

Promoting De-Escalation of Commitment: A Regulatory-Focus Perspective on Sunk Costs

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Abstract

People frequently escalate their commitment to failing endeavors. Explanations for such behavior typically involve loss aversion, failure to recognize other alternatives, and concerns with justifying prior actions; all of these factors produce recommitment to previous decisions with the goal of erasing losses and vindicating these decisions. Solutions to escalation of commitment have therefore focused on external oversight and divided responsibility during decision making to attenuate loss aversion, blindness to alternatives, and justification biases. However, these solutions require substantial resources and have additional adverse effects. The present studies tested an alternative method for de-escalating commitment: activating broad motivations for growth and advancement (*promotion*). This approach should reduce concerns with loss and increase perceptions of alternatives, thereby attenuating justification motives. In two studies featuring hypothetical financial decisions, activating promotion motivations reduced recommitment to poorly performing investments as compared with both not activating any additional motivations and activating motivations for safety and security (*prevention*).

Keywords

motivated decision making, regulatory focus, decision biases

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People frequently allocate additional time and money to endeavors that are clearly failing. Once invested, they escalate their commitment to their current course of action despite not achieving the desired outcome (Staw, 1976). This escalation often leads to adverse financial (McNamara, Moon, & Bromiley, 2002), political (Ross & Staw, 1993), and interpersonal (Schoorman, 1988) consequences.

Prominent explanations for escalation of commitment (see Brockner, 1992) involve people's willingness to accept risks to avoid sure losses (Arkes & Blumer, 1985), their inability to recognize viable alternatives (Harvey & Victoravich, 2009; Northcraft & Neale, 1986), and their motivations to justify prior actions (Sivanathan, Molden, Galinsky, & Ku, 2008; Staw, 1976). That is, people are too reluctant to accept previous investments as lost (i.e., too concerned with *sunk costs* that are unrecoverable), too focused on the costs of abandoning the current approach as compared with the costs of missing other possible opportunities, and too unwilling to acknowledge that the original investments were a mistake. They thus invest additional resources in the hope that an eventual payoff will erase their losses and vindicate their actions.

Accordingly, strategies for reducing escalation of commitment in organizational settings typically involve one of two approaches. One approach is to institute external oversight of decision processes, which presumably motivates decision makers to avoid loss aversion, consider alternatives, and evaluate whether continued commitment is sufficiently justified (Simonson & Staw, 1992). The other approach is to assign different individuals to make initial decisions and subsequent decisions, which presumably reduces feelings of responsibility that exacerbate loss aversion, the failure to recognize alternatives, and motivations for justification (McCarthy, Schoorman, & Cooper, 1993; McNamara et al., 2002). Although effective at de-escalating commitment, these strategies have other adverse effects, including reduced information processing and reticence to acknowledge negative outcomes (McNamara et al., 2002). In addition, implementing these strategies requires substantial time and organizational resources. The present studies

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examined alternative means of de-escalating commitment by altering the broad motivational context (i.e., the *regulatory focus*; Higgins, 1997) within which people make decisions.

Research on self-regulation has shown that focusing on losses, narrowing one's consideration of alternatives, and committing to previous choices are primarily associated with *prevention-focused* motivations concerned with maintaining security. In contrast, *promotion-focused* motivations concerned with attaining growth are primarily associated with focusing on gains, broadening consideration of alternatives, and forgoing previous choices for new opportunities (Halamish, Liberman, Higgins, & Idson, 2008; Idson, Liberman, & Higgins, 2004; Lench & Levine, 2008; Liberman, Idson, Camacho, & Higgins, 1999; Molden & Higgins, 2004, 2008; see also Molden, Lee, & Higgins, 2008). Thus, whereas prevention-focused motivations should leave individuals vulnerable to escalation of commitment, promotion-focused motivations could attenuate such escalation.

Two studies tested this hypothesis by first activating participants' prevention-focused or promotion-focused motivations and then giving participants financial decision-making tasks that have been widely used to investigate escalation of commitment. As in previous research, such escalation was measured by participants' recommitment to an initial poorly performing investment when they were responsible for this initial choice as compared with when they were not responsible for the initial choice (Staw, 1976; see also Brockner, 1992).

Study I Method

Participants. One hundred twenty-four volunteers (31 men and 93 women; mean age = 26.30 years, SD = 8.99 years, range = 16–49 years)¹ were recruited via an Internet survey. These subjects were somewhat diverse in ethnicity (70% Caucasian, 10% Asian, 9% African American, 6% Latino, and 5% other), well educated (27% held a bachelor's degree or more, 51% had some college education, and 22% held a high-school diploma or less), and native English speakers.

Procedure. Participants first completed a well-validated manipulation of prevention- or promotion-focused motivations. Participants in the prevention-focused condition spent 5 min writing about their duties and obligations—a task that has been shown to evoke a mind-set of protecting against loss—and participants in the promotion-focused conditions spent 5 min writing about their personal hopes and aspirations—a task that has been shown to evoke a mind-set of seeking gains (see Idson et al., 2004; Liberman et al., 1999; Molden & Higgins, 2004, 2008). Then, in what they were told was a separate study, all participants completed the decision-making task developed by Staw (1976). Playing the role of financial vice president for a fictional company, half of the participants in each motivation condition first chose which of two company divisions should receive \$5 million in research and

development (R&D) funds. They reviewed past-earnings data, with which the future earnings of each division would ostensibly be simulated, and learned that if earnings in their chosen division exceeded earnings in the other division, they would receive entry to a \$50 lottery. The other half of the participants in each motivation condition initially viewed identical past-earnings data, but they learned that the previous vice president had chosen how to invest the R&D funds. Thus, the study had a 2 (activated motivations: promotion vs. prevention) × 2 (original investment: responsible vs. not responsible) design.

Next, all participants viewed the simulation, which always indicated that the division not chosen to receive the \$5 million in R&D funds had achieved higher earnings. Everyone then learned that \$10 million more in R&D funds were now available, and they were asked to choose how to allocate these funds between the two divisions (in any proportion they chose). They further learned that this second investment would also be simulated and could earn them another entry to the \$50 lottery. Reinvestment in the underperforming division that received the original R&D funds was the primary measure of escalation of commitment (Staw, 1976). Regardless of their investment choices, all participants were entered into the lottery.

Results and discussion

A 2 (activated motivations: prevention vs. promotion) \times 2 (original investment: responsible vs. not responsible) analysis of variance on reinvestments in the originally chosen division revealed only an interaction, F(1, 120) = 5.05, p = .03, $\eta^2 = .04$. As Figure 1 illustrates, prevention-focused participants

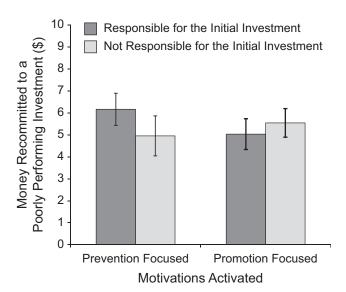


Fig. 1. Results from Study 1: mean amounts of money recommitted (in hypothetical millions of dollars) to a poorly performing investment by promotion-focused or prevention-focused individuals who were or were not responsible for the original investments. Commitments of \$5 million represent a risk-neutral choice to spread risk equally across the two available options, whereas investments greater than \$5 million represent a distinct preference for the original, poorly performing investment (Staw, 1976). Error bars represent 95% confidence intervals.

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displayed typical escalation of commitment: When they were responsible for the original, underperforming investment, their reinvestment was greater than when they were not responsible, F(1, 120) = 4.18, p = .04, $\eta^2 = .08$, and they were less likely to make the risk-neutral choice of investing equal amounts in the two divisions (see Staw, 1976), F(1, 120) = 9.80, p < .001, $\eta^2 = .09$. However, promotion-focused participants did not escalate their commitment: When they were responsible for the underperforming investment, their reinvestment was no different than when they were not responsible, F(1, 120) = 1.10, p = .30, $\eta^2 = .02$, and did not differ from the risk-neutral choice, F(1, 120) = 0.01, p = .93, $\eta^2 = .00$.

Thus, when participants were responsible for initial investments and escalation would be expected, promotion-focused participants reinvested less in their initial choice than did prevention-focused participants, F(1, 120) = 4.87, p = .03, $\eta^2 = .07$. However, when participants were not responsible for initial investments and no escalation would be expected, promotion-and prevention-focused participants did not differ in their reinvestments, F(1, 120) = 1.07, p = .30, $\eta^2 = .02$. These results indicate that promotion-focused motivations specifically influenced escalation of commitment and did not simply influence people's approach to the reinvestment decision itself. None of the effects reported were moderated by gender, age, ethnicity, or education level, Fs < 2.0, ps > .16, $\eta^2 s < .02$.

Study 2

Study 2 extended Study 1 by using a different decision-making task and including a control condition, in which participants did not receive a motivational prime. This additional condition allowed a more conclusive analysis of whether promotion-focused motivations reduce the typical prevalence of escalation of commitment during decision making.

Method

Participants. One hundred fourteen volunteers (39 men and 75 women; mean age = 27.80 years, SD = 8.38 years, range = 18-50 years) were recruited via an Internet survey. These subjects were somewhat diverse in ethnicity (76% Caucasian, 12% Asian, 4% African American, 1% Latino, and 7% other), well educated (54% held a bachelor's degree or more, 35% had some college education, and 11% held a high-school diploma or less), and native English speakers.

Procedure. Participants were assigned to one of three conditions. In the first two conditions, participants completed the same manipulation of prevention- or promotion-focused motivations as in Study 1. The remainder of the participants were assigned to a control condition in which they simply wrote about their typical daily activities, which presumably did not activate any particular motivational orientation. Then, in what they were told was a separate study, all participants completed

a decision-making task developed by Arkes and Blumer (1985). Playing the role of the president of an aviation company who had committed \$10 million to developing a "radarblank" plane, participants learned that with the project almost complete and \$9 million already spent, a rival company had announced their own radar-blank plane that was superior in performance and lower in cost. Participants then chose whether to invest the remaining \$1 million to complete the project; an affirmative response indicated escalation of commitment despite the poor results of the initial investment (Arkes & Blumer, 1985).

Results and discussion

Analyses of the 3 (activated motivations: prevention vs. promotion vs. none) × 2 (investment decision: yes vs. no) contingency table for participants' choices revealed an effect of the motivation manipulation, $\chi^2(2, N = 114) = 6.76$, p = .03. As Figure 2 illustrates, promotion-focused participants invested the remaining funds less frequently than did both preventionfocused participants, $\chi^2(1, N=78) = 3.85$, p = .05, and controlgroup participants, $\chi^{2}(1, N = 75) = 5.36, p = .02$. Prevention-focused participants' decisions did not differ from control-group participants' decisions, $\chi^2(1, N = 75) = 0.18, p =$.67. Moreover, whereas prevention-focused and control-group participants invested the remaining funds more frequently than they did not, $\chi^2(1, N = 35) = 13.56$ and $\chi^2(1, N = 39) =$ 16.00, ps < .001, respectively, promotion-focused participants were no more likely to invest than to not invest the remaining funds, $\chi^2(1, N=39) = 1.25$, p = .26. None of these effects were moderated by gender, age, ethnicity, or education level, Wald χ^2 s < 2.24, ps > .13. Study 2 thus provided direct evidence that promotion-focused motivations can reduce people's typical tendencies for escalation of commitment (Arkes & Blumer, 1985; Staw, 1976).

General Discussion

Because existing strategies for de-escalating commitment, such as external oversight over decision processes or division of responsibility, are not always feasible and can have additional negative consequences (McNamara et al., 2002), the alternative illustrated in these studies could help to improve decision making. When motivated to think less about maintaining obligations or preventing loss and to think more about attaining opportunities or promoting gains, people may reduce their commitment to past mistakes, better ignore sunk costs, and increase their chance of selecting their best options for the future.

However, promotion-focused motivations may not always produce better outcomes. Although these motivations reduce overcommitment to failing endeavors, they could also encourage premature disengagement from surmountable challenges. Thus, to fully uncover when and how prevention- or

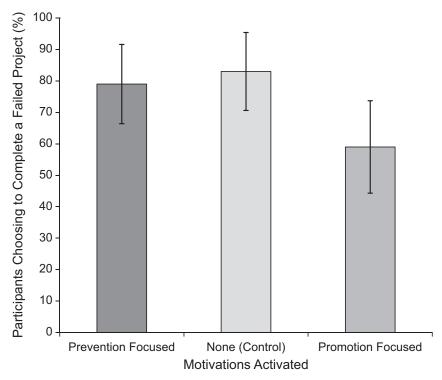


Fig. 2. Results from Study 2: mean percentage of promotion-focused, prevention-focused, and control-group participants who chose to invest additional funds to complete an already-failed project. Error bars represent 95% confidence intervals.

promotion-focused motivations improve decision outcomes, future research should explore the trade-offs that these motivations dictate during decision making.

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Declaration of Conflicting Interests

The authors declared that they had no conflicts of interest with respect to their authorship or the publication of this article.

Note

1. Because Strough, Mehta, McFall, and Schuller (2008) demonstrated that older adults do not show escalation of commitment, we limited our sample in both studies to individuals who were middleaged (i.e., 50 years old) or younger.

References

Arkes, H., & Blumer, C. (1985). The psychology of sunk costs. *Organizational Behavior and Human Decision Processes*, 35, 124–140.

Brockner, J. (1992). The escalation of commitment to a failing course of action: Toward theoretical progress. *Academy of Management Review*, *17*, 39–61.

Halamish, V., Liberman, N., Higgins, E.T., & Idson, L.C. (2008).
Regulatory focus effects on discounting over uncertainty for losses vs. gains. *Journal of Economic Psychology*, 29, 654–666.

Harvey, P., & Victoravich, L.M. (2009). The influence of forward-looking antecedents, uncertainty, and anticipatory emotions on project escalation. *Decision Sciences*, 40, 759–782.

Higgins, E.T. (1997). Beyond pleasure and pain. *American Psychologist*, 52, 1280–1300.

Idson, L.C., Liberman, N., & Higgins, E.T. (2004). Imagining how you'd feel: The role of motivational experiences from regulatory fit. *Personality and Social Psychology Bulletin*, 30, 926–937.

Lench, H.C., & Levine, L.J. (2008). Goals and responses to failure: Knowing when to hold them and when to fold them. *Motivation and Emotion*, 32, 127–140.

Liberman, N., Idson, L.C., Camacho, C.J., & Higgins, E.T. (1999).
Promotion and prevention choices between stability and change.
Journal of Personality and Social Psychology, 77, 1135–1145.

McCarthy, A.M., Schoorman, F.D., & Cooper, A.C. (1993). Reinvestment decisions by entrepreneurs: Rational decision making or escalation of commitment? *Journal of Business Venturing*, 8, 9–24.

McNamara, G., Moon, H., & Bromiley, P. (2002). Banking on commitment: Intended and unintended consequences of an organization's attempt to attenuate escalation of commitment. *Academy of Management Journal*, 45, 443–452.

Molden, D.C., & Higgins, E.T. (2004). Categorization under uncertainty: Resolving vagueness and ambiguity with eager versus vigilant strategies. *Social Cognition*, 22, 248–277.

Molden, D.C., & Higgins, E.T. (2008). How preferences for eager versus vigilant judgment strategies affect self-serving outcomes. *Journal of Experimental Social Psychology*, 44, 1219–1228. 12 Molden, Hui

Molden, D.C., Lee, A.Y., & Higgins, E.T. (2008). Motivations for promotion and prevention. In J. Shah & W. Gardner (Eds.), *Handbook of motivation science* (pp. 169–187). New York, NY: Guilford.

- Northcraft, G.B., & Neale, M.A. (1986). Opportunity costs and framing of resource allocation decisions. *Organizational Behavior and Human Decision Processes*, *37*, 348–356.
- Ross, J., & Staw, B.M. (1993). Organizational escalation and exit: Lessons from the Shoreham Nuclear Power Plant. Academy of Management Journal, 36, 701–732.
- Schoorman, F.D. (1988). Escalation bias in performance appraisals: An unintended consequence of supervisor participation in hiring decisions. *Journal of Applied Psychology*, 73, 58–62.

- Simonson, I., & Staw, B.M. (1992). De-escalation strategies: A comparison of techniques for reducing commitment to losing courses of action. *Journal of Applied Psychology*, 77, 419–426.
- Sivanathan, N., Molden, D.C., Galinsky, A.D., & Ku, G. (2008). The promise and peril of self-affirmation in de-escalation of commitment. *Organizational Behavior and Human Decision Processes*, 107, 1–14.
- Staw, B.M. (1976). Knee-deep in the big muddy: A study of escalating commitment to a chosen course of action. *Organizational Behavior and Human Decision Processes*, 16, 27–44.
- Strough, J., Mehta, C.M., McFall, J.P., & Schuller, K.L. (2008). Are older adults less subject to the sunk-cost fallacy than younger adults? *Psychological Science*, 19, 650–652.