Self-Enhancement and Learning from Performance Feedback

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ABSTRACT

The theory of performance feedback views decision makers as problem-solvers seeking to improve performance. By specifying how and when decision makers may instead seek to enhance their self-image by assessing performance as satisfactory, the model presented in this paper specifies boundaries on performance feedback theory's critical prediction that low performance induces increased search, change, and risk-taking, and suggests one reason why decision makers sometimes fail to learn from their mistakes.

SELF-ENHANCEMENT AND LEARNING FROM PERFORMANCE FEEDBACK

Organizational theory has traditionally been dominated by a conception of decision makers as boundedly rational agents whose attempts to maximize positive outcomes for their organizations are constrained by limits to their cognitive abilities (DiMaggio & Powell, 1983; March & Simon, 1958/1993; Ocasio, 1997; Thompson, 1967). According to this view, a primary mechanism by which decision makers deal with their cognitive limitations is learning from performance feedback (Audia, Locke, & Smith, 2000; Greve, 1998; Lant, Milliken, & Batra, 1992; Mezias, Chen, & Murphy, 2002; Miller & Chen, 1994). Research on performance feedback, growing out of Cyert and March's (1963) behavioral theory of the firm, holds that decision makers set levels of performance that they desire to achieve (i.e., aspiration levels) according to their past performance as well as peers' performance levels, and in turn, if performance falls short according to these preordained standards, decision makers work to identify impediments to performance and to improve it, whereas if performance exceeds aspirations, decision makers become less likely to take actions oriented toward increasing performance.

Summarizing advances made by this line of research, Greve (2003: 53–59) identifies three predictions regarding the effects of performance relative to the aspiration level. First, decision makers' search behavior, oriented toward identifying alternatives to the current set of activities, is increased when performance is below the aspiration level and decreased when performance is above the aspiration level. Second, decision makers' inclination to implement changes to activities is increased when performance is below the aspiration level and decreased when performance is above the aspiration level. Third, decision makers' propensity to choose from a pool of potential solutions those that entail greater risk is increased when performance is

below the aspiration level and decreased when performance is above the aspiration level.

Although contributors to this line of inquiry have acknowledged occasional shortcomings in decision makers' responses to performance—such as resistance to changing strategies even when failure is quite severe (e.g., Audia & Greve, 2006; Greve, 1998; March & Shapira, 1992; Ocasio, 1995; Staw, Sandelands, & Dutton, 1981)—the emphasis in this literature has remained on problem-solving responses to perceived performance (see Figure 1 for a familiar flow-chart representation of the theory).²

Insert Figure 1 here

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Comparatively little attention has been paid to the processes underlying decision makers' assessments of performance, even though it is these subjective interpretations, rather than any impartial truth about performance, that largely determine whether search is initiated, changes are undertaken, and risky solutions are chosen (Elsbach & Kramer, 1996; Pfeffer, 1981; Staw, 1980; Sutton & Kramer, 1990). For example, a decision maker may be performing poorly according to informed outside observers, but if she assesses her own performance as satisfactory, then performance feedback theory's critical prediction that low performance induces the decision maker to intensify problem-solving responses is less likely to hold. In this paper, we propose a two-mode model of how decision makers assess performance and respond to it. Focusing on the individual decision maker as our unit of analysis, we begin by reviewing the conventional model of performance assessment, rooted in a view of decision makers as problem solvers, and then contrast it with a model that takes into account people's need to see themselves in a positive light—what social psychologists have called the self-enhancement motive (Allport, 1937; Fiske,

2004; McDougall, 1933; Pyszczynski & Greenberg, 1987). Next we describe and illustrate strategies of self-enhancement in performance assessment that have received limited attention, and we proceed to identify conditions under which decision makers are more likely to switch from a problem-solving mode to a self-enhancing mode of performance assessment, and thus become less likely to respond to low performance by increasing search, enacting changes, and taking risks. We conclude with a discussion of what might be done to reduce unwanted self-enhancement in the assessment of performance. Consistent with much of the recent literature on the effects of performance feedback on decision makers (e.g., Audia & Greve, 2006; Desai, 2008), throughout our analysis we refer to performance below the aspiration level as low performance and we refer to performance above the aspiration level as high performance.

By incorporating insights from contemporary research on self-enhancement, our work builds upon recent efforts to advance performance feedback theory (Argote & Greve, 2007; Gavetti, Levinthal, & Ocasio, 2007; Greve, 2003) in two key ways. First, we extend the component of the theory that concerns performance assessment itself by identifying a broader range of cognitive strategies through which performance is assessed. In particular, we highlight ways that self-enhancing decision makers may retrospectively revise standards of performance evaluation to make them align more favorably with observed performance, rather than staying consistent in their standards of evaluation, as suggested by the conventional model of performance assessment. Second, we extend the component of the theory that concerns behavioral responses to performance by identifying scope conditions regarding the theory's critical prediction that low performance induces decision makers to increase search, change, and risk-taking. Although a considerable body of empirical work at the organizational level (e.g., Bromiley, 1991; Haleblian, Kim, & Rajagopalan, 2006; Lant et al., 1992; Miller & Chen, 1994)

and at the individual level (Audia & Goncalo, 2007; Audia et al., 2000) supports this prediction, researchers have noted situations in which low performance does not have these predicted effects (e.g., Audia & Greve, 2006; Desai, 2008; Greve, 1998; March & Shapira, 1992; Ocasio, 1995), and we add to this work by identifying several situational and dispositional features likely to lead decision makers to form self-enhancing assessments of low performance that in turn reduce the extent of behavioral responses to low performance. A deeper understanding of subjective performance construal thus helps to shed light on deviations from the predictions of performance feedback theory that are not yet fully understood.

TWO VIEWS OF PERFORMANCE ASSESSMENT

The Problem-Solving Decision Maker as Performance Assessor

According to classic organizational theory, decision makers are motivated to improve future performance by rooting out problems and searching for solutions (Simon, 1947/1997). To promote successful performance, the decision maker first decides upon clear performance goals (e.g., sales goals) and sets moderately ambitious aspiration levels based on historical performance levels and the performance of comparable others (Cyert & March, 1963). After some interval of time has passed, the decision maker next observes performance outcomes, attending first to the goals that were previously determined to be most important. The decision maker acknowledges a problem if performance is below the aspiration level. He then enacts a search "directed toward finding a solution to that problem" (Cyert & March, 1963: 121), increases his propensity to implement changes to activities, and becomes more likely to choose from a pool of potential solutions those that entail greater risk (Greve, 2003: 53-59).

Thus, the decision maker functions primarily as a problem solver: Performance feedback helps the decision maker to identify important problems; these problems spur a search for

solutions, changes in activities, and greater risk tolerance. This view of how decision makers assess performance and respond to it hinges on the assumption that decision makers show temporal consistency in their standards for evaluating performance.³ According to this view, decision makers' goals are set prospectively and remain fixed across the performance assessment process, until changes in the environment or strategic orientation motivate alterations to them. We argue in the following section that a more comprehensive model of how decision makers assess and respond to performance must go beyond this assumption and also take into account decision makers' motivation to see themselves as good, competent actors who perform their jobs well. This motivation, as we will see, can lead decision makers to retrospectively shift their standards for performance evaluation in order to form a more favorable view of low performance.

The Self-Enhancing Decision Maker as Performance Assessor

The conventional model of performance assessment suggests that to predict behavior, the decision maker's subjective assessment of performance must be understood, "not merely a specification of the situation as it 'really' is" (March & Simon, 1958/1993: 172). According to this view, decision makers' cognitive limitations are the chief subjective influence on performance assessment, but there is some insinuation that decision makers "also strive rationally to advance their own personal goals, which may not be wholly concordant with organizational goals" (Simon, 1947/1997: 88; see also Cyert & March, 1963: 121). These personal strivings, outside the assumed motive to improve performance, may critically affect the performance assessment process, yet they have received little attention in the body of work inspired by Simon (1947/1997) and Cyert and March (1963).

How might decision makers' personal motives affect performance assessment? Whenever

a decision maker feels responsible for performance, performance assessment becomes an evaluation of the self as much as an evaluation of outcomes. People have various motives when evaluating themselves, including self-assessment (the desire to accurately assess the self; Trope, 1986), self-improvement (the desire to improve oneself for the future; Sedikides & Hepper, 2009), self-verification (the desire to confirm pre-existing self-evaluations; Swann, 1983), and self-enhancement (the desire to see oneself in a positive light; Pyszczynski & Greenberg, 1987). Attending to the self-enhancement motive—the desire to see oneself as a winner, no matter one's actual performance—is especially important for advancing performance feedback theory, since this motive is likely to distort the performance assessment process, unlike the self-assessment and self-improvement motives, which should instead motivate decision makers to assess performance as accurately as they can (congruent with the decision maker's desire to identify and solve problems), and the self-verification motive, which should distort performance assessment primarily when decision makers wish to verify an unrealistically positive self-image (i.e., its distorting influence is mediated by self-enhancement).

Psychologists have long regarded the motivation to see oneself positively as a fundamental drive that influences cognition on conscious and unconscious levels (Kruglanski, 1980; Kunda, 1990). For example, people tend to process positive information about the self more fluently than negative information, and take credit for their successes while attributing their failures to outside influences (Sedikides & Strube, 1997). These processes distort people's self-perceptions in a positive direction, and the self-enhancement motive can even lead people to retrospectively revise their understanding of prior actions to make it seem to themselves as if they acted more competently than might actually be the case (Greenwald, 1980; Staw, 1980). As we discuss below, these retrospective cognitive processes have implications for the assessment of

performance.

Although self-enhancement is viewed by some as a general tendency (Taylor & Brown, 1988), research suggests that this motive is accentuated by perceptions of threat to the self-image (Baumeister, Smart, & Boden, 1996; Gramzow, 2011). After all, when things are going well, one does not need to distort his cognitive processes to form favorable evaluations of the self. It is after suffering a setback—something that might lead to negative evaluations of the self, if perceived objectively—that a concern with maintaining a positive self-image activates the tendency to self-enhance. Thus, the literature on self-enhancement suggests that in the context of performance assessment, the most crucial triggers of self-enhancement are low performance (i.e., performance below the aspiration level) and a perception of personal responsibility for that performance (e.g., Audia & Brion, 2007). Performance outcomes that are, on the surface, inconsistent with a positive view of one's job-related abilities pose a threat to the decision maker's self-image, this self-threat activates the self-enhancement motive, and then, motivated by the desire to see himself or herself in a positive light, the decision maker engages in cognitive processes that facilitate a more favorable assessment of low performance than he or she would otherwise hold.

An initial implication of our analysis is that when performance is below the aspiration level, the performance assessment process may become more complex than suggested by the problem-solving mode assumed by performance feedback theory. Decision makers in problem-solving mode define standards of performance evaluation prospectively and, later on, assess actual performance by comparing it to their predefined standards (Cyert & March, 1963; Greve, 2003). So if performance is below the aspiration level, decision makers in problem-solving mode conclude that a performance gap exists. In contrast, decision makers in a self-enhancing mode of

performance assessment may set performance evaluation standards and later retrospectively revise them so that the gap between desired performance and actual performance is minimized, reducing or even eliminating the perception of performance problems, and thereby bolstering the self-image (cf. Staw, 1980). Thus, whereas decision makers in problem-solving mode stay consistent in their standards of performance evaluation, self-enhancing decision makers' standards of evaluation may be fluid, and the priority assigned to various goals may be shifting, all in service of supporting the conclusion that performance is favorable. We summarize the differences between performance assessment in the problem-solving mode assumed by the theory of performance feedback and performance assessment in the self-enhancement mode in Table 1.

Insert Table 1 here

These variations in how decision makers assess low performance have important implications for some of the key predictions made by performance feedback theory. According to the theory, perceptions of low performance signal to decision makers the existence of a problem; decision makers then seek to resolve the problem by initiating a search for solutions, making changes, and taking risky actions (Greve, 2003). Acknowledging that decision makers facing low performance may adopt either a problem-solving mode or a self-enhancing mode of performance assessment suggests that variations in the decision makers' assessments of low performance may cause variations in their responses to low performance, as seen by outsiders. Decision makers who form more favorable assessments of performance below the aspiration level—due to their adoption of a self-enhancing mode of performance assessment rather than a problem-solving

mode—may display weaker than expected responses in terms of initiating search, making changes, and taking risky actions.

The next steps in our analysis will be to identify strategies that decision makers use to form self-enhancing assessments of low performance and the conditions that increase decision makers' propensity to engage in such self-enhancement in performance assessment. Our analysis draws on the existing social psychological literature on self-enhancement but also adds to this literature by proposing links between decision makers' propensity to self-enhance in performance assessment and key features of the organizational context in which decision makers operate.

INCONSISTENT STANDARDS OF EVALUATION AND SELF-ENHANCING ASSESSMENTS OF LOW PERFORMANCE

Self-enhancing assessments of low performance may take familiar forms such as attending selectively to positive indicators and ignoring negative indicators (cf. Baumeister & Cairns, 1992; Sweeney & Gruber, 1984), or taking credit for successes and finding external excuses for failures (e.g., Bettman & Weitz, 1983; Bowman, 1976; Staw, McKechnie, & Puffer, 1983). Here we concentrate on three self-enhancing cognitive strategies of performance assessment that have received limited attention in the performance feedback literature. The common theme shared by these strategies is that they illustrate how the self-threat posed by performance below the aspiration level can prompt the decision maker to retrospectively reconsider the standards of evaluation used to assess performance. Observed low performance can thus influence how performance is assessed.

Revising the Priority of Performance Goals

One self-enhancing strategy of performance assessment that illustrates temporal inconsistency in the standards of performance evaluation is redefining the priority of

performance goals according to observed performance—giving greater importance to those goals for which performance is favorable, that is. People sometimes show a tendency to regard those things they are good at as more important than those they are bad at (Campbell, 1986; Dunning, Meyerowitz, & Holzberg, 1989; Greve & Wentura, 2003; Lewicki, 1983, 1984; Tesser & Paulhus, 1983), and empirical evidence suggests that this is especially the case when performance is low.

Elsbach and Kramer (1996) evaluated how members of the top 20 business schools reacted to Business Week's rankings and found that members of business schools that received lower than expected rankings deflected the meaning of the low rankings by giving greater importance to favorable performance dimensions (e.g., reputation in regional labor market) and discounting the importance of the performance dimensions used to form the rankings. Similarly, Audia and Brion (2007) found that both participants in experimental studies and organizational decision makers tended to regard a secondary performance goal as central to goal achievement only when it was positive and a primary performance goal was negative. Based on this work, we propose that, for example, when a hospital executive finds that the number of gallbladder surgeries performed at her hospital has increased but the outcome of such surgeries has declined, she may decide that, contrary to her previous prioritizing of performance goals, the most important goals should be the number of patients served and the length of waiting lists, rather than outcome quality. Retrospectively revising the priority of performance goals thus allows decision makers to perceive low performance in a more positive light.

Proposition 1: Compared to decision makers whose performance is above the aspiration level, decision makers whose performance is below the aspiration level are more likely to revise the priority of performance goals by giving greater importance to those that show

favorable performance, which in turn makes performance seem more favorable and consequently reduces the extent of search, change, and risk-taking triggered by low performance.

Increasing the Level of Abstraction of Performance Goals

A second strategy that illustrates inconsistency of standards in how low performance is assessed consists of increasing the level of abstraction of performance goals. Psychologists have noted that every human action can be identified at numerous levels of abstraction (Trope & Liberman, 2003; Vallacher & Wegner, 1987). Lower levels of abstraction involve a concrete description of the action on a physical level, whereas higher levels of abstraction involve a more general description of the action in terms of the actor's intentions. At a low level, for example, a person might be said to be pressing keys on a keyboard, whereas at a higher level, the same behavior might be described as typing words, writing an article, or, at a higher level still, working toward tenure or fulfilling career aspirations. Taking advantage of the fluid quality of action descriptions, self-enhancing decision makers may restate their performance goals at a different level of abstraction—especially when they are threatened by a conclusion of failure if they stick to their previous level of description.

We propose that decision makers may be especially likely to retrospectively increase the level of abstraction of their goals, since the more abstract one's performance goals, the more flexibility is afforded in defining exactly how, at a lower level, goal fulfillment might be specifically and concretely instantiated. After redefining performance goals at a more abstract level, the self-enhancing decision maker may search for evidence that could be construed as positive under the new, more flexible description of what constitutes success. Increasing the level of abstraction at which a goal is described is thus one means by which decision makers may form

favorable assessments of low performance. For example, the principal of a high school, faced with a declining proportion of students attending college after graduation, may revise his mission to be about "preparing students for success in life" rather than "sending every student to college," allowing him to search for other evidence of post-graduate success when assessing performance. Similarly, a manager who is faced with declining financial outcomes may revise her goal to be about serving the general welfare of the firm's stakeholders, rather than simply maximizing shareholder value, allowing her to search for new evidence when assessing performance, such as improved work—life balance among employees (Walsh & Seward, 1990: 432).

Proposition 2: Compared to decision makers whose performance is above the aspiration level, decision makers whose performance is below the aspiration level are more likely to increase the level of abstraction at which their goals are described, which in turn makes performance seem more favorable and consequently reduces the extent of search, change, and risk-taking triggered by low performance.

Invoking Counterfactual Outcomes as Comparison Standards

A third cognitive strategy that illustrates inconsistency of the standards used in the assessment of low performance consists of invoking counterfactual outcomes as comparison standards. Decision makers may deviate from the comparison standards they previously set for themselves based on past performance or the performance of comparable others, especially when performance is poor in relation to those standards. By shifting to counterfactual thinking (see Byrne, 2005; Roese, 1997; Epstude & Roese, 2008), decision makers can justify their performance by comparing it to what *would have happened* had they employed different strategies. That is, a questionable outcome in the real world can be made to seem less bad by

comparing it to a catastrophic imagined outcome that would have occurred, according to the decision makers' speculation, under alternative decisions. Such "downward" counterfactuals generally make people feel better about themselves (Roese, 1994; Sanna, Chang, & Meier, 2001; Sanna, Meier, & Turley-Ames, 1998; Sanna, Meier, & Wegner, 2001; White & Lehman, 2005), such that the self-enhancing decision maker may be more likely to focus on how things could have been worse than how they could have been better had they acted differently—even though the latter, "upward" counterfactuals are more likely to lead to adaptive changes to behavior in the future (cf. Epstude & Roese, 2008; Markman, Gavanski, Sherman, & McMullen, 1993; Morris & Moore, 2000; Roese, 1994; Roese, Hur, & Pennington, 1999). For example, in a lab experiment, college students who contemplated a poor recent test score felt better if they afterward wrote privately about how things could have gone even worse for them on the exam (Roese, 1994).

In a real-world example of downward counterfactual generation, President Obama, acknowledging mediocre economic indicators one year after his economic recovery package went into effect, defended the stimulus measures by claiming that "it is largely thanks to the Recovery Act that a second depression is no longer a possibility" (Stolberg, 2010). Other examples of this strategy in action can be found in statements from the American leaders of the war in Iraq. In the summer of 2003, the press began to run stories about the problem of terrorists from other nations entering Iraq to target U.S. troops (Fassihi, Jaffe, & Bravin, 2003). In response to this troubling indicator, President Bush suggested that American troops were "defeating the terrorists here in Iraq, so that we don't have to face them in our own country" (Bush, 2003). This reinterpretation of a prime facie negative situation contains an implied counterfactual: *if there were no invasion of and war in Iraq, there would be terrorist attacks on American soil*. By invoking a frightening alternative reality, the administration was able to

suggest that the war in Iraq was responsible for the prevention of further attacks in the style of September 11th—an unfalsifiable and rhetorically effective claim. Conjuring counterfactual outcomes as comparison standards thus allows decision makers to perceive low performance in a more positive light.

Proposition 3: Compared to decision makers whose performance is above the aspiration level, decision makers whose performance is below the aspiration level are more likely to compare their own performance to downward counterfactual outcomes, which in turn makes performance seem more favorable and consequently reduces the extent of search, change, and risk-taking triggered by low performance.

Taken together, these three self-enhancing processes of performance assessment help to explain why decision makers sometimes exhibit weaker problem-solving responses to low performance than would be expected given the magnitude of their performance deficits.

WHEN DECISION MAKERS SELF-ENHANCE IN PERFORMANCE ASSESSMENT

Our analysis thus far lays out the primary conditions that can activate self-enhancement (i.e. low performance and personal responsibility for the performance), key differences between the self-enhancing mode of performance assessment and the problem-solving mode of performance assessment, and important implications of the self-enhancing assessment of performance for behavioral responses to low performance. However, rather than suggesting that decision makers threatened by low performance always adopt a self-enhancing mode of performance assessment, the literature on self-enhancement offers insights into the specific conditions under which low-performing decision makers can be expected to adopt a self-enhancing mode versus a problem-solving mode. The next step in our analysis is to identify features of decision makers and their situations that influence the performance assessment mode

in which decision makers operate when facing low performance, and that thus influence the degree to which they form favorable assessments of low performance and, consequently, the degree to which they respond to low performance by initiating search, making changes, and taking risks.

Social psychological research suggests that the magnitude of self-threat posed by low performance—and thus the likelihood that decision makers will adopt a self-enhancing mode of performance assessment—is influenced by characteristics of both the decision maker and his or her situation that affect the perception of threat (Campbell, Reeder, Sedikides, & Elliot, 2000; John & Robins, 1994; Sedikides & Gregg, 2008; Tetlock, Stitka, & Boettger, 1989). Drawing from and integrating literatures that view self-threat as a chief activator of self-enhancing responses, we propose that the threat posed by low performance and the consequent likelihood of assessing performance self-enhancingly are greater when decision makers possess narcissistically high self-regard (low performance is more threatening the more inflated one's view of his or her job-related abilities), believe their ability is fixed (low performance is more threatening when it signals a permanent rather than correctable deficit in ability), are accountable for performance to audiences who can influence their futures (low performance is more threatening when it signals a poor future for the self), and are accountable for performance outcomes rather than processes (low performance is more threatening when the focus is solely on ultimate outcomes).

Beyond factors that increase the threat that low performance poses for decision makers' self-images, self-enhancement in response to low performance is also facilitated by a second set of conditions, those that give decision makers more latitude to portray performance in a positive light (Dunning et al., 1989; Kunda, 1990; Sedikides & Gregg, 1998). In a theoretical synthesis of

the empirical literature on self-enhancement, Sedikides and Gregg (2008: 108) noted that "positive self-evaluations reflect not only what people want to believe, but also what they can believe." Similarly, Kunda (1990: 493) observed that "when one wants to draw a particular conclusion, one feels obligated to construct a justification for that conclusion that would be plausible to a dispassionate observer." These insights suggest that the propensity to form more favorable assessments of low performance may be strengthened or weakened by factors that alter the extent to which decision makers can form plausible and defensible self-enhancing performance assessments. Specifically, we propose that low performance is more likely to be assessed self-enhancingly when decision makers' jobs involve greater task complexity and when decision makers possess greater informational power. As will be discussed below, greater task complexity and greater informational power both allow for greater flexibility in redefining standards of evaluation according to one's self-enhancing biases, so that a reasonable case can be built for a self-serving conclusion.

Conditions Increasing the Perceived Threat of Low Performance

High level of narcissism. Low performance is especially threatening to the self-image of individuals who have high self-esteem, who expect success, who are highly motivated to achieve, and to whom the performance is personally important (Campbell & Sedikides, 1999). At the extreme of these variations in personality, narcissism involves a grandiose self-image (e.g., exaggerated perceptions of own abilities, John & Robins, 1994; Farwell & Wohlwend-Lloyd, 1998) and a need to have inflated self-views constantly reconfirmed (Bogart, Benotsch, & Pavlovic, 2004; Campbell & Foster, 2007; Campbell, Goodie, & Foster, 2004). As might be expected from these characteristics, experimental evidence suggests that highly narcissistic individuals show more dramatic self-enhancement effects than less narcissistic individuals (John

& Robins, 1994), and that their motivation to self-enhance persists more strongly across varying conditions than that of less narcissistic people (Campbell et al., 2000). Decision makers in organizations can sometimes manifest high levels of narcissism (e.g., Kets de Vries, 1994; Lubit, 2002), and highly narcissistic decision makers should be expected to experience greater threat in the face of performance problems. We therefore propose that decision makers with higher levels of narcissism should show a greater propensity to form favorable assessments of low performance than decision makers with more ordinary levels of self-regard.

Proposition 4: Greater narcissism increases the perceived threat of performance below the aspiration level, thereby increasing decision makers' propensity to self-enhancingly assess low performance.

Belief that ability is fixed. In much the same way that decision makers' views on the *level* of their ability (i.e., their narcissism) may affect whether they form self-enhancing assessments of low performance, so their views on the *malleability* of their ability may also modulate the degree to which they assess low performance self-enhancingly. A large body of social psychological research indicates that some people believe ability is unchangeable, whereas others believe ability is increasable through sustained effort, and that these different beliefs can have wide-reaching effects on cognition and behavior (Dweck, 1999; Dweck & Leggett, 1988) and organizational performance (Wood & Bandura, 1989). Within organizations, decision makers vary in the extent to which they assume that talent is innate or a quantity that can be expanded, and human resource and corporate training practices, for example, may reflect these beliefs (e.g., Heslin, VandeWalle, & Latham, 2005). Dweck (2006) suggests that Enron's Ken Lay exemplified an executive adhering to a fixed view of ability, whereas Xerox's Anne Mulcahy exemplified an executive embracing a malleable view of ability, constantly emphasizing the

capacity for growth of talents and capabilities at all levels. Note that narcissism and beliefs about the modifiability of ability are conceptually orthogonal: a decision maker with a low or a high overall view of their ability may view that ability as fixed or as modifiable.

For a decision maker who believes that ability is fixed, low performance may indicate a permanent deficit in job-related ability, with no obvious avenue of remediation except defensive self-enhancement. On the other hand, for a decision maker who believes ability can be grown, low performance may indicate only a current deficit that can be corrected by hard work and new strategies in the future—a far less threatening prospect, and therefore one that is less likely to lead to self-enhancement. Consistent with this idea, when people with a "growth" view of ability received negative performance feedback in one study, they responded by searching for new strategies to do better in the future (by examining the strategies of others who performed better), whereas people with a "fixed" view of ability responded to the same feedback by defensively boosting their self-image (by examining the strategies of others who performed worse; Nussbaum & Dweck, 2008). Moreover, some evidence suggests that people with a growth mindset learn more in response to their failures, and consequently perform better in the future on the same tasks, than do people with a fixed-ability mindset (Mangels, Butterfield, Lamb, Good, & Dweck, 2006). Drawing from this literature, we suggest that the magnitude of threat to the decision maker's self-image posed by low performance should be greater for decision makers who believe that ability is fixed than for decision makers who believe that ability is malleable. As a result, decision makers who believe that ability is fixed as opposed to malleable should be more inclined to assess low performance self-enhancingly, perceiving it to be more favorable than it really is.

Proposition 5: Greater belief that ability is permanently fixed increases the perceived

threat of performance below the aspiration level, thereby increasing decision makers' propensity to self-enhancingly assess low performance.

Accountability to audiences who can influence one's future. While narcissism and the belief that ability is fixed are individual characteristics likely to influence the magnitude of the perceived threat that low performance poses to the decision maker's self-image, accountability—having to explain, defend, or justify oneself to an audience—is "a ubiquitous feature of everyday life that links individuals to institutions" (Tetlock, 2002: 455) that may also modulate the degree of self-threat felt by low-performing decision makers. Although some audiences can directly influence decision makers' behaviors through the kinds of incentive systems they devise (e.g., equity compensation), our focus is instead on the impact that audiences have on decision makers' cognitive processes through the generation of more broadly defined evaluative pressures. Taking this social psychological perspective, we draw from Lerner and Tetlock (1999: 255), who define accountability as "the implicit or explicit expectation that one may be called on to justify one's beliefs, feelings, and actions to others." In this literature, the assumption is that decision makers who do not provide satisfactory justifications will suffer negative consequences ranging from disdainful looks to the loss of valued outcomes.

The effects of accountability on individual cognition are complex and varied (see Lerner & Tetlock, 1999), and we propose that accountability's influence on self-enhancement in performance assessment depends on at least two critical factors that determine the degree to which the audience is perceived as a threat. First, the effect of accountability may depend on the extent to which the audience can influence the decision maker's future through their evaluations. Some audiences can inflict negative consequences on decision makers who fail to justify their actions by withholding rewards or administering punishments, and thus exercising what French

& Raven (1960) called reward and coercive power. These potential negative consequences pose a threat to decision makers that is likely to elicit a defensive cognitive response in which decision makers self-enhance (Lambert, Cronen, Chasteen, & Lickel, 1996; Peecher & Kleinmuntz, 1991; Tetlock et al., 1989) and escalate their commitment to prior actions (Conlon & Wolf, 1980; Fox & Staw, 1979). For instance, in a study of pilots' verbal accounts of near accidents they were involved in, pilots flying for commercial airlines—those who were accountable to audiences who could influence their professional fates, that is—interpreted the incidents in more self-serving, defensive terms, and were less likely to draw lessons for improving future performance than were pilots flying their own planes (Morris & Moore, 2000). On the other hand, accountability to an audience whose evaluation will not affect a decision maker's future may not increase selfthreat and may even sometimes encourage thoughtful reflection on one's potential performance weaknesses (Sedikides, Herbst, Hardin, & Dardis, 2002). Drawing from this literature, we propose that accountability to audiences who can influence a decision maker's future increases the threat posed by low performance and consequently increases decision makers' propensity to form rosy assessments of low performance.

Proposition 6: Greater accountability to audiences who can influence decision makers' futures increases the perceived threat of performance below the aspiration level, thereby increasing decision makers' propensity to self-enhancingly assess low performance.

Accountability to audiences who are focused on outcomes. Second, accountability researchers have averred that, in order to understand the effects of accountability systems, it is important to distinguish between accountability for outcomes and accountability for processes (Lerner & Tetlock, 1999; Simonson & Staw, 1992). Within organizations, both types of accountability are commonly instantiated. For example, executives who answer to corporate

boards that are focused solely on results exemplify decision makers who are held accountable for outcome rather than processes. On the other hand, executives who answer to corporate boards that are involved in formulating strategy may find themselves accountable primarily for decision processes rather than outcomes per se. Although greater audience expertise might be expected to elevate the probability of process accountability (an inexpert corporate board, after all, could not knowledgeably critique decision processes), expert audiences sometimes also elect to use outcome accountability. We therefore focus here on the outcome/process distinction itself rather than audience characteristics that might influence the type of accountability utilized.

When decision makers are held accountable for ultimate performance outcomes alone, and must justify those outcomes retrospectively, this may increase decision makers' need to selfenhance and see performance outcomes in a positive light. When outcomes are all that matters, after all, there is no way to bolster one's self-image against the threat of low performance other than to recast the performance in a more positive light; a decision maker cannot seek solace in the knowledge that prior decisions leading to that performance were sensible at the time they were made. Conversely, with process accountability, it is possible to see oneself as performing competently—that is, making good decisions, given the information available at the time of the decisions—even if ultimate performance outcomes are acknowledged as subpar (Salancik, 1977). Indeed, when decision makers are asked to explain or justify their decision processes to audiences, this type of accountability may actually promote more comprehensive, careful consideration of all available information and evidence, rather than pushing decision makers toward narrow, self-justifying and self-enhancing cognition, as outcome accountability often does (Johns, 1999; Sedikides & Strube, 1997; Scholten, Van Knippenberg, Nijstad, & De Dreu, 2007). Drawing from this literature, we propose that when performance is low, outcome

accountability poses a greater level of threat to the decision makers' self-image than process accountability. As a result, an audience's focus on outcomes as opposed to processes is likely to elevate decision makers' tendency to form favorable assessments of low performance.

Proposition 7: Greater accountability to audiences who are focused on ultimate performance outcomes increases the perceived threat of performance below the aspiration level, thereby increasing decision makers' propensity to self-enhancingly assess low performance.

Conditions Increasing the Latitude to Portray Performance Positively

High task complexity. Decision makers' jobs vary tremendously in what has been called *task complexity* (e.g., Campbell, 1988; Wood, 1986). A key distinguishing feature of highly complex tasks, according to the various definitions of the construct that have been offered, is that they involve a large number of subtasks or component acts composing the complete task, and a large number of information cues, sources, or dimensions that inform the completion of each subtask (Campbell, 1988: 43; Wood, 1986: 66–68). Some tasks are low in complexity; for example, personnel scheduling at a small firm may involve only a handful of subtasks, each requiring attention to a very limited number of information cues. On the other hand, other tasks, such as forecasting the firm's future performance, can involve innumerable subtasks, with multitudinous sources of information informing every subtask.

With low-complexity tasks, performance is relatively straightforward to define. On the other hand, with greater task complexity comes greater flexibility in defining (and redefining) performance. As March and Simon (1951) noted, "[a]n individual can attend to only a limited number of things at a time" (151), and therefore the definition of a complex situation "is simplified by omitting some criteria and paying particular attention to others" (152). Consistent

with March and Simon's intuition, Dunning et al. (1989) found experimentally that the greater the number of criteria that were given to define a particular trait (i.e., the more complex the trait's definition), the more that people self-enhanced when assessing themselves on the trait, because people used "self-serving trait definitions when providing self-evaluations," emphasizing those criteria on which they were strongest (1082).

Drawing on these insights, we suggest that when task performance itself is a "complex situation," decision makers' latitude to portray performance in a positive light is greater and this is likely to impact their propensity to form self-enhancing assessments of low performance.

Going back to our examples of tasks low and high in complexity, when a severely inaccurate business forecast for the current year threatens a manager's positive self-image, he can revise the interpretation of performance on that specific task by emphasizing subtasks on which performance was stronger (e.g., predicted changes in macro environment, predicted change in market share) and omitting subtasks on which performance was weaker. On the other hand, when performance on a low-complexity task such as employee scheduling is low (e.g., there is insufficient coverage for absences), there will be fewer options to portray performance in a positive light. Thus, while low performance motivates self-enhancement by threatening a decision maker's self-image, task complexity influences the extent to which decision makers can portray low performance in a positive light.

Proposition 8: Greater task complexity increases the latitude to portray performance below the aspiration level in a positive light, thereby increasing decision makers' propensity to self-enhancingly assess low performance.

Possession of informational power. When we discussed the effect of decision makers' accountability to audiences who can influence their futures, we noted that the reward and

coercive power that some audiences are able to exercise can pose a threat to decision makers that increases the probability of self-enhancing assessments of low performance. Decision makers, too, possess varying levels of power, and our theoretical analysis implies that the level of informational power possessed by decision makers may affect the likelihood of self-enhancing assessments of low performance by altering decision makers' latitude to portray low performance positively. Organizational theorists have long seen differential access to information as an important source of differences in power (e.g., Aldrich & Herker, 1972; Mechanic, 1962; Pettigrew, 1972; see also Raven, 1965), and more recently social network theorists have suggested that decision makers who occupy more central positions are perceived as more influential in part because of their greater access to information (e.g., Brass, 1984; Friedkin, 1993; Krackhardt, 1990). Underlying this work is the view that information that is in demand and that is not easily available confers to those who have access to it the ability to produce outcomes aligned with their perceived interests.

Explicating the link between information access and power, Pfeffer (1981; 1997) suggests that decision makers with greater access to information can selectively report performance-relevant information that is more favorable to them and more acceptable to interested audiences. Drawing on Meyer and Rowan's (1977) classic analysis of educational organizations, Pfeffer (1981) gives the example of decision makers responsible for public schools whose pupils were underperforming on standardized reading and mathematics tests. These decision makers' privileged access to performance-relevant information allowed them to form favorable perceptions of low performance by directing attention to dimensions of performance that were more positive, such as the proportion of their teachers who possessed advanced degrees and the money they spent on each student. Similarly, he notes, hospital administrators may de-emphasize

measures such as risk-adjusted mortality and morbidity that reveal low performance, and exaggerate the importance of indicators that point to favorable outcomes, such as staffing ratios and the proportion of board-certified physicians.

Drawing on this literature, we propose that greater informational power increases decision makers' propensity to self-enhance in response to low performance. Decision makers with greater informational power are more likely to form self-enhancing assessments of performance because privileged informational access affords them greater latitude to portray performance positively.

Proposition 9: Greater informational power increases the latitude to portray performance below the aspiration level in a positive light, thereby increasing decision makers' propensity to self-enhancingly assess low performance.

It is helpful to take a step back and reflect on the relationships among the variables we have specified as influences on decision makers' propensity to assess performance self-enhancingly. In our model, performance below the aspiration level (for which the decision maker is responsible) is the condition that triggers decision makers' propensity to adopt a self-enhancing mode of performance assessment. Our model also specifies that decision makers' likelihood of adopting the self-enhancement mode in response to low performance is influenced by factors that affect the self-threat posed by the low performance and factors that affect decision makers' latitude to portray performance positively. We conceive of high narcissism, belief that ability is fixed, accountability to audiences who can influence one's future, and accountability to audiences focused on ultimate outcomes as having additive effects on self-threat; similarly, we conceive of informational power and task complexity as having additive effects on latitude to portray performance positively.

However, the two higher-level constructs of self-threat posed by low performance and latitude to portray performance positively are likely to interact in their effects on self-enhancing assessments of performance. Other theories of organizational behavior suggest that the motivation to act and the capacity to act are both necessary for spurring behavior (e.g., Chen, Su, & Tsai, 2007; Vroom, 1964), and analogously, the motivation to self-enhance and the latitude to portray performance positively are both necessary for prompting self-enhancing assessments of low performance. Motivation to self-enhance can be rendered impotent if there is low or no latitude to portray performance positively; likewise, latitude to portray performance positively can have little effect if the motivation to self-enhance is weak or even absent. Conversely, the highest levels of self-enhancement can occur only when both the motivation to self-enhance and the latitude to portray performance positively are high.

Proposition 10: The effect that conditions increasing the perceived threat of low performance have on the propensity to form self-enhancing assessments of low performance is greater when the latitude to portray performance positively is high than when the latitude is low. Likewise, the effect that conditions increasing the latitude to portray performance positively have on the propensity to form self-enhancing assessments of low performance is greater when the perceived threat of low performance is high than when the perceived threat is low.

Figure 2 provides a visual summary of how our model expands the familiar model of learning from performance feedback shown in Figure 1. In the familiar flowchart, the decision maker responds to performance below the aspiration level by increasing search, making changes, and taking risky actions. Figure 2 suggests that the degree to which the decision maker responds to low performance by increasing search, making changes, and taking risky actions depends on

whether the decision maker assesses low performance adopting the self-enhancing mode or the problem-solving mode of performance assessment. The conditions specified in Propositions 4–10 combine to influence whether the decision maker will opt for the problem-solving mode or the self-enhancing mode. The self-enhancing mode involves retrospectively revising standards of evaluation as specified in Propositions 1–3, so that low performance is perceived to be more favorable than it really is. Consequently, opting for the self-enhancement mode leads to lesser search, change, and risk-taking than when low-performing decision makers opt for the problem-solving mode.

Insert Figure 2 here

PRIVATE COGNITIONS VERSUS PUBLIC PERCEPTIONS

Because the theory of performance feedback and the literature on self-enhancement view the problem-solving mode and the self-enhancement mode, respectively, as guided by intrapersonal motives, we conceptualize performance assessment as a private cognitive process focused on decision makers' own perceptions of performance independent from their public statements about performance. The intrapersonal orientation of the theory of performance feedback is evident in the assumption that decision makers are motivated to solve problems not to shape others' impressions of them, but rather to satisfy their own personal desire to improve performance. Likewise, the self-enhancement motive is defined as the personal desire to see oneself in a positive light, and in social psychological research, people rate themselves as above average on many dimensions even when these self-ratings are made entirely privately (e.g., Dunning et al., 1989; Kruger & Dunning, 1999). Similarly, in one study, even in the absence of

any obligation to justify their actions and performance assessment to an audience, decision makers confronted with low performance retrospectively redefined the priority of performance goals in order to form a more favorable assessment of overall performance (Audia & Brion, 2007). Moreover, research has shown that accountability to audiences causes shifts in private thoughts, not merely in public statements (e.g., Morris & Moore, 2000; see also Tetlock, 1992).

Although performance feedback theory and self-enhancement theory focus on intrapersonal motives, it would be limiting to think that decision makers entirely ignore the repercussions of their actions on others' perceptions of them. Decision makers in problemsolving or self-enhancing modes may sometimes contemplate how others may respond to their action or inaction, and private and public considerations may influence each other. However, like other contributors to the theory of performance feedback (e.g., Greve, 1998; March & Shapira, 1992), we are concerned chiefly with what decision makers do in response to performance and the private cognitions that guide their behaviors. In order to illustrate some of the cognitive strategies that may be utilized in self-enhancing performance assessment (e.g., conjuring downward counterfactuals), we have drawn on publicly observable statements on performance from decision makers, but we intend these examples to be purely illustrative, rather than evidential. Self-enhancing cognition in performance assessment can, like any other private thought, be made externally observable when a decision maker articulates the cognition in speech or in writing, but this type of external articulation is not required in our model of how self-enhancement influences the assessment of performance and thereby affects problem-solving behavioral responses to performance.

REDUCING SELF-ENHANCEMENT

By making low performance seem more favorable than it actually is, self-enhancing

performance assessment may prevent decision makers from tackling problems and may increase commitment to losing courses of action (cf. Staw, 1976) and promote long-run failure. We propose here organizational features that may prevent or at least reduce self-enhancing cognition among decision makers facing low performance. We target our interventions at the two key facilitators of self-enhancement reviewed in this paper: threat to the decision maker's self-image, and the decision maker's latitude to portray low performance in a positive light.

First, organizations can limit decision makers' latitude to portray low performance positively by implementing appropriate formal control systems—the rules, standard procedures, and incentive structures that help to shape organization members' behaviors (Langfield-Smith, 1997; Walsh & Seward, 1990). Because powerful decision makers engaged in highly complex tasks often have significant latitude to retrospectively revise standards of evaluation to fit observed performance, it may be especially important to require top managers to prospectively commit to specific, well-defined standards of evaluation, so that they cannot later utilize slippery performance-redefining strategies (cf. Staw, 1980). Indeed, an experimental investigation found that asking decision makers to set an unambiguous aspiration level in advance—that is, a strict criterion for the level of performance that would be considered a failure and lead to a change in strategy—reduced subsequent escalations of commitment to a losing investment, presumably by reducing self-enhancing reinterpretations of performance (Simonson & Staw, 1992). Similarly, studies have found that decision makers who are working toward highly specific, well-defined goals rate their own performance more modestly than when they are working toward less welldefined goals, even when receiving the same level of performance feedback (Kernan & Lord, 1989; Mento, Locke, & Klein, 1992; Mossholder, 1980). Formal systems that incentivize the regular and prospective setting of tightly circumscribed standards of evaluation are thus one

means by which organizations might rein in decision makers' self-enhancing tendencies.

Of course, managers' tasks can sometimes be so complex and novel that well-defined, formal, prospective performance goals may not be possible to demand in every domain and at all times. Fortunately, informal control systems—including the organization's culture, or its shared values and norms (Chatman & Cha, 2003)—can exert their effects on organization members continuously, and can be tailored to reduce the self-threat that low performance poses for decision makers and can thus attenuate self-enhancement.

Specifically, a growth-oriented organizational culture that emphasizes the malleability of abilities may guard against defensive self-enhancement by reducing the threat of low performance associated with a fixed-ability mindset. In recent studies, asking participants to imagine themselves within an organization that endorsed either a "fixed" or a "growth" view of ability led the participants to behave as if they, themselves, subscribed to the respective view (Murphy & Dweck, 2010). Organizational cultures that promote a static view of ability—for example, firms that heavily emphasize standardized test scores when hiring entry-level analysts—may thus incline decision makers embedded within them to respond to performance difficulties with self-enhancement, whereas cultures promoting a growth-oriented mindset may have opposite effects (Nussbaum & Dweck, 2008). To develop a growth-oriented culture, organizations might consider measures such as training recruiters to seek prospective organization members who believe in and value intellectual growth (Chatman & Cha, 2003) and having managers highlight their own mistakes as an inevitable and integral part of their growth and improvement (Murphy & Dweck, 2010; Pfeffer & Fong, 2005). The morbidity and mortality conferences that occur regularly at most large medical centers exemplify a threat-reducing, growth-oriented cultural practice; here, physicians gather and discuss their errors in a nonpunitive environment, with the goal of determining how similar problems can be prevented in the future. Analogous mechanisms in other organizations could serve a similar function, encouraging a mindset that views low performance as a spur to reflection, hard work, and improvement rather than an indictment of one's fixed abilities that must be defended against at all costs.

CONTRIBUTIONS TO THEORY AND RESEARCH

By integrating insights from the literature on self-enhancement into the theory of performance feedback, we have proposed a more nuanced understanding of how decision makers assess and respond to low performance. Whereas in the theory of performance feedback the problem-solving decision maker is assumed to reason solely prospectively and to apply the same standards of evaluation consistently across the stages of assessment—potentially revealing unflattering discrepancies when performance is observed—we have suggested that when prompted by certain situational and dispositional features, the decision maker may switch to a self-enhancing mode in which he or she revises prior cognitions and commitments according to present results and thus shows a type of "retrospective rationality" (Staw, 1980). Rather than being concerned with consistency in the evaluative standards applied in the assessment process, the decision maker in a self-enhancing mode is chiefly concerned with maintaining consistency in the conclusion that the assessment should lead to—that is, the conclusion that performance is satisfactory. This type of strategy was anticipated when Cyert and March noted in passing that decision makers may sometimes address performance problems "by revising the goals to levels that make an available alternative acceptable" (1963: 121), but has received almost no attention in the literature on performance feedback since that prescient observation (for an exception, see Audia & Brion, 2007).

An important implication of recognizing that decision makers may sometimes switch

from a problem-solving mode to a self-enhancing mode is that standards of performance evaluation are no longer strictly exogenously defined, as is often assumed in research on performance feedback. When performance falls below the aspiration level and self-enhancement is activated, decision makers may seek to redefine performance. Far from being a straightforwardly linear sequence, performance assessment is dynamic and iterative in the model we have proposed. Revising goals to form favorable assessments of low performance may influence the goals that are then set prospectively for future performance, illustrating the potentially far-reaching implications of self-enhancement in performance assessment. We view this process of performance definition and redefinition as an important area of investigation for future work, and our propositions on features of the individual and of the situation that magnify self-enhancement (Propositions 4–10) can easily be combined with our propositions on how selfenhancement occurs (Propositions 1–3) to yield testable predictions: manipulations or measurements of the dispositional and situational variables that promote self-enhancement in response to low performance should have an effect upon or a relationship with the self-enhancing strategies of performance assessment that we describe. For example, highly narcissistic decision makers should be more likely to respond to low performance by retrospectively increasing the level of abstraction of performance goals than should be less narcissistic decision makers.

Ironically, the cognitive fluidity demonstrated by the self-enhancing decision maker's ability to twist ambiguity to fit adaptive notions of success may actually lead to behavioral *rigidity*, since search, change, and risk-taking actions are less likely when a decision maker does not perceive performance as poor. Other researchers have pointed to factors that reduce decision makers' responsiveness to low performance, and it is useful to note how our analysis differs from theirs. Whereas we focus on psychological processes as a source of decreased responsiveness to

low performance, Greve (1998), in his analysis of product introductions, attributes decreased sensitivity to low performance to bureaucratic constraints that limit decision makers' discretion. March and Shapira (1992) focus on psychological processes as we do, but they see decreased responsiveness as arising not from rosy interpretations of low performance but rather from decisions makers' interpretations of low performance as a vital threat (Staw et al., 1981). The switch of the focus of attention from the aspiration to the survival point is their key mediating mechanism. Their analysis is intended to apply especially to cases of extremely low performance, when the distance between actual performance and aspiration levels is greater than the distance between actual performance and the point at which a vital threat is likely to occur (i.e. the "survival point"). Our predictions, in contrast, apply to a broader range of negative performance outcomes.

Before concluding, we wish to note two limitations in the scope of the current analysis that point to future directions for research. First, we have focused on the self-enhancement motive in this paper because, compared to other motives such as self-assessment and self-improvement, it is more likely to distort the performance assessment process, but we certainly do not mean to imply that it is the only self-evaluative motive worthy of additional attention. To the contrary, we hope that this effort will encourage further analyses of how related motives may also impact performance assessment. Complex behavior can never be reduced to a single explanation, and we believe that drawing on other established constructs in social psychology will yield similarly productive opportunities for theoretical development.

Second, although we have examined the influence of institutional and organizational features (e.g., accountability to audiences) on how decision makers assess and respond to performance, our unit of analysis has been the individual decision maker, and the implications of

the self-enhancement literature for organizational processes of learning from performance feedback are beyond the scope of this paper. Although researchers interested in the study of performance feedback have often used individual-level theories to successfully explain organizational-level outcomes influenced by powerful actors such as top executives of firms (e.g., Audia et al., 2000; Greve, 1998), additional work is needed to fully integrate insights from the self-enhancement literature into the theory of performance feedback. For example, changes in dominant coalitions (Cyert & March, 1963) are typically seen as reflections of changes in the institutional environment (e.g., Fligstein, 1990) and the failure to achieve satisfactory performance levels (e.g., Ocasio, 1994); an interesting question is thus whether and under what conditions self-enhancement in the assessment of performance might delay the redefinition of dominant coalitions.

Our goals in this paper have been to illustrate strategies of self-enhancement in performance assessment and to identify the conditions under which such self-enhancement is most likely to occur, so that organizations and their decision makers can better recognize systemic and individual barriers to accurate performance assessment and adaptive response to low performance. We hope that this work illustrates the value of integrating contemporary psychological insights into classic organizational theory (cf. Gavetti et al., 2007), and that it will inspire researchers interested in individual performance and learning to undertake empirical studies, in the lab and in the field, to both constrain and expand on the ideas proposed herein. In addition, by highlighting the subjectivity of performance assessment, we hope to inspire organizations to develop interventions that guard against problematic self-enhancement and thereby enhance learning.

FOOTNOTES

¹ Search behavior that occurs in response to performance below the aspiration level is known in the literature as *problemistic search* (Cyert & March, 1963: 121). In contrast, *slack search* stems from extra time and resources that allow for experimentation and *institutionalized search* is conducted by units dedicated to search activities (Greve, 2003: 54). Throughout the paper, given our focus on behavioral responses to performance, we use the term search to refer to problemistic search.

² The theory of performance feedback also assumes that participants bring different interests to organizations and that conflict is resolved through negotiation, resulting in the formation of a dominant coalition and the selection of organizational goals (Cyert & March, 1963; Fligstein, 1990; Ocasio, 1995). Here our focus is on the individual level processes posited by the theory and discussed at length by Greve (2003: 40–70) and the influences of the organizational and institutional context on the individual decision maker. We note in the discussion that our arguments might have significant implications for political processes as well, but the task of fully developing these implications is left to future research.

³ By standards of evaluation, we mean the performance goals chosen to evaluate performance and the benchmarks, such as the aspiration levels, against which performance on the chosen goals are assessed.

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TABLE 1Two Modes of Performance Assessment

	Problem-Solving Mode	Self-Enhancing Mode
Primary motivation	Fix problems; improve performance	See oneself in a positive light; assess performance as satisfactory
Standards of evaluation used across assessment process	Predetermined; temporally consistent	Fluid; temporally inconsistent
Priority of performance goals	Fixed	Shifting
Primary temporal orientation	Prospective; reasoning motivates conclusions	Retrospective; conclusions motivate reasoning

FIGURE 1

The Conventional Model of Learning from Performance Feedback

(adapted from Greve, 2003: 60, and Scott & Davis, 2007: 335)

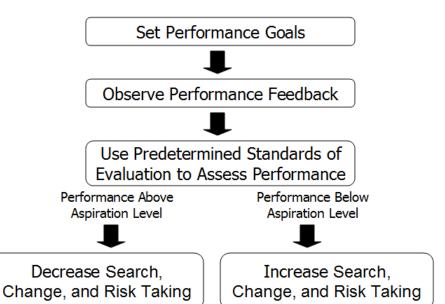


FIGURE 2

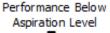
A Two-Mode Model of Learning from Performance Feedback

Set Performance Goals



Observe Performance Feedback

Performance Above Aspiration Level





PROBLEM-SOLVING MODE Conditions Influencing Performance Assessment Mode

Use Predetermined Standards of Evaluation to Assess Performance



Decrease Search, Change, and Risk Taking Conditions Increasing Self-Threat Posed by Low Performance

- Greater narcissism (Prop. 4)
- Greater belief that ability is fixed (Prop. 5)
- Greater accountability to audiences who can influence one's future (Prop. 6)
- Greater accountability for performance outcomes (Prop. 7)

Conditions Increasing Latitude to Portray Low Performance Positively

- Greater task complexity (Prop. 8)
- Greater possession of informational power (Prop. 9)

Interaction

•The effect on performance assessment of conditions increasing self-threat is greater when latitude to portray low performance positively is high, and the effect on performance assessment of conditions increasing latitude is greater when self-threat is high. (Prop. 10)

LOW



PROBLEM-SOLVING MODE

Use Predetermined Standards of Evaluation to Assess Performance



Greater Increase in Search, Change, and Risk Taking HIGH



SELF-ENHANCING MODE

Use Retrospectively Revised Standards of Evaluation to Assess Performance as More Favorable

- Revise the priority of performance goals (Prop.
 1)
- Increase the level of abstraction of performance goals (Prop. 2)
- Invoke counterfactual outcomes as comparison standards (Prop. 3)



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