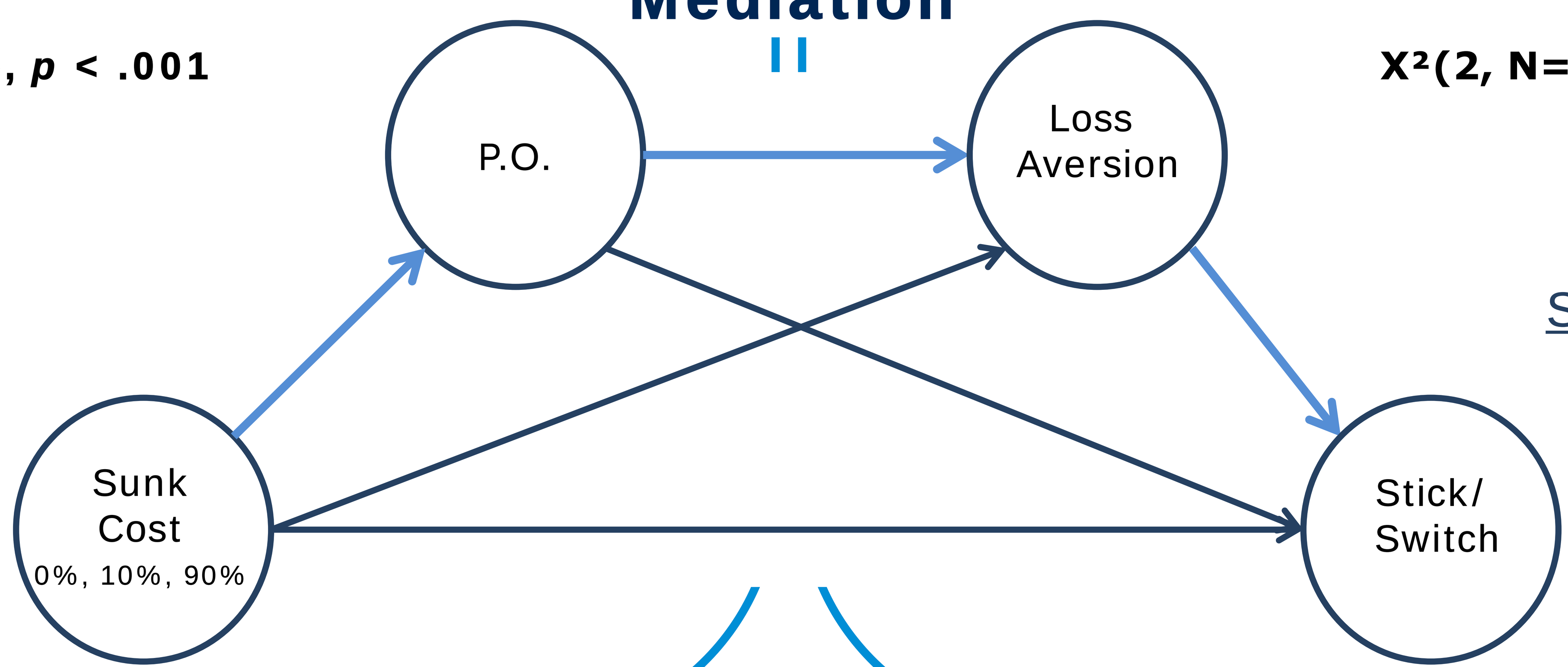
Decision:
- Stick with old project A
- or
- Switch to new project B

Results (Study 2)



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

Mediation



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

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

Psychological Ownership and 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 larger 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., Kostova, 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.

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