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ESCALATING COMMITMENT TO FAILING FINANCIAL DECISIONS: WHY DOES IT OCCUR?

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Research indicates inappropriate escalation of commitment to apparently failing decisions occurs in many areas of life. Examples include doubling-up blackjack bets to recover losses, the too lengthy Vietnam War debacle, and the tendency to continue with financial investments long after they appear to be failing. What motivates such behavior? Two theories presently compete as major explanations for this behavior: the self-justification theory and the prospect theory. This paper compares the two theories to determine which theory better predicts escalation behaviors within an un-confounded and unambiguous context. The research is motivated by the belief that understanding why people escalate is prerequisite to successfully developing strategies for mitigating the damages of escalation. Results show, that after removing the confounding effects of framing differences across conditions, prospect theory better predicts escalation than does self-justification theory within the context tested.

INTRODUCTION

It has long been known that financial managers sometimes utilize accounting and financial information in less than optimal ways, and as a result, make poor financial decisions. One area of sub-optimal decision making has been the observed tendency to escalate commitment to failing financial choices even though accounting and financial information suggest it may be time to abandon the investment. Users of financial information are well served by understanding what is known about the causes of escalation since it is a starting point in developing strategies to avoid the sometimes disastrous consequences of inappropriate escalation.

Staw reported the earliest empirical evidence of escalating commitment to failing financial decisions (Staw, 1976). Staw noted that individuals with high personal responsibility for earlier and apparently failing financial decisions displayed more commitment to them than others having little or no personal responsibility for the earlier decisions. Staw inferred the relatively higher commitment to failing decisions by high responsibility decision-makers resulted from *self-justification* in accordance with Aronson's self-justification theory (Aronson, 1976, 1968). Aronson's self-justification theory itself was an extension of Festinger's well established and widely accepted dissonance theory (Festinger, 1957).

Self-justification theory says people feel threatened by their mistakes and are reluctant to admit mistakes even to themselves. Self-justification says the reluctance to recognize personal mistakes protects the ego from the

dissonance that accompanies personal failure. Staw inferred the escalation behaviors he observed in his 1976 experiment resulted from this self-justification phenomenon. Staw's inference (i.e. escalation results from self-justification/ego-defense) has been widely accepted by others, and is still commonly cited in escalation literature. The escalation tendencies first observed by Staw are well documented and have been extended in experiments by Staw and Fox (1977), Caldwell and O'Reilly (1982), Davis and Bobko (1986), Brockner (1992), Beeler and Hunton (1997), Geiger, Robinson, and Irwin (1998), and Cheng, Schulz, Luckett, and Booth (2003).

However, there is a second competing explanation for escalation behaviors which has also gained wide acceptance in escalation literature. This explanation, known as *prospect theory* (Kahneman and Tversky, 1979), attributes different reasons for escalation behaviors. Prospect theory says that decision-makers naturally select and utilize different decision utility functions depending on their current state of wealth relative to an initial state of wealth. According to prospect theory, decision makers are naturally *risk-seeking* when making decisions that may recover losses to an initial wealth state and will take more risks than normal to attempt this. Prospect theory believes this is a widespread and natural human tendency and is not dependent upon personal ego involvement for efficacy in predicting behavior.

Additionally, when making decisions to preserve an initial wealth state (or to protect gains to an initial wealth state), prospect theory says decision-makers are naturally

risk averse and demonstrate reluctance to take risks that jeopardizes initial wealth. Put another way, in the domain of wealth preservation people are naturally risk averse, but in the domain of recovering losses to initial wealth, they are naturally risk seeking. These differing decision utilities, according to prospect theory, are natural and descriptive and do not require personal ego involvement in earlier decisions.

Prospect theory predictions are well documented. Empirical tests in a variety of contexts show their accuracy including Kahneman and Tversky (1979, 1984), Tversky and Kahneman (1981, 1986), Northcraft and Neale (1986), Garland (1990), Schaubroeck and Davis (1994), Johnstone (2002), Moreno, Kidda, and Smith (2002), and Chang, Yen, and Duh (2002).

There is a third less accepted theory of escalation called sunk cost theory. Sunk cost theory posits escalation is a form of persistence in decision-making, which may be a critical element of success in business in the long-run even if resulting in suboptimal short run decisions (Fox, Shaul, Hoffman, and Michael, 2002). While this line of reasoning is interesting, it does not serve the present research goal of pitting self-justification theory against prospect theory, and therefore is not developed further here or incorporated into the research design of this paper.

Bazerman was perhaps the first to suggest prospect theory is an alternate explanation for escalation behaviors (Bazerman, 1984). Whyte developed specific arguments detailing how prospect theory explains the particular escalation behaviors observed by Staw in 1976 within the context of the A & S Financial Decision Case used by Staw in that experiment (Whyte, 1986, 1993). Whyte further points out prospect theory is a more parsimonious explanation of escalation, and therefore, preferable.

In Whyte's view of escalation, the behaviors observed by Staw were a natural result of decision-makers having selected different decision utilities because one group framed decisions as recovering losses (i.e. were risk seeking) and the other group framed decisions as preserving wealth (i.e. were risk averse). More specifically, high responsibility subjects escalated, not because of personal ego involvement, but because they viewed their decision as attempting to recover losses from the initial wealth state existing when they made their earlier decision. Thus, they were naturally risk-seeking in attempting to recover their losses. On the other hand, low personal responsibility subjects framed their decisions as preserving an initial wealth state existing at the point these subjects first became personally involved in the A & S Financial Decision Case, the point of the

second decision. In order to preserve their initial wealth they were naturally risk averse. According to Whyte, ego defense is not needed to explain the observed escalation behaviors. Decision framing differences explains it.

Chang, Ho, and Lin, reviewed escalation literature and point out that both self-justification theory and prospect theory continue as major explanations for escalation (Chang, Ho, and Lin, 2002). Both theories are cited as continuing active research streams.

It is interesting to note that no empirical evidence was presented by Whyte in 1986 or 1993 to support his theoretical arguments in support of prospect theory. Furthermore, to date no unambiguous empirical evidence has been reported in academic literature that directly and unambiguously contrasts the two theories after removing the confounding effects of framing differences across groups. The purpose of this research is to do just that. We test prospect theory predictions against self-justification predictions within the context of Staw's original A & S Financial Decision Case after removing framing differences. We ask, what are the patterns of escalation between high personal responsibility and low personal responsibility subjects (with negative feedback) if decision framing differences across the two groups have been removed. Self-justification theory and prospect theory make very different predictions about outcomes under these conditions. If self-justification is the sole reason for escalating commitment, then high personal responsibility decision-makers will escalate more than low responsibility decision-makers to self-justify their past actions. On the other hand, if prospect theory alone explains escalation, high personal responsibility subjects and low responsibility subjects who have framed decisions similarly as recovering losses will make similar decisions because both groups have selected and used the same decision utility function in their decisions. A third possibility that is considered is that both self-justification and prospect theory may be independent sources of escalation behavior.

Hypothesis Development

In this section the methods and hypotheses for testing Whyte's and Staw's separate theories for escalating commitment are discussed. To test the differing escalation theories, two independent variables are manipulated: RESPONSIBILITY (either high or low personal responsibility for an earlier decision) and FEEDBACK (either negative or positive feedback with respect to that earlier decision). These are the same two variables manipulated by Staw in his 1976 A & S Financial Decision Case. Furthermore, we have used the

same exact case facts as used by Staw in the A & S Financial Decision Case. The difference between our experiment and the 1976 Staw experiment relates only to its expanded design which includes not one, but two sets of low responsibility subjects. The additional set of low responsibility subjects is intentionally induced to frame the continuing investment decision as recovering losses, similar to high responsibility subjects, thus eliminating the confound of framing differences across groups.

This design change deserves further elaboration. One set of low responsibility subjects are told an earlier investment decision has been made by a former vice president (i.e. former vice president condition). This condition exactly replicates Staw's low responsibility condition. A second set of low responsibility subjects are established who are induced to believe the earlier investment decision was made, not by a former vice-president, but by their teammate in a case competition being completed in two person teams (i.e. teammate condition). Subjects in this condition (and all conditions) are told the A & S Financial Decision Case is being completed in two person teams and results are to be evaluated at the team level. The negative feedback they receive about their teammate's investment decision affects their team standing. The design addition is entirely for the purpose of creating a set of low personal responsibility subjects who believe they are recovering losses (albeit team losses) to an initial team wealth state.

By including low responsibility subjects who frame similarly to high responsibility subjects (i.e. recovering losses), we can directly and unambiguously test whether high personal responsibility subjects escalate more than low personal responsibility subjects for reasons of self-justification. If both groups have framed in the same way, framing differences cannot explain the escalation and do not confound the result. If, under these conditions, high personal responsibility subjects escalate more than low

responsibility subjects it is strong support for self-justification theory. On the other hand, if high personal responsibility subjects do not escalate more than low responsibility subjects when framing differences are removed, then self-justification theory is apparently not a viable explanation for escalation after framing differences are removed.

To strengthen the motivation of subjects to give their best efforts in completing the expanded A & S Financial Decision Case, all subjects were told they could earn up to ten extra credit points for completing the decision case according to the following guidelines: 10 extra-credit points for submitting top quartile solutions, 8 extra-credit points for second quartile solutions, 6 extra-credit points for third quartile, and 4 extra-credit points for fourth quartile solutions. All subjects were told the extra-credit points were earned at a team level. At the end of the experiment, everyone in fact received 10 extra-credit points for participating, and in reality there were no teams though this was not known until after completing the case.

It should be noted Whyte's prospect theory analysis of the Staw result covered only negative feedback conditions. Positive feedback conditions were irrelevant to explaining why people escalate and therefore were not included. Nevertheless, prospect theory would predict high and low responsibility subjects receiving positive feedback would perceive themselves to be in the domain of preserving wealth or preserving gains to wealth. In both cases these subjects would be risk-averse according to prospect theory. On the other hand, subjects receiving negative feedback fall into two different categories in terms of framing expectations: those recovering losses to an initial wealth state (risk-seeking teammate subjects) and those maintaining an initial wealth state (risk-averse former vice president subjects). Table 1 summarizes our expectations about decision framing and decision utilities in the six experimental conditions.

Table 1: Prospect Theory - Summary of Framing Effects

	High Responsibility	(Former VP) Low Responsibility	(Teammate) Low Responsibility
Positive Feedback	Frame: Preserving gains and risk averse Escalate? No	Frame: Preserving initial wealth and risk averse Escalate? No	Frame: Preserving gains and risk averse Escalate? No
Negative Feedback	Frame: Recovering losses and risk seeking Escalate? Yes	Frame: Preserving initial wealth and risk averse Escalate? No	Frame: Recovering losses and risk seeking Escalate? Yes

The lower right-hand cell in table 1 contains an important and testable prediction which informs our desire to contrast the efficacies of self-justification and prospect theory in predicting escalation. Self-justification

theory predicts no escalation by low responsibility subjects with negative feedback since low responsibility subjects by definition have no personal responsibility for the past decisions. Prospect theory on the other hand

predicts these particular low responsibility subjects will be risk seeking to recover team losses and will escalate.

Hypothesis 1 compares high responsibility and low responsibility-former vice president subjects exactly as Staw did in 1976.

Hypothesis 1: There will be a significant interaction between RESPONSIBILITY and FEEDBACK when comparing high responsibility subjects with low responsibility-former vice president subjects. The direction of the interaction will be high responsibility subjects escalate more than low responsibility-former vice president subjects in the negative feedback condition only.

If confirmed, Hypothesis 1 replicates Staw's main 1976 finding in the present experimental context and with the present set of subjects and instructions involving teammates.

Our second hypothesis (the main hypothesis) contrasts Whyte's framing predictions with Staw's self-justification predictions after removing the potential confound of framing differences across groups. High responsibility subjects are compared to low responsibility-teammate subjects, both who are framing to recover losses. The results of Hypothesis 2 inform the main question of this experiment. Do high and low responsibility subjects who have framed in a similar risk seeking way demonstrate significantly different levels of continuing commitment to earlier decisions after negative feedback due to self-justification of past actions? Hypothesis 2 assumes that prospect theory is correct and no escalation will occur after framing differences are removed.

Hypothesis 2: There will not be a significant interaction between RESPONSIBILITY and FEEDBACK for high responsibility subjects and low responsibility-anonymous teammate subjects.

Our third and final hypothesis provides one additional test of prospect theory. Since low responsibility-teammate subjects are expected to frame in terms of recovering losses to an initial team wealth state, and will therefore be risk-seeking, and since low responsibility-former vice president subjects are believed to frame in terms of maintaining an initial wealth state, and will therefore be risk-averse, it follows the two low responsibility groups will have differing levels of continuing commitment to past decisions under

conditions of negative feedback. Accordingly, we predict the reappearance an interaction in these two groups and in the same direction as before due to framing differences alone.

Hypothesis 3: There will be a significant interaction between RESPONSIBILITY and FEEDBACK when comparing low responsibility-anonymous teammate subjects with low responsibility-former vice president subjects. The direction of the interaction will be low responsibility-anonymous teammate subjects escalate more than low responsibility-former vice president subjects in the negative feedback condition.

Should Hypothesis 1 prove true, this experiment replicates Staw's main 1976 finding of escalation using different subjects. Should hypothesis 2 (the main hypothesis) prove true, and escalation behaviors disappear after removing framing differences across conditions, it calls into question self-justification as an explanation for what has been observed, but supports a prospect theory and framing explanation. Finally, if Hypothesis 3 proves true, the only explanation for escalation differences between two low responsibility groups is prospect theory and framing differences. Self-justification cannot explain escalation by subjects who have no earlier personal responsibility for past decisions.

Experimental Design

All hypotheses are tested using the decision facts of Staw's 1976 A & S Financial Decision Case. Independent variables manipulated are RESPONSIBILITY--high or low responsibility (but with two types of low responsibility), and FEEDBACK--positive or negative feedback. All subjects were given the same instructions and led to believe the case was being solved in two person teams. High responsibility subjects were given the first half of the A & S Financial Decision Case and requested to select one of two corporate divisions, consumer or industrial, to receive all of a 10 million dollar research allocation. After making the decision, high responsibility subjects were provided positive or negative feedback, and then required to make a second decision in which they allocated another 20 million research dollars all or in part to either of the two corporate divisions.

Low responsibility-former vice president subjects began the decision case by reading about a former vice president who made a 10 million dollar research

allocation to one of two corporate divisions, consumer or industrial, based on the same facts made available to high responsibility subjects. Next, feedback positive or negative was then provided. The key difference between this group and the high responsibility group was that a former vice president made the first decision rather than subjects, themselves. At this point, low responsibility-former vice president subjects were asked to allocate another 20 million research dollars all or in part to either of the two corporate divisions.

Low responsibility-teammate subjects were given the same facts and feedback as the low responsibility-former vice president condition except they were told their teammate in the case competition had made the initial 10 million dollar research decision (not an unknown former vice president). After receiving positive or negative feedback about the teammate's decision, low responsibility-teammate subjects were asked to make a second 20 million dollar research allocation as in the other conditions.

The dependent variable for all six conditions was the amount in dollars of the 20 million allocated to the division selected in the first decision (i.e. a measure of the level of continuing commitment to an earlier decision). The experimental approach for testing all three hypotheses was three fully randomized 2 X 2 factorials. Three-hundred-eighty-four undergraduate students recruited from multiple sections of sophomore/junior level business classes at three mid-western universities served as subjects. Subjects were randomly assigned to one of six conditions at the three sites and results were collapsed across campuses for final analyses. Two hundred and twelve subjects were male; one hundred and seventy-two were female. The mean age of subjects was 20.8 years. No subjects from any site were debriefed until data had been fully collected at all locations. The experiment itself was conducted during the first twenty-five minutes of regular class periods.

Manipulation Checks

Manipulation checks were conducted to better understand the success of several critical aspects of the experiment's manipulations. These included subjects' perceptions about feedback type, perceptions about level of personal responsibility for the first decision, and perceptions in the low responsibility teammate condition about the need to support the teammate's decision. Subjects self-reported each of these on a seven-point

Likert scale immediately after the experiment itself had been concluded and decisions had been collected.

Self-justification theory and prospect theory both depend on subjects being able to distinguish positive from negative feedback. Results of our manipulation check show subjects in positive feedback conditions did perceive feedback to be more positive (mean = 5.31) than subjects in the negative feedback conditions (mean = 2.59) ($t = 15.76$, $p\text{-value} = .0001$). The feedback manipulation appears successful.

Subjects were also asked to describe their perceptions about the level of personal responsibility they had for the first research allocation decision. It is important to be sure that low responsibility-former vice president subjects and low responsibility-teammate subjects both perceived low personal responsibility for the earlier decision relative to high responsibility subjects. If this were not the case, feelings of inappropriate high personal responsibility by low responsibility subjects may have confounded results and thereby disallowed ruling out self-justification as the cause for escalation. Results of our manipulation check show high responsibility subjects did perceive significantly higher personal responsibility for the first decision (mean = 5.27) than either of the two low responsibility groups--low responsibility-former vice president (mean = 1.70) and low responsibility-anonymous teammate (mean = 1.50) ($t = 18.96$, $p\text{-value} = .0001$ and ($t = 20.87$), $p\text{-value} = .0001$ respectively). Subjects in all six conditions appear to have perceived their level of personal responsibility for first decision as intended.

Lastly, subjects in the teammate condition were requested to self-report the degree to which they perceived their continuing decisions had been influenced in any way by concerns about the opinions, feelings, or sense of social obligation to back up their unknown teammate's earlier decision. Subjects reported a very low level of concern about obligations to support their teammate's decisions with a mean score of 1.52 on a scale of seven. This reduces the plausibility of a confound related to team dynamics affecting continuing commitment and thereby confounding results in some unknown way.

Results

Table 2 provides descriptive statistics for each of the six conditions.

Table 2: Mean Escalation in Millions, STD. DEV., and Sample by Condition

	High Responsibility	(Former VP) Low Responsibility	(Teammate) Low Responsibility
Positive Feedback	MEAN = 8.34, S.D. = 4.16, n = 64	MEAN = 8.36, S.D. = 3.82, n = 64	MEAN = 7.71, S.D. = 4.40, n = 64
Negative Feedback	MEAN = 12.01, S.D. = 4.11, n = 64	MEAN = 9.40, S.D. = 4.34, n = 64	MEAN = 10.75, S.D. = 4.40, n = 64

Tables 3, 4, and 5 present results of the three fully randomized 2 X 2 factorial analyses of variance testing for the patterns of behavior predicted by the three hypotheses.

Table 3: High Responsibility Subjects with Low Responsibility-Former VP Subjects
 (Note: this is the original 1976 Staw design)

Summary Analysis of Variance (2 x 2 Factorial) n = 256

Source	SS	DF	MS	F	Significance
Responsibility	106.993	1	106.993	6.327	.013
Feedback	353.675	1	353.675	20.915	.000
Two Way Interaction	110.381	1	110.381	6.527	.011
Residual	4261.421	252	16.910	----	----
Total	----	255	----	----	----

In table 3, hypothesis 1 is confirmed and escalation has occurred between high responsibility and low responsibility - former vice president subjects. The significant interaction is similar to was reported by Staw in 1976 between responsibility and feedback ($F(1, 254) = 6.527, p = .011$). High responsibility subjects escalated

more than low responsibility-former vice president subjects but only in the negative feedback condition. This replicates Staw's main finding from 1976 under conditions and instructions of the current experiment. Table 4 gives the results of comparing high responsibility subjects to low responsibility-teammate subjects.

Table 4: High Responsibility with Low Responsibility-Teammate Subjects

Summary Analysis of Variance (2 X 2 Factorial) n = 256

Source	SS	DF	MS	F	Significance
Responsibility	57.191	1	57.191	3.524	.062
Feedback	718.910	1	718.910	44.294	.000
Two Way Interaction	6.250	1	6.250	.385	.535
Residual	4090.086	252	16.230	----	----
Total	----	255	----	----	----

Table 4 shows high responsibility subjects have not escalated more than low responsibility-teammate subjects after removing framing differences which confirms hypothesis 2. The significant interaction earlier observed between high responsibility and low responsibility - former vice president subjects disappears in low

responsibility-teammate subjects who are induced to frame as recovering losses. Table 4 shows the interaction between responsibility and feedback is not significant ($F(1, 254) = .385, p = .535$) after framing is held constant. Table 5 below provides results comparing the two low responsibility groups at positive and negative feedback.

Table 5: Low Responsibility-Teammate with Low Responsibility-Former VP
 Summary Analysis of Variance (2 X 2 Factorial) n = 256

Source	SS	DF	MS	F	Significance
Responsibility	7.735	1	7.735	.482	.488
Feedback	265.894	1	265.894	16.568	.000
Two Way Interaction	64.100	1	64.100	3.994	.047
Residual	4044.140	252	16.048	----	----
Total	----	255	----	----	----

Hypothesis 3 is confirmed. Table 5 shows a significant interaction between RESPONSIBILITY and FEEDBACK when comparing low responsibility-former vice president subjects with low responsibility-teammate

subjects ($F(1, 254) = 3.994, p = .047$). Low responsibility-teammate subjects escalate more than low responsibility-former vice president subjects, but only in the negative feedback condition.

Low responsibility subjects induced to frame as recovering from a teammate's losses were more committed to their teammate's earlier decision than were low responsibility subjects who believed a former vice president made those decisions, but only in the negative feedback condition. This result cannot be explained by self-justification since there is no personal responsibility for the earlier decision by either group. It is however predicted by prospect theory because differing decision frames are used by the two groups relative to initial wealth state.

Implications and Discussion

Escalation in financial decision-making is a potentially disastrous decision-making phenomenon. For researchers, a starting place must be to understand why escalation occurs. Making correct assumptions about the causes of escalation is a crucial first step towards predicting its occurrence and discovering approaches for mitigating its costs. We believe by better understanding the theoretical underpinnings of escalation, the likelihood of making research progress towards its mitigation will be improved. A correct theoretical understanding of escalation causes affects the sorts of research questions asked, affects research designs employed to resolve those questions, and ultimately shapes the real-world solutions developed to address the problem.

If it is true that escalation is the consequence of self-justification of past actions, then strategies to control the ego involvement of decision makers in continuing decisions are necessary. On the other hand, if escalation is only an artifact of decision framing, then strategies which ensure careful and explicit awareness of the potential for decision frame bias be used.

Results reported here seem fully consistent with Whyte's prospect theory interpretation of escalating commitment (Whyte, 1986). Our tests were made within the context of Staw's A & S Financial Decision Case and though they support a prospect theory interpretation, they are not consistent with a self-justification theory interpretation. Seemingly, escalation behaviors very similar to those observed by Staw no longer occur if low responsibility subjects are induced to frame similarly to high responsibility subjects. Furthermore, low responsibility subjects induced to frame as recovering losses escalate more than low responsibility subjects who have framed as preserving initial wealth. These differences in escalation behavior cannot be explained as self-justification since neither group had any personal responsibility for the earlier decisions. Together our

findings raise interesting questions about self-justification as the explanation for escalation in the present context.

Some may criticize our tests for relying on a hypothetical decision case with student subjects rather than real world events and decision-makers. Artificiality has long been a valid criticism of laboratory research. We must note however that nearly all existing escalation research including Staw's seminal 1976 study is based on these same artificial contexts. Furthermore, it was the A & S Financial Decision Case outcome that Staw used as the basis for concluding (without sufficient evidence in our view) that self-justification motivates escalating commitment to failing courses of action. This inference has remained largely untested and is not well supported with unambiguous empirical evidence.

Whyte questioned Staw's inference of self-justification on a theoretical basis and suggested prospect theory is a more parsimonious explanation. We have presented here modest empirical evidence within the same experimental setting suggesting self-justification theory is inconsistent with the escalation behaviors observed. The data show, after eliminating framing differences as a confound, self-justification no longer predicts what occurs in the context tested. In an admittedly artificial and narrow context of the A & S Financial Decision Case, prospect theory better explains what has been observed.

Additional evidence is needed of course, and in more compelling and less artificial decision settings before final conclusions can be drawn about the efficacy of self-justification as a partial cause for escalation. In stronger, more realistic decision contexts with stronger ego involvement, perhaps self-justification can provide a significant independent motivation for escalation. Testing of this type need not be limited to business and financial contexts but should be broadened to explore other continuing decisions in areas such as medical decision-making or political decision-making. However, until empirical evidence is free of the framing confound common to most existing escalation research is available, self-justification remains in our view a speculative, untested and perhaps inaccurate explanation for escalation behavior.

Finally, we have not intended this evidence to be final and conclusive that self-justification is not a viable source of escalating commitment. No single study and certainly not one as narrow and artificial as this could do that. What we have attempted to do is raise interesting questions about the nature of the escalation behaviors first observed by Staw in the context of the A & S Financial Decision Case, and more importantly raise

questions about the inferences drawn from them. A long stream of research has followed Staw that assumes self-justification is the major cause of escalation. In our opinion, too little empirical scrutiny has been given to this assumption.

In conclusion, we have asked and attempted to answer the question: do observed escalation behaviors support or contradict self-justification theory as an explanation for escalating commitment after removing framing differences as a confound? In the context of Staw's 1976 *A & S Financial Decision Case* (with an expanded design), we find that prospect theory better fits observed escalation behaviors than self-justification theory.

REFERENCES

- Aronson, E. 1968. **Dissonance theory: Progress and problems.** In R. Abelson, E. Aronson, W. McGuire, T. Newcomb, M. Rosenberg, & R. Tannenbaum, (Eds.), *Theories of cognitive consistency: A sourcebook.* Chicago: Rand McNally, 5-27.
- Aronson, E. 1976. **The social animal.** San Francisco: W. H. Freeman.
- Bazerman, M. 1984. The relevance of Kahneman and Tversky's concept of framing to organization behavior. **Journal of Management**, 10: 333-343.
- Beeler, J., & Hunton, J. 1997. The influence of compensation method and disclosure level on information search strategy and escalation of commitment. **Journal of Behavioral Decision Making**, 10: 77-91.
- Brockner, J. 1992. The escalation of commitment to a failing course of action: Toward theoretical progress. **Academy of Management Review**, 17: 39-61.
- Caldwell, D., & O'Reilly, C. 1982. Response to failure: the effects of choice and responsibility on impression management. **Academy of Management Review**, 25: 121-136.
- Chang, C., Ho, J., & Lin, P. 2002. Managers' resource allocation: Review and implications for future research. **Journal of Accounting Literature**, 21: 1-37.
- Chang, C., Yen, S., & Duh, R. 2002. An empirical examination of competing theories to explain the framing effect in accounting-related decisions. **Behavioral Research in Accounting**, 14: 35-64.
- Cheng, M., Schulz, A., Luckett, P., & Booth, P. 2003. The effects of hurdle rates on the level of escalation of commitment in capital budgeting. **Behavioral Research In Accounting**, 15: 63-78.
- Davis, M., & Bobko, P. 1986. Contextual effects on escalation processes in public sector decision making. **Organizational Behavior and Human Decision Processes**, 37: 121-138.
- Festinger, L. 1957. **A theory of cognitive dissonance.** Stanford: Stanford University Press.
- Fox, S., & Hoffman, M. 2002. Escalation behavior as a specific case of goal-oriented activity: a persistence paradigm. **Basic And Applied Social Psychology**, 24: 273-285.
- Garland, H. 1990. Throwing good money after bad: The effect of sunk costs on the decision to escalate commitment to an ongoing project. **Journal of Applied Psychology**, 75: 728-731.
- Geiger, S., Robertson, C., & Irwin, J. 1998. The impact of cultural values on escalation of commitment. **International Journal of Organizational Analysis**, 6: 165-176.
- Johnstone, D. 2002. Behavioral and prescriptive explanations of a reverse sunk cost effect. **Theory and Decision**, 53: 209-218.
- Kahneman, D., & Tversky, A. 1984. Choices, values and frames. **American Psychologist**, 39: 341-350.
- Kahneman, D., & Tversky, A. 1979. Prospect theory: An analysis of decisions under risk. **Econometrica**, 47: 263-291.
- Moreno, K., Kida, T., & Smith, J. 2002. The impact of affective reactions on risky decision making in accounting contexts. **Journal of Accounting Research**, 40: 1331-1349.
- Northcraft, G., & Neale, M. 1986. Opportunity costs and the framing of resource allocation decisions. **Organizational Behavior and Human Decision Processes**, 37: 348-356.
- Schaubroeck, J., & Davis, E. 1994. Prospect theory predictions when escalation is not the only chance to recover sunk costs. **Organizational Behavior and Human Decision Processes**, 57: 59-82.

- Staw, B. 1976. Knee-deep in the big muddy: A study of escalating commitment to a chosen course of action. **Organizational Behavior and Human Performance**, 16: 27-44.
- Staw, B., & Fox, F. 1977. Escalation: The determinants of commitment to a previously chosen course of action. **Human Relations**, 30: 431-450.
- Tversky, A., & Kahneman, D. 1986. Rational choice and the framing of decisions. **Journal of Business**, 59: 251-278.
- Tversky, A., & Kahneman, D. 1981. The framing of decisions and the psychology of choice. **Science**, 211: 453-458.
- Whyte, G. 1993. Escalating commitment in individual and group decision-making: A prospect theory approach. **Organizational Behavior and Human Decision Processes**, 54: 430-455.
- Whyte, G. 1986. Escalating commitment to a course of action: A reinterpretation. **Academy of Management Review**, 11: 311-321.

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