

Self-Assessment, Self-Enhancement, and the Choice of Comparison
Organizations for Evaluating Organizational Performance

Pino G. Audia*

Dartmouth College

Sebastien Brion

IESE Business School

Henrich R. Greve

INSEAD

January 2015

* Correspondence should be sent to:

Pino Audia
Tuck School of Business
at Dartmouth
100 Tuck Hall
Hanover, NH 03755 USA
(603) 646-0527
pino.g.audia@tuck.dartmouth.edu

Self-Assessment, Self-Enhancement, and the Choice of Comparison
Organizations for Evaluating Organizational Performance

Abstract

We examine the influence of the self-assessment and self-enhancement motives on the choice of comparison organizations in two experimental studies. Study 1 shows that: (1) self-assessment generally prevailed over self-enhancement, guiding decision makers to choose organizations that were more similar and had better performance; (2) self-enhancement was more pronounced under conditions of low performance, leading participants to more frequently choose organizations that were less similar and had lower performance; and, (3) self-enhancing comparisons inhibited perceptions of failure and the propensity to make changes. Study 2 extends the results of Study 1 by showing that participants were more likely to choose comparison organizations that had lower performance and were less similar when they were in a self-enhancement mindset than when they were in a self-assessment mindset. The combined effects of self-assessment and self-enhancement on the choice of comparison organizations are discussed in relation to the broader organizational literature on learning from performance feedback.

Keywords: social comparison, organizational performance feedback theory, categories

Self-Assessment, Self-Enhancement, and the Choice of Comparison Organizations for Evaluating Organizational Performance

Perhaps no topic in research on organizational learning is more prominent than learning from performance feedback ([Cyert & March, 1963](#); [Greve, 2003](#); [Huber, 1991](#); [Jordan & Audia, 2012](#); [Levitt & March, 1988](#); [March & Shapira, 1992](#)). Yet in this ever-growing literature, there is a curious deficit. The theory recognizes that subjective interpretations of organizational performance prompt a wide range of behavioral responses and that these interpretations are often based on comparisons with organizations facing similar business environments. Yet very little empirical research examines the prerequisite question of how comparison organizations are chosen to evaluate performance.

Researchers examining the impact of performance on change, risky investments, and innovative efforts usually assume that decision makers rely on judgments of similarity as the primary basis of choosing comparison organizations (e.g., [Audia, Locke, & Smith, 2000](#); [Blettner, He, Hu, & Bettis, forthcoming](#); [Kacperczyk, Beckman, & Moliterno, forthcoming](#)). Executives in the railroad industry, for example, are assumed to compare their performance to the performance of other railroad companies ([Desai, 2008](#)) and executives in the radio industry are assumed to evaluate their performance in relation to the performance of other radio organizations ([Greve, 1998](#)). Similarly, within-industry comparisons are assumed also in multi-industry panel studies (e.g., [Fiegenbaum & Thomas, 1988](#)). This assumption is rooted in the view, articulated by [Festinger \(1954\)](#) and incorporated in normative models of strategic management (e.g., [Giachetti & Lampel, 2010](#); [Peteraf & Bergen, 2003](#)), that the primary motive guiding the choice of comparable organizations is the desire to be accurate, what social psychologists have called self-assessment ([Sedikides & Strube, 1997](#)). Consider for example a decision maker who wants to evaluate the performance of a car manufacturer. By this view, comparisons to the performance of other car manufacturers are thought to give a more accurate evaluation of the performance of the focal organization than comparisons to less similar organizations, such as for example, a broad array of transportation equipment manufacturers including manufacturers of cars but also manufacturers of

airplanes and trains. Greater similarity between the focal organization and comparison organizations in terms of products and resources employed is thought to increase the quality of the inferences one can draw from the comparison.

Although decision makers are expected to choose comparison organizations on the basis of similarity and to be driven by the desire to be accurate, there is evidence that suggests that they often deviate from this pattern. Specifically organizational research on the justification of executive pay ([Porac, Wade, & Pollock, 1999](#)) and on responses to identity threats ([Elsbach & Kramer, 1996](#)) finds that decision makers often alter the boundaries of social comparison groups in ways that help them project positive perceptions of their organizations. This work on externally directed impression management tactics offers insights that can help advance the current understanding of how evaluations of organizational performance in relation to comparison organizations may be conducted. First, this work suggests that shared cognitive categories such as industry classifications generally provide the basis for making apples to apples comparisons, but that there is still the need to know more about the frequency with which decision makers use comparisons that relax the criterion of similarity. How often and when do decision makers choose comparison organizations that deviate from the expected tendency to compare apples to apples? Moreover, how does the choice of dissimilar comparison organizations impact the decision making process?

Second, research on externally directed impression management tactics suggests that we can gain a more complete picture of how decision makers make choices of comparison organizations by broadening consideration of the motives guiding their evaluations beyond self-assessment. Decision maker's choice of comparison organizations may also be influenced by self-enhancement (the desire to see oneself in a positive light; e.g. [Sedikides & Strube, 1997](#)), self-improvement (the desire to improve oneself for the future; e.g., [Sedikides & Strube, 1997](#)), and self-verification (the desire to confirm one's pre-existing self-evaluations; e.g., [Swann, 1981](#)). Keeping in mind that the choice of comparison firms may reflect the combined effect of various motives, here we take a step toward recognizing these complex effects by focusing on the tension generated by the competing influences of the self-assessment and self-

enhancement motives. We think this is a useful starting point because the self-assessment motive is seen as the predominant motive in the organizational literature on performance feedback ([Greve, 2003](#)) and because the self-enhancement motive may cause important distortions in the performance assessment process, hindering, for example, decision makers' ability to recognize failure ([Audia & Brion, 2007](#); [Jordan & Audia, 2012](#); [KC, Staats, & Gino, 2013](#)). Both self-enhancement and self-assessment motives are likely to influence the criteria by which comparison organizations are chosen. Whereas decision makers motivated by self-assessment tend to view similarity as the key criterion to choose comparison organizations, decision makers motivated by self-enhancement tend to view favorability as the key criterion to choose comparison organizations. By inducing decision makers to choose comparison organizations that provide a more favorable comparison (i.e., choose worse performing organizations), self-enhancement may inflate their perception of organizational performance.

In this paper we are interested in examining real world dilemmas in which decision makers charged with the task of selecting comparison organizations need to choose between satisfying the self-assessment motive or the self-enhancement motive. Specifically, we address the following questions: When the available options of social categories for performance evaluations pit the desire to be accurate against the desire to self-enhance, how frequently do decision makers make choices of comparison organizations that are based more on favorability than on similarity? Are there conditions that increase the probability that options that satisfy the desire to self-enhance will be chosen at the expense of options that satisfy the desire for self-assessment? Does self-enhancement in the choice of comparison organizations affect low performing decision makers' perceptions of failure and propensity to continue using the current strategy? Does the extent to which decision makers are in self-enhancing or self-assessing mindsets influence such choices?

The few empirical studies that shed light on how decision makers use social categories in response to threats or to justify organizational actions use field data ([Porac et al., 1999](#); [Elsbach & Kramer, 1996](#); [Still & Strang, 2009](#)). Here we investigate the choice of comparison organizations for the evaluation of organizational performance in an experimental setting. Our unit of analysis is the individual

decision maker and, as we explain in greater detail below, our independent variables are past performance and mindsets that prime different motives. There are three primary reasons that make the choice of an experimental design desirable. First, this design allows us to present decision makers with options that pit favorability against similarity as the key criterion for the choice of comparison organizations, thereby making it possible to detect the influence of these motives in the process of comparison. Second, compared to field data, experimental data allows more direct observation of the actual choices of comparison organizations made to conduct evaluations of performance. Letters to shareholders and other public documents provide a useful source of field data, but it is unclear whether they are representative of how managerial evaluations of performance that prompt behavioral responses are made. For instance, research suggests that decision makers use different sets of comparable organizations for different purposes ([Bizjak, Lemmon, & Naveen, 2008](#)), a finding that is confirmed in the broader literature on social comparisons (e.g., [Wheeler & Miyake, 1992](#)). Third, an experimental design controls for the availability of information about comparison organizations, a condition likely to influence the choice of comparisons ([Marsden & Friedkin, 1993](#)). By holding information availability constant, we can make stronger inferences regarding the impact of the self-assessment and self-enhancement motives on the choice of comparison organizations, the primary focus of our investigation.

Social comparison and the evaluation of organizational performance

A cornerstone of organizational research on performance feedback is that performance information alone is not sufficient to establish whether a given performance level can be classified a success or a failure ([Cyert & March, 1963](#); [Greve, 2003](#); [Jordan & Audia, 2012](#)). Performance feedback theory holds that performance needs to be compared to an aspiration level. When the performance meets or exceeds the aspiration level it will be perceived as a success. Failure is inferred from performance levels that fall below an aspiration level. Whether decision makers classify organizational performance as success or failure consequently affects a broad range of organizational behaviors, including change, risky actions, and search (e.g., [Greve, 1998](#)).

Given that perceptions of success and failure influence organizational behaviors and given that aspirations are critical to classifying performance into these two categories of outcomes, how decision makers form aspirations is a central component of performance feedback theory. According to the theory the two types of aspiration levels most frequently used are historical aspiration levels and social aspiration levels. Historical aspiration levels are formed using information about past performance whereas social aspiration levels are formed using information about comparison organizations. The theory suggests that decision makers may use both types of aspiration levels to evaluate performance, assigning varying importance to each type depending on conditions that affect their informative value ([Cyert & March, 1963](#); [Levinthal & March, 1981](#); for recent empirical studies see: [Blettner et al., forthcoming](#); [Washburn & Bromiley, 2012](#)). Social aspiration levels are seen as more informative when either the organization or the environment in which it operates undergo important changes ([Greve, 2003](#)). Under high levels of organizational and environmental changes, historical aspirations are less useful as the basis for evaluating the future performance. When an organization changes in important ways, the resource base reflected in the past performance may be dramatically different. Therefore past performance becomes a weaker indicator of an organization's performance possibilities. Likewise, when the environment changes, the capabilities that underlied past performance may no longer be relevant.

Because change is a ubiquitous feature in many organizational settings and in many industries, social aspiration levels are often more informative for organizations, especially for larger firms ([Short & Palmer, 2003](#)). The greater informative value that social aspiration levels have compared to historical aspiration levels, however, comes at the cost of greater complexity involved in forming social aspirations. While the information necessary to form historical aspiration levels is easily available because it can be found inside the organization, the information necessary to form social aspiration levels is often difficult to acquire because other organizations keep valuable information regarding their internal operations and market performance confidential. Even when information about other organizations is available, forming social aspiration levels requires tackling the preliminary step of determining the boundaries of the social

comparison group, that is, determining which organizations decision makers should select as comparisons to determine organizational performance.

Despite the fact that the way in which the boundaries of social comparison groups are drawn can greatly affect the evaluations of organizational performance, very little research examines how decision makers select comparison organizations to evaluate their performance. Recent studies, for example, examine the conditions under which managers may switch their attention between different aspiration levels but take for granted the boundaries defining which organizations fall in the comparison group and which do not ([Audia & Greve, 2006](#); [Blettner et al., forthcoming](#); [Kacperczyk et al., forthcoming](#); [Washburn & Bromiley, 2012](#)). The neglect of this important step in the process of performance assessment is likely rooted in the widely held assumption that the primary motive that guides the choice of comparison organizations is self-assessment ([Greve, 2003](#)). The theoretical rationale for self-assessment is generally traced to Festinger's (1954) social comparison theory. According to Festinger, peoples' choices of comparison others are guided by the desire to either accurately assess their abilities, or accurately assess whether their opinions are correct. This self-assessment motive is dominant, he suggests, because "the holding of incorrect opinions and/or inaccurate appraisals of one's abilities can be punishing or even fatal in many situations" (Festinger, 1954, p. 117). People generally satisfy this self-assessment motive by gathering objective information. However, when such information is not available or is insufficient to evaluate ability levels people compare themselves with similar others. Festinger uses the example of a runner who can count how many seconds it takes her to run a certain distance, but who ultimately requires information about the performance of others to determine whether she is a fast or slow runner.

According to Festinger, people prefer to compare themselves to similar others because similar others are the most diagnostic sources of information. Using the runner's example, a twenty year-old runner would learn more about her running abilities if she compared herself to runners in their twenties than if she compared herself to runners in their fifties. Focusing on similar others allows the evaluator to take into account influences common to all people included in the comparison group. For the runner

seeking to evaluate her ability, age is a major factor impacting performance that is likely to confound the assessment of ability.

Empirical evidence indicates that individuals in organizations commonly use similar others as comparisons to evaluate their pay, job, complexity, and workplace status (e.g., [Adams, 1965](#); [Oldham, et al. 1986](#); for a review see: [Goodman & Haisley, 2007](#)). Less studied is how decision makers choose comparison organizations to evaluate the performance of their organization. Researchers examining the impact of performance on change, risky investments, and innovative efforts typically assume that managers draw the boundaries of the categories defining comparison organizations on the basis of similarity. For example, managers in the magazine industry are assumed to compare the performance of their magazines to the average performance of magazines in the same content category ([Blettner et al., forthcoming](#)) and managers of mutual funds are assumed to compare the performance of their fund to the performance of funds in the same category ([Kacperczyk et al., forthcoming](#)). These assumptions are consistent with Festinger's social comparison theory because the focus on magazines in the same content category and on funds in the same category is believed to offer the most similar comparison organizations on which to base social aspiration levels.

However, the assumption that organizational actors use classifications that maximize similarity as the basis for determining social aspiration levels remains largely untested. The best available evidence documenting whether decision makers base the choice of comparison organizations on familiar industry categories comes from research on externally directed accounts of organizational behaviors, especially those advanced to justify top executives' compensation. These accounts do not focus on the evaluation of firm performance, but rather on where the pay of a firm's top executive stands in relation to the pay of top executives in other organizations. [Porac, Wade, and Pollock \(1999\)](#) investigated proxy statements which, in compliance with SEC reporting regulations, must outline the criteria used by the board of directors to set CEO compensation including explicit performance comparisons to organizations selected on the basis of "line-of-business" similarities. Although organizations had latitude in the choices they made and there was considerable variation in the care taken to report on these issues, these researchers found that

similarity was the dominant criterion used to choose comparison organizations. Sixty-nine percent of a company's chosen comparison organizations belonged to that company's 2-digit SIC industry. Further, forty-one percent of the organizations chose all of the comparison organizations from within the same industry and eleven percent chose all but one comparison firm from within the same industry. Similarly, Bizjak, Lemmon, and Nguyen (2008) found a strikingly consistent pattern in a more recent analysis of proxy statements. In their study sixty-two percent of the comparison organizations chosen to justify executives' compensation came from the same industry as the reporting company.

Although these findings clearly point to the importance of similarity as a criterion guiding the choices of comparison organizations that boards of directors make to justify executive compensation, they are insufficient to establish whether self-assessment is the primary motive guiding the choice of comparison organizations for the evaluation of organizational performance. Indeed, much research suggests that decision makers are driven by multiple motives (Sedikides & Strube 1997), including not only self-assessment, but self-enhancement as well. Social psychologists have long regarded self-enhancement - people's desire to see themselves in a positive light – as a fundamental drive influencing thoughts and behaviors ([Allport, 1937](#); [Fiske, 2004](#)), especially in Western cultures ([Heine, et al., 1999](#)). [Taylor and Brown's \(1988\)](#) theory of positive illusions supports the self-enhancing nature of self-perception, arguing that people have a disproportionate interest in and recall of positive self-relevant information, are more likely to take credit for good outcomes than failures ([Miller & Ross, 1975](#)), tend to see themselves more positively than others see them ([Kruger & Dunning, 1999](#)), and tend to perceive themselves as better than peers on a number of qualities ([Alicke, 1985](#)). Research on learning from performance feedback also suggests that decision makers often form self-enhancing assessments of performance ([Audia & Brion, 2007](#); [KC, Staats, & Gino, 2013](#); [Jordan & Audia, 2012](#); [Washburn & Bromiley, 2012](#))

The most sustained line of research pointing to self-enhancing comparisons focuses on the contrast between downward and upward comparisons (Bandura & Jourdan, 1991; Gibbons et al., 2002; [Taylor & Lobel, 1989](#); [Wills, 1981](#)). In the dominant “rank-order paradigm” ([Wheeler, 1966](#)) used in

most social comparison studies, equally similar people are ranked along a given dimension and then the choices of comparison others on the basis of rank are examined (for a review see: [Suls & Wheeler, 2000](#)). This literature shows that people often use self-enhancing strategies in social comparison by picking people who are worse off rather than people who are better off, and that these downward social comparisons enhance subjective well-being ([Wills, 1981](#)) and are used especially when self-enhancement is salient ([Collins, 1996](#)). However, studies in which participants are given the option of choosing among comparison others that vary both in terms of favorability (i.e. downward and upward targets) and similarity are rare. Recent work examines the impact of social comparison information that varies in terms of favorability and similarity on self-evaluations ([Stapel & Schwinghammer, 2004](#)). But in these studies participants do not choose comparison others. They are randomly assigned different kinds of social comparison information.

Some evidence regarding choices in which decision makers trade similarity for favorability comes from organizational research on externally directed accounts of executive pay. As we noted above, [Porac et al. \(1999\)](#) found that most organizations justified executive compensation by choosing comparisons organizations in the same industry, but they also found that a considerable number of organizations included in an organization's set of peers – thirty-one percent - were from other industries. Moreover, these less similar peers were not randomly selected; rather they appeared to have performance that was lower than the performance of the focal firm – a feature that offered a more favorable comparison for the focal firm. A similar pattern of trading similarity for favorability was reported by [Bizjak et al. \(2008\)](#) who found that the less similar organizations chosen as comparisons had higher executive compensation than the most similar organizations chosen as comparisons, a feature that in addition to allowing justifying the focal firm's executive compensation also laid the foundation for subsequent compensation increases.

If decision makers are affected not only by the self-assessment motive, as the original formulation of the theory of performance feedback assumes ([Cyert & March, 1963](#); [Greve, 2003](#)), but also by the self-enhancement motive, then an important question is “when is the influence of the self-enhancement motive

more pronounced”)? Both psychological research ([Aspinwall & Taylor, 1993](#); [Greenberg & Pyszczynski, 1985](#); [Wills, 1981](#); [Wood et al., 1985](#)) and organizational learning research ([Audia & Brion, 2007](#); [KC, Staats, & Gino, 2013](#); [Jordan & Audia, 2012](#)) suggest that the self-enhancement motive is more common when people’s positive self-views are put in jeopardy, and performance failure is a particular instance of self-threat that has been found to increase individuals’ propensity to make efforts to elevate their self-image. This suggests that a pattern of opting for favorability at the expense of similarity in the choice of comparison firms may be more pronounced under conditions of threat to the image of the organization and its decision makers. This literature then implies that declining levels of organizational performance – current performance that falls below past levels of performance - may constitute a threat to which decision makers respond by increasing their propensity to choose less similar but more favorable comparisons as opposed to more similar but less favorable comparisons. [Porac et al. \(1999\)](#) found some evidence consistent with this prediction. In their study, a firm’s low stock returns increased the probability of including peers from outside the industry though they did not find the same effect for accounting returns.

We can now formulate four predictions regarding the tension between the self-assessment and self-enhancement motives in the choice of comparison organizations used to evaluate organizational performance. Drawing from the performance feedback literature and the psychological research on social comparisons, we begin by predicting that when the available options of social categories for performance evaluations pit the self-assessment motive against the self-enhancement motive, the self-assessment motive will generally prevail, leading decision makers to choose comparison organizations on the basis of similarity rather than on the basis of favorability.

Hypothesis 1: Confronted with the choice of more similar and better performing organizations and less similar and worse performing organizations, decision makers generally choose to evaluate their organizational performance in relation to the performance of the more similar and better performing organizations.

Although the self-assessment motive may generally prevail over the self-enhancement motive in guiding the choice of comparison organizations, the self-enhancement literature suggests that, given that low performance is generally threatening, the self-enhancement motive is stronger when performance is low than when performance is high ([Audia & Brion, 2007](#); [Jordan & Audia, 2012](#); [KC et al, 2013](#)). This suggests that decision makers respond to low performance and the resulting threat to their self-image by elevating their tendency to choose comparison organizations on the basis of favorability rather than similarity.

Hypothesis 2: Confronted with the choice of more similar and better performing organizations and less similar and worse performing organizations, decision makers facing low performance are more likely to evaluate their organizational performance focusing on the less similar and worse performing organizations than decision makers facing high performance.

Variations in the extent to which decision makers rely on similarity as the criterion guiding the choice of comparison organizations may have important ramifications in the decision making process. Decision makers experiencing the same level of low performance should vary in their overall evaluation of performance and propensity to change the current strategy as a function of the comparison organizations they have chosen. Decision makers focusing on comparison organizations that are more similar and better performing should form less favorable evaluations of performance than decision makers who relax the criterion of similarity to select more favorable comparisons. The theory also holds that perceptions of failure spur change ([Cyert & March, 1963](#); [Greve, 2003](#)). Therefore another likely consequence of variations in the choice of comparison organizations when performance is low is that decision makers who choose comparison organizations that are more similar and better performing may recognize the need to change the current strategy to a greater extent than those who relax the criterion of similarity to select more favorable comparisons.

Hypothesis 3: Low performing decision makers who evaluate their organizational performance focusing on the more similar and better performing organizations compared to low performing decision makers focusing on less similar and more favorable comparison options are more likely

(1) to evaluate organizational performance as poor and (2) to recognize the need to change the current strategy.

Through Hypotheses 1 and 2 we seek to infer self-enhancement and self-assessment from whether individuals choose comparison organizations on the basis of similarity or favorability and from whether people's choices of comparison organizations are affected by low performance. However, the hypothesized relationships may also stem from the influence of other motives. One could argue, for example, that, because most people have positive self-views ([Diener & Diener, 1995](#)), the desire to verify a positive self-image may account for a tendency to choose comparable organizations that are dissimilar and worse performing ([Kwan et al., 2008](#); [Kwang & Swann, 2010](#)). To conduct an additional test of the extent to which self-assessment and self-enhancement influence the choice of comparison organizations, we manipulate participants' mindsets regarding the importance of these motives. Past research using priming techniques has shown that when a goal or construct is activated, associated perceptual and behavioral tendencies are also activated (e.g., [Brewer & Gardner, 1996](#); [Kuhnen & Oyserman, 2002](#)), and this has been shown to be true for manipulations of self-enhancement and self-assessment ([Wilson & Ross, 2000](#)). Participants in a self-enhancement mindset condition can be primed to think that there are benefits in maintaining a positive self-image and that selecting information that describes them in the most positive light is an important way to achieve this goal. Analogously, participants in a self-assessment mindset condition can be primed to think that there are benefits in evaluating themselves as accurately as possible and that selecting information that is most relevant for making a precise assessment of themselves is an important way to achieve this goal. Following research that has shown that these motives can be primed experimentally, we expect that compared to participants given a self-assessment prime participants given a self-enhancement prime are more likely to select comparison organizations on the basis of favorability than on the basis of similarity.

Hypothesis 4: Confronted with the choice of more similar and better performing organizations and less similar and worse performing organizations, decision makers primed for a self-enhancement mindset are more likely to evaluate their organizational performance focusing on

the less similar and worse performing organizations than decision makers primed for a self-assessment mindset.

We test these hypotheses in two studies. The first study tests hypotheses 1, 2, and 3, examining the extent to which self-assessment and self-enhancing motives impact the choice of comparison firms in a decision-making scenario and the consequences of these choices on the evaluation of performance and the perceived need to make changes. The second study tests hypothesis 4, examining the extent to which manipulated self-enhancement and self-assessment mindsets impact the choice of comparison firms.

Study 1

Method

Participants

Participants were eighty-nine undergraduate students attending a West Coast university who participated in the study in partial fulfillment of course credit.

Procedure

All materials were presented using a web-based script on Windows-based computers. Participants were seated at semi-private workstations. Acting as the Chief Executive Officer (CEO) of a firm, participants were told that they would be asked to make a number of strategy decisions based on the information provided to them and that it is therefore essential that they formed a complete assessment of the firm's performance.

Participants were given background information on a fictional firm, Allied Waste Industries, which included a summary of the firm's founding and other miscellaneous background information intended to add realism to the case. Upon reading the background information, participants were provided with information about the firm's growth strategy. The firm was described as having implemented a rapid growth strategy that led to the acquisition of a number of organizations, more than tripling its customer base. Participants were then informed that this strategy had either led to positive or negative outcomes for the firm, depending on condition.

In the 'high performance' condition, participants were informed that: (1) revenues had increased from 5362.00 (in millions) in 1997 to 5734.80 in 2005, a 6.9% increase, (2) operating income had increased from 886.4 in 1997 to 915.5 in 2005, and (3) return on sales (i.e., operating income divided by revenue) had increased from 12.2% in 1997 to 20.6% in 2005. In the 'low performance' condition, participants were informed that (1) revenues had decreased from 5362.00 (in millions) in 1997 to 4989.20 in 2005, a 6.9% decrease, (2) operating income had decreased from 886.4 in 1997 to 857.30 in 2005, and (3) return on sales (i.e., operating income divided by revenue) had decreased from 12.2% in 1997 to 3.8% in 2005.

Following the manipulation of performance, participants were informed that while historical performance information provides important details on a firm's performance, "to accurately assess the performance of the organization, it is also important to consider the performance of Allied Waste in relation to the performance of organizations that operate in the same environment. Historical performance is often affected by external circumstances that are not specific to a particular firm. Having a grasp on the performance of one's competitors is essential to making informed strategic decisions."

Participants were given the opportunity to review basic information about four groups of organizations that were competitors of Allied Waste. They were told that they would first review information on all four groups, and then would be asked to select one of these groups to use as a comparison to Allied Waste. The four groups of organizations varied along two dimensions: similarity and favorability. Drawing on the approach used by [Porac et al. \(1999\)](#) to discern the degree of similarity of comparison firms, we use standard industry classification (SIC) codes to establish an objective measure of similarity. Participants were told that Allied Wastes is a solid wastes company. The background that participants read about Allied Waste reads as follows:

" Allied Waste Industries proves every day that one person's trash is another person's treasure. Founded in 1976, Allied Waste picks up the garbage of about 10 million residential, commercial, and industrial customers throughout the US. Its vast collection, recycling, and

landfill operations include a network of 310 collection companies, 166 transfer stations, 169 active landfills, and 57 recycling facilities in 37 states. Residential, commercial, and roll-off (dumpsters) collection accounts for about two-thirds of sales. Allied Waste believes its diverse asset base will help it survive the US economic downturn and maintain its position within the industry as the economy recovers."

Participants were also told that,

"According to the Standard Industry Classification (SIC) system, Allied Waste is part of the "Electric, Gas, And Sanitary Services" group (SIC code: 49). The SIC system also classifies firms within more specific categories, adding an additional number to the SIC code with each specification. Allied Waste is part of the 3-digit SIC group, "Sanitary Services" (SIC code: 495) and, more specifically, the 4-digit SIC group, "Solid Wastes Services & Recycling" group (SIC code: 4953)."

Participants were then asked to assess four groups of comparison firms presented to them in random order. The most similar group had a SIC code of 4953, 'Solid Wastes Services & Recycling' (within Allied Waste's four digit SIC code). The least similar group had a SIC code of 4, "Transportation, Communications, Electric, Gas, And Sanitary Services". The other two SIC codes were 495, 'Sanitary Services', and 49, 'Electric, Gas, And Sanitary Services.'

For each group, participants were given the SIC code, as well as qualitative information about the SIC grouping. The description of the most similar group, SIC 4953, closely resembles the description of Allied Waste and reads as follows: "This group includes companies primarily engaged in the collection and disposal of refuse by processing or destruction or in the operation of incinerators, waste treatment plants, landfills, or other sites for disposal of such materials. Establishments primarily engaged in collecting and transporting refuse without such disposal are classified in Transportation, Industry 4212". In the least similar group, SIC 4, participants were told that, "this group includes companies providing, to the general public or to other business enterprises, passenger and freight transportation, communications

services, or electricity, gas, steam, water or sanitary services, and all establishments of the United States Postal Service.”

The groups of organizations also varied in their performance in comparison to Allied waste. The performance of companies in SIC 4953 was described as having an average ROS between 1997 and 2005 that was 40% higher than Allied Waste – the least favorable comparison. The performance of companies in SIC 495 was described as 20% higher. The performance of companies in SIC 49 was described as 20% lower. Finally, the performance of companies in SIC 4 was described as 40% lower than Allied Waste – the most favorable comparison. After viewing information on each of the four groups, participants were asked a number of questions related to Allied Waste’s performance and strategy. These included: ranking the four groups in order of appropriateness as a target of comparison with Allied Waste (1= Most appropriate, 4= Least appropriate); assessing the performance of Allied Waste on a 7-point scale (1=Very Poor, 7=Very Good); and, evaluating whether they would be likely to continue on the same strategy (1=Unlikely, 7=Likely).

Results

Table 1 and Figure 1 report the frequencies of the rank given to the two groups of organizations that were most similar to Allied Waste and had higher performance than Allied Waste. A rank of 3 means that participants ranked the two groups that were most similar and most unfavorable (i.e. had higher performance) than Allied Waste as the most appropriate target for comparison, whereas a rank of 7 indicates that participants gave the lowest rank to the two groups that were most similar and most unfavorable. The mean of the rank variable was 3.87 (SD = 1.22) and it was significantly different from a hypothesized mean of 5 that would be obtained if the available ranking options received equal frequencies, $t = -8.73$, $p < .01$. Giving the highest rank to the two most similar but least favorable groups was the most frequent choice of comparison with a fifty-five percent frequency. Giving the lowest rank to the two most similar and most unfavorable groups had a considerably smaller frequency with a 6.74 percent frequency. Thus, the choices of comparison organizations made by participants in our sample were generally guided by the self-assessment motive, as predicted in Hypothesis 1.

INSERT TABLE 1 AND FIGURE 1 ABOUT HERE

To test Hypothesis 2 we turned our attention to the impact of performance on the choice of comparison organizations. First, to confirm whether participants correctly encoded the performance manipulation we examined how they evaluated the overall performance of Allied Waste. As expected, participants in the low performance condition rated the overall performance lower than participants in the high performance condition, $P_{low} = 3.69$ vs. $P_{high} = 5$, $t = -6.45$, $p < .01$. Next we conducted a one-way (performance condition: low performance versus high performance) analysis of variance including as covariates the order in which the four available options of comparison organizations were shown to participants and whether participants were native English speakers (fifty-three were native English speakers and thirty-six were non-native English speakers). Participants in the low performance condition gave lower rankings to the most similar and least favorable groups of comparison organizations than participants in the high performance condition, $P_{low} = 4.10$ vs. $P_{high} = 3.69$, $F(1,88) = 4.80$, $p < .01$, lending support to Hypothesis 2. The two covariates were not significant.

In addition to the total rank given to the two most similar groups reported above, another way to discern the impact of low performance on the choice of comparison is to focus on the cases in which participants evaluated as most appropriate for comparison the two least similar but most favorable groups of organizations. These are the cases in which the most similar but least favorable group of organizations received a total rank of 7, as reported in Table 1. Only 2.5 % of the participants in the high performance condition gave the highest rank of appropriateness to the least similar but most favorable groups of organizations. But when performance was low this frequency was four times larger as 10.20 % of participants selected as most appropriate target for comparison the least similar most favorable groups. So the impact of low performance is quite considerable given that participants internalized performance simply by assuming the role of the Chief Executive Officer of a fictional company. We would expect

stronger effects of low performance in real organizations where the threat to the self-image brought by low performance is likely to be more salient and more consequential.

To test Hypothesis 3 we examined the impact of the choice of comparison groups on participants' ratings of overall performance and their propensity to continue the current strategy. The evaluations made by low performing decision makers who gave the highest rank to the two most similar but better performing groups of comparison organizations (total rank = 3; $N = 25$) were compared to the low performing decision makers who gave lower ranks to the most similar and better performing groups of comparison organizations (rank > 3; $N = 24$). Decision makers who assigned the highest rank to the most similar comparison organizations evaluated overall performance significantly lower, $P_{\text{rank}=3} = 3.4$ vs. $P_{\text{rank}>3} = 4.0$, $t(1,47) = 2.46$, $p < .01$, and were significantly less likely to continue with the same strategy, $C_{\text{rank}=3} = 2.72$ vs. $R_{\text{rank}>3} = 3.38$, $t(1,47) = 1.84$, $p < .05$, than decision makers who gave lower ranks to the most similar comparison organizations. We report one-tailed significance levels because these were directional predictions.

Together the findings from Study I support our first three predictions: Participants' rankings of comparison generally followed a self-assessment motive (Hypothesis 1), but their rankings were impacted by the performance of their organization, such that participants who represented low performing organizations were more likely to view as appropriate target for comparison less similar but lower performing organizations, thereby following a self-enhancement motive (Hypothesis 2). Furthermore, self-enhancing choices of comparison organizations under conditions of low performance impacted the decision making process by inhibiting perceptions of failure and the propensity to change the current strategy (Hypothesis 3).

Study 2

Method

Participants

Participants were seventy-six undergraduate students attending a West Coast university who participated in the study in partial fulfillment of course credit.

Procedure

The procedure was virtually identical to that of Study 1, with the addition of a manipulation of self-enhancing or self-assessing mindsets that preceded the Allied Waste Case. This resulted in a 2 (Performance: Low v High) x 2 (Mindset: Self-enhancement v Self-assessment) between subjects design.

In the experimental session, participants were informed that they would be completing two unrelated exercises: a brief questionnaire about their beliefs, which contained the manipulation of mindset, and a decision-making exercise. The prime, adapted from Wilson and Ross (2000), manipulated whether participants were in a self-enhancing or self-assessing mindset. In the self-enhancing condition, participants were told,

“Depending on our goals and situations, we may describe ourselves in different ways. Sometimes we want to describe ourselves in a way that makes us feel particularly good about ourselves. We select the information that makes us feel best and describe ourselves in the most positive light. The ability to sometimes describe ourselves in this positive way may be important for maintaining a positive self-image and good mental health. Please describe yourself in a way that makes you feel particularly good about yourself on the following attributes. Please only report truthful information, but you may selectively present whatever kinds of information that best accomplishes this goal.”

In the self-assessing condition, participants were told,

“Depending on our goals and situations, we may describe ourselves in different ways. Sometimes we want to evaluate ourselves as accurately as possible. We select the information that we feel is most useful and relevant for making a precise assessment of ourselves. The ability to sometimes describe ourselves in this evaluative way may be important for correctly understanding our abilities and guiding our approach to many tasks. Please describe yourself in a way that provides the most accurate assessment of yourself on the following attributes. Please only report truthful

information, but you may selectively present whatever kinds of information that best accomplishes this goal.”

In both conditions, participants described themselves on the following four attributes: social skills, self-confidence, analytical abilities, and business acumen.

To account for possible mood effects from the manipulation (cf., Wheeler and Miyake 1992), following the prime, participants completed the positive and negative affect scale (PANAS) (Watson, Clark, & Tellegen, 1988). Participants were instructed to indicate their feelings “at the present moment”. The remainder of the experiment follows the procedures of Study 1.

Results

Table 2 and Figure 2 report the frequencies of the ranks given to the four available options of comparison organizations. As in study 1, with sixty percent, the most frequent choice of comparison organizations was giving the highest ranks to the two groups that were most similar and most unfavorable (i.e. had better performance) to Allied Waste. In contrast, with nearly seven percent, the choice of giving the lowest ranks to the two groups that were most similar and most unfavorable was relatively rare. The mean of the total rank variable was 3.78 (SD = 1.21).

 INSERT TABLE 2 AND FIGURE 2 ABOUT HERE

A 2 (performance condition: low vs. high) X 2 (mindset: self-assessment vs. self-enhancement) analysis of variance revealed a significant main effect for motive condition, $F(1, 75) = 4.41, p < .05$, and a marginal effect for performance condition, $F(1, 75) = 3.03, p = .08$, whereas the interaction between performance condition and motive condition was not significant. We also included as covariates the order in which the four groups were displayed to participants and participants’ number of years in which they lived in the U.S. as a proxy for their fluency in the English language (mean = 16.72, std. dev. = 6.59) but neither covariate was significant. As in study 1, although self-assessment prevailed over self-enhancement in guiding the choice of comparison organizations, participants gave lower rankings to the

two groups that were most similar and most unfavorable (i.e. had higher performance) when performance was low than when it was high, $R_{low} = 4.16$ vs. $R_{high} = 3.45$, $F(1,75) = 3.03$, $p = .08$.

Furthermore, participants who received the self-enhancement prime gave lower rankings to the two groups of comparison organizations that were most similar and most unfavorable compared to participants in the self-assessment condition, $R_{se} = 3.92$ vs. $R_{sa} = 3.64$, $F(1, 75) = 4.41$, $p < .05$, lending support to Hypothesis 3. The frequencies reported in Table 2 and Figure 2 reveal additional evidence regarding the impact of the motive condition. When performance was low, thirty-seven percent of participants in the self-enhancement prime condition gave the highest ranks to the groups that were most similar and most unfavorable versus fifty percent of participants in the self-assessment prime condition. A similar frequency gap emerged when performance was high. Nearly seventy percent of participants in the self-enhancement condition gave the highest ranks to the most similar / most favorable comparison groups versus eight-two percent of participants in the self-assessment condition. We checked whether participants who chose as comparison group organizations that were least similar and most favorable (i.e. had lower performance) were aware that the performance of organizations in the comparison group they chose was lower than Allied Waste. That was indeed the case. The correlation between the rank variable and participants' assessment of the performance of the comparison group in relation to Allied Waste (1=much worse 7= much better), was negative and significant, $r = -.48$, $p < .01$.

Comparing the frequencies in study 2 to the frequencies reported in study 1, it appears that participants in the self-assessment condition did not act much differently than participants who received no motive manipulation in study 1. This may be because a self-assessment mindset is, as assumed in the theory of performance feedback, the default condition with which participants approach the evaluation of comparison organizations. Self-assessing mind set manipulations may therefore be redundant in such settings. The self-enhancement prime, however, altered participants' choice of comparison organizations in significant ways. These effects of the motive manipulations do not appear to stem from variations in participants' mood inadvertently induced in the experiment. Neither positive affect ($PA_{sa} = 2.74$; $PA_{se} =$

2.90; $t = -.96$, ns) nor negative affect ($NA_{sa} = 1.48$; $NA_{se} = 1.56$; $t = -.53$, ns) displayed significant differences across motive conditions.

By employing a mindset priming task in which participants were put in either a self-assessment or self-enhancement mindset, Study 2 provides additional evidence that the self-enhancement motive competes with the self-assessment motive in guiding the choice of comparison organizations. These results suggest that both low performance as well as situational cues that influence decision makers' motives may lead to self-enhancing mindsets that bias decision makers' choices of comparison firms.

Discussion

Subjective evaluations of whether an organization is performing well or poorly often require making comparisons among organizations. Although these subjective evaluations are a critical component of organizational research on performance feedback, studies that examine which firms are chosen for these comparisons are surprisingly rare. In this paper we addressed this gap by examining how these choices are made. Specifically, we examined in two experimental studies the extent to which these choices were guided by self-assessment and self-enhancement - two motives that have been identified as having important influences in the social comparison process. We found that the self-assessment motive generally prevailed over the self-enhancement motive, guiding decision makers to choose firms that were most similar to their organization, even when those firms were performing better. However, low performance strengthened the impact of self-enhancement in the choice of comparison firms as it increased the tendency to select comparison firms that were less similar but worse performing. Importantly, this greater propensity to self-enhance under conditions of low performance impacted decision makers' response to low performance, dampening perceptions of failure and the propensity to change the current strategy. We also found additional evidence linking the self-enhancement motive to the choice of comparison firms as participants were more likely to choose comparison firms that were less similar and more favorable when they were primed to think that there are benefits in maintaining a

positive self-image than when they were primed think that there are benefits in evaluating themselves as accurately as possible.

These results suggest that an understanding of how comparison firms are chosen benefits from simultaneously considering the self-assessment and the self-enhancement motives. The results support the assumption guiding much empirical research on performance feedback that self-assessment is the primary motive guiding people's evaluations. At the same time, however, the results highlight the need to consider contingencies that can alter this motivational orientation and activate the self-enhancement motive. Low performance is an important contingency because it activates self-enhancement ([Audia & Brion, 2007](#); [Jordan & Audia, 2012](#)) and because a key prediction of performance feedback theory is that it increases the propensity to make changes (e.g., [Greve, 2003](#)). When performance is low, organizational members' greater reliance on favorability than on similarity when selecting comparison organizations may induce them to form rosier evaluations of low performance than it is often assumed. Consequently, as our findings suggest, decision makers engaging in these subjective and self-enhancing choices of comparison organizations may not respond to declining performance by initiating change or, at least, they may not exhibit the sense of urgency that outside observers would expect. This does not contradict the theory of performance feedback because the theory recognizes that subjective evaluations of performance motivate behavioral change, but it casts in a different light the results of studies that infer subjective evaluations of performance from objective indicators. Decision makers' reluctance to initiate change when low performance should signal that change is necessary may reflect a failure to perceive low performance, as decision makers choose self-enhancing comparisons to other organizations ([Audia & Brion, 2007](#); [Jordan & Audia, 2012](#); [Washburn & Bromiley, 2012](#)).

Much work remains to be done to incorporate in the theory the recognition that boundedly rational decision makers are motivated not only by self-assessment or accuracy motives, as is often assumed, but also by other motives. The self-enhancement literature provides additional opportunities to advance the understanding of the way in which decision makers evaluate performance. For example, whereas performance feedback research tends to assume that individuals evaluate performance primarily

by making comparisons with real outcomes, whether in the form of historical aspiration levels or in the form of social aspiration levels (for a notable exception see: March, Sproull, & Tamuz, 1991), research on self-enhancement points to the possibility that decision makers in dire need of favorable comparisons may conjure up hypothetical outcomes ([Jordan & Audia, 2012](#)). Specifically, experimental studies suggest that the desire to self-enhance may prompt the generation of downward counterfactuals ([White & Lehman, 2005](#)), such as catastrophic outcomes that would have happened had individuals taken different actions. From the perspective of individuals motivated by the desire to see themselves in a positive light, these are desirable comparisons; objectively low levels of performance can be perceived as less negative when they are compared to worse imagined outcomes. Future studies could further integrate the organizational literature on performance feedback and the literature on self-enhancement by examining whether and when organizational members invoke these downward counterfactuals for the evaluation of performance.

While the literature on self-enhancement offers fruitful opportunities to enrich the theory of performance feedback, self-enhancement is not the only self-evaluative motive worthy of additional attention. Self-improvement and self-verification are examples of other motives likely to influence the choice of comparison organizations. For example, the scenario we used in our studies could be adapted to examine whether and when decision makers make choices of comparison organizations that reflect self-improvement ([Labianca et al., 2009](#)). Participants could be presented with comparison firms that vary in terms of similarity and favorability. Choices of unfavorable comparison organizations (i.e. that are performing better than the focal organization) would be evidence of self-improvement. An integrative question that could guide this kind of research on the interplay of self-assessment and other motives in the choice of comparison organizations is under what conditions and how each of these motives weakens self-assessment as the predominant influence in the social comparison process.

We noted in the introduction that the literature on externally directed impression management tactics suggests that decision makers are more opportunistic and adaptive in the choice of comparison organizations than it is often assumed in the theory of performance feedback. Our results show that opportunism in the choice of comparison firms is not confined to externally directed accounts.

Participants in our studies were not asked to report their evaluations of comparison organizations to an audience, but they still showed a greater propensity to choose comparison firms that were less similar and more favorable when their self-image was threatened by low performance and when their desire to self-enhance was elevated by the prime manipulation. Internally oriented motivations appear to have been sufficient to generate the tension between the desire to be accurate and the desire to appear in a positive light.

The usual cautionary note regarding limits to the generalizability of our findings to real organization applies here. For example, there are obvious demographic differences between our participants and decision makers in real organizations that may influence the relationships we studied. We should not discount, however, that there are also features of real organizations that may strengthen our results. Self-enhancing tendencies hinge on the perception that evaluations of the consequences of people's actions impact their self-images. Participants in our studies internalized the performance of a fictional organization by taking the role of Chief Executive Officer in a decision making exercise. This link between evaluations and self-image is likely to be considerably stronger for organizational decision makers and consequently the self-enhancing tendencies that emerged in the lab should be considerably stronger in real organizations. In addition to operating in settings where performance evaluation is often clearly linked to their self-image, organizational decision makers are also exposed to accountability pressures that are known to promote self-enhancement. In fact, a voluminous literature indicates that the self-enhancement motive is activated when individuals have to explain, defend, or justify actions to audiences whose evaluations can strongly affect their future ([Jordan & Audia, 2012](#); [Lerner & Tetlock, 1999](#)), and these accountability pressures are common inside organizations where superiors or investors are often perceived as threatening audiences.

Recognizing that self-enhancing tendencies may be stronger in real organizations than in the lab should provide additional impetus for extending the study of the choice of social comparisons and its antecedents to field settings. Drawing on the literature on self-enhancement a possible extension would be to study whether organizational features likely to promote self-enhancement influence the social

comparison process. Another interesting direction would be to examine the impact of other sources of threat to managers' self-image. Managers of public companies, for example, are likely to be highly sensitive to how they are portrayed in the press and press coverage is often independent from performance evaluation ([Hayward, Rindova, & Pollock, 2004](#); [Desai, 2008](#)). Recognizing that decision makers are subject to the competing influences of self-assessment, self-enhancement, and other motives opens up new and exciting avenues for organizational research on the choice of comparison organizations and the theory of performance feedback more broadly.

References

- Adams, J. S. (1965). Inequity in social exchange. In L. Berkowitz (Ed., *Advances in Experimental Psychology*, 267-300. New York, Academic Press.
- Alicke, M. D. (1985). Global Self-Evaluation as Determined by the Desirability and Controllability of Trait Adjectives. *Journal of Personality and Social Psychology*, 49, 1621-1630.
- Allport, G.W. (1937). *Personality: A Psychological Interpretation*. Holt, Rinehart, & Winston, New York.
- Aspinwall, L. G., & Taylor, S. E. (1993). Effects of Social-Comparison Direction, Threat, and Self-Esteem on Affect, Self-Evaluation, and Expected Success. *Journal of Personality and Social Psychology*, 64, 708-722.
- Audia, P. G., & Brion, S. (2007). Reluctant to change: Self-enhancing responses to diverging performance measures. *Organizational Behavior & Human Decision Processes*, 102, 255-269.
- Audia, P.G., & Greve, H.R. (2006). Less likely to fail: Low performance, firm size, and factory expansion in the shipbuilding industry. *Management Science*, 52, 83-94.
- Audia, P.G., Locke, E.A., Smith, K.G. (2000). The paradox of success: An archival and laboratory study of strategic persistence following radical environmental change. *Academy of Management Journal*. 43, 837-854.
- Bandura, A., & Jourden, F. J. (1991). Self-Regulatory Mechanisms Governing the Impact of Social-Comparison on Complex Decision-Making. *Journal of Personality and Social Psychology*, 60, 941-951.
- Bizjak, J. M., Lemmon, M. L., & Naveen, L. (2008). Does the use of peer groups contribute to higher pay and less efficient compensation? *Journal of Financial Economics*, 90, 152-168.
- Blettner, D.A., He, Zi-Lin, Hu, Songcui, & Bettis, R. (forthcoming). Adaptive aspirations and performance heterogeneity: Attention allocation among multiple reference points. *Strategic Management Journal*, forthcoming.

- Brewer, M. B., & Gardner, W. (1996). Who is this "we"? Levels of collective identity and self representations. *Journal of Personality and Social Psychology*, **71**, 83-93.
- Collins, R. L. (1996). For better or worse: The impact of upward social comparison on self-evaluations. *Psychological Bulletin*, **119**, 51-69.
- Cyert, R. M., & March, J. G. (1963). *A Behavioral Theory of the Firm*. New York: Prentice Hall.
- Desai, V. M. (2008). Constrained growth: How experience, legitimacy, and age influence risk taking in organizations. *Organization Science*, **19**, 594-608.
- Diener, E., & Diener, M. (1995). Cross-cultural correlates of life satisfaction and self-esteem. *Journal of Personality and Social Psychology*, **68**, 653-663.
- Elsbach, K. D., & Kramer, R. M. (1996). Members' responses to organizational identity threats: Encountering and countering the Business Week rankings. *Administrative Science Quarterly*, **41**, 442-476.
- Festinger, L. (1954). A theory of social comparison processes. *Human Relations*, **7**, 117-140.
- Fiegenbaum, A., & Thomas, H. (1988). Attitudes toward risk and the risk-return paradox - prospect-theory explanations. *Academy of Management Journal*, **31**, 85-106.
- Fiske, S.T. (2004). *Social Beings: A Core Motives Approach to Social Psychology*. New York: Wiley.
- Giachetti, C., & Lampel, J. (2010). Keeping both eyes on the competition: Strategic adjustment to multiple targets in the UK mobile phone industry. *Strategic Organization*, **8**, 347-376.
- Gibbons, F. X., Lane, D. J., Gerrard, M., Reis-Bergan, M., Lautrup, C. L., Pexa, N. A., et al. (2002). Comparison-level preferences after performance: Is downward comparison theory still useful? *Journal of Personality and Social Psychology*, **83**, 865-880.
- Goodman, P.S., & Haisley, E. (2007). Social comparison processes in an organizational context: New directions. *Organizational Behavior and Human Decision Processes*, **102**, 109-125.
- Greenberg, J., Pyszczynski, T. A., & Solomon, S. (1982). The self-serving attributional bias: Beyond self-presentation. *Journal of Experimental Social Psychology*, **18**, 56-67.

- Greve, H. R. (1998). Performance, aspirations and risky organizational change. *Administrative Science Quarterly*, **43**, 58-86.
- Greve, H. R. (2003). A behavioral theory of R&D expenditures and innovations: Evidence from shipbuilding. *Academy of Management Journal*, **46**, 685-702.
- Greve, H. R. (2008). A behavioral theory of firm growth: Sequential attention to size and performance goals. *Academy of Management Journal*, **51**, 476-494.
- Hayward, M. L. A., Rindova, V. P., & Pollock, T. G. (2004). Believing one's own press: The causes and consequences of ceo celebrity. *Strategic Management Journal*, **25**, 637-653.
- Heine, S. J., Lehman, D. R., Markus, H. R., & Kitayama, S. (1999). Is there a universal need for positive self-regard? *Psychological Review*, **106**, 766-794.
- Huber, G. P. (1991). Organizational learning: The contributing processes and the literatures. *Organization Science*, **2**, 81-115.
- Jordan, A.H., & Audia, P.G. (2012). Self-enhancement and learning from performance feedback. *Academy of Management Review*, **37**, 211-231.
- Kacperczyk, A., Beckman, C.M., & Moliterno, T.P. (forthcoming). Social comparison, risk, and change: Evidence from the mutual fund industry. *Administrative Science Quarterly*, forthcoming.
- KC, D., Staats, B.R., & Gino, F. (2013). Learning from my success and from others' failure: Evidence from minimally invasive cardiac surgery. *Management Science*, **59**, 2435-2449.
- Kruger, J., & Dunning, D. (1999). Unskilled and unaware of it: How difficulties in recognizing one's own incompetence lead to inflated self-assessments. *Journal of Personality & Social Psychology*, **77**, 1121-1134.
- Kuhnen, U., & Oyserman, D. (2002). Thinking about the self influences thinking in general: Cognitive consequences of salient self-concept. *Journal of Experimental Social Psychology*, **38**, 492-499.
- Kwan, V. S., John, O. P., Robins, R. W., & Kuang, L. L. (2008). Conceptualizing and assessing self-enhancement bias: A componential approach. *Journal of Personality and Social Psychology*, **94**, 1062-1077.

- Kwang, T., & Swann, W. B. (2010). Do people embrace praise even when they feel unworthy? A review of critical tests of self-enhancement versus self-verification. *Personality and Social Psychology Review, 14*, 263-280.
- Labianca, G., Fairbank, J.F., Andreovski, G., & Parzen, M. (2009). Striving toward the future: aspiration-performance discrepancies and planned organizational change. *Strategic Organization, 7*, 433-466.
- Lerner, J. S., & Tetlock, P. E. (1999). Accounting for the effects of accountability. *Psychological Bulletin, 125*, 255-275.
- Levinthal, D., & March, J. G. (1981). A model of adaptive organizational search. *Journal of Economic Behavior & Organization, 2*, 307-333.
- Levitt, B., & March, J. G. (1988). Organizational learning. *Annual Review of Sociology, 14*, 319-340.
- March, J. G., & Shapira, Z. (1992). Variable risk preferences and the focus of attention. *Psychological Review, 99*, 172-183.
- March, J. G., Sproull, L. S., & Tamuz, M. (2003). Learning from samples of one or fewer (Reprinted from *Organization Science*, vol 2, pg 1-13, 1991). *Quality & Safety in Health Care, 12*, 465-471.
- Marsden, P. V., & Friedkin, N. E. (1993). Network studies of social-influence. *Sociological Methods & Research, 22*, 127-151.
- Miller, D. T., & Ross, M. (1975). Self-serving biases in the attribution of causality: Fact or fiction? *Psychological Bulletin, 82*, 213-225.
- Oldham, G. R., Kulik, C. T., Ambrose, M. L., Stepina, L. P., & Brand, J. F. (1986). Relations between Job Facet Comparisons and Employee Reactions. *Organizational Behavior and Human Decision Processes, 38*, 28-47.
- Peteraf, M.A., & Bergen, M.E. (2003). Scanning competitive landscapes: A market-based and resource-based framework. *Strategic Management Journal, 24*, 1027-1041.
- Porac, J. F., Wade, J. B., & Pollock, T. G. (1999). Industry categories and the politics of the comparable firm in CEO compensation. *Administrative Science Quarterly, 44*, 112-144.

- Sedikides, C., & Strube, M. J. (1995). The Multiply Motivated Self. *Personality and Social Psychology Bulletin*, **21**, 1330-1335.
- Short, J. C., & Palmer, T. B. (2003). Organizational performance referents: An empirical examination of their content and influences. *Organizational Behavior and Human Decision Processes*, **90**, 209-224.
- Stapel, D.A., & Schwinghammer, S.A. (2004). Defensive social comparisons and the constraints of reality. *Social Cognition*, **22**, 147-167.
- Still, M. C., & Strang, D. (2009). Who does an elite organization emulate? *Administrative Science Quarterly*, **54**, 58-89.
- Suls, J. H., & Wheeler, L. (2000). A selective history of classic and neo-social comparison theory. In J.H. Suls & L. Wheeler (Eds.), *Handbook of Social Comparison: Theory and Research*, 3-22. New York, Plenum Publishers.
- Swann, W. B., & Read, S. J. (1981). Self-verification processes - how we sustain our self-conceptions. *Journal of Experimental Social Psychology*, **17**, 351-372.
- Taylor, S. E., & Brown, J. D. (1988). Illusion and well-being: A social psychological perspective on mental health. *Psychological Bulletin*, **103**, 193-210.
- Taylor, S. E., & Lobel, M. (1989). Social comparison activity under threat: Downward evaluation and upward contacts. *Psychological Review*, **96**, 569-575.
- Washburn, M., & Bromiley, P. (2012). Comparing aspiration models: The role of selective attention. *Journal of Management Studies*, **49**, 896-917.
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect - The PANAS scales. *Journal of Personality and Social Psychology*, **54**, 1063-1070.
- Westphal, J.D., & Bednar M.K. (2005). Pluralistic ignorance in corporate boards and firms; strategic persistence in response to low performance. *Administrative Science Quarterly*, **50**, 262-298.

- Wheeler, L. (1966). Motivation as a Determinant of Upward Comparison. *Journal of Experimental Social Psychology*, **2**, 27-31.
- Wheeler, L., & Miyake, K. (1992). Social-Comparison in Everyday Life. *Journal of Personality and Social Psychology*, **62**, 760-773.
- White, K., & Lehman, D. R. (2005). Culture and social comparison seeking: The role of self-motives. *Personality and Social Psychology Bulletin*, **31**, 232-242.
- Wills, T. A. (1981). Downward comparison principles in social psychology. *Psychological Bulletin*, **90**, 245-271.
- Wilson, A. E., & Ross, M. (2000). The Frequency of Temporal-Self and Social Comparisons in People's Personal Appraisals. *Journal of Personality and Social Psychology*, **78**, 928-942.
- Wood, J. V., Taylor, S. E., & Lichtman, R. R. (1985). Social-Comparison in Adjustment to Breast-Cancer. *Journal of Personality and Social Psychology*, **49**, 1169-1183.

Table 1

Frequencies of rank given to the two groups of comparison organizations that were most similar to Allied Waste and most unfavorable to Allied Waste (i.e. had higher performance than Allied Waste) by low vs. high performance (3= highest rank given to most similar and most unfavorable and 7 = lowest rank given to most similar and most unfavorable) – *Study 1*

Rank	Overall		Low Performance		High Performance	
	Freq.	Pctg.	Freq.	Pctg.	Freq.	Pctg.
3	49	55.1	25	51.0	24	60.0
4	19	21.4	8	16.3	11	27.5
5	10	11.2	7	14.3	3	7.5
6	5	5.6	4	8.2	1	2.5
7	6	6.7	5	10.2	1	2.5

Figure 1

Percentages of participants ranking the two groups of comparison organizations that were most similar to Allied Waste and most unfavorable to Allied Waste (i.e. had higher performance than Allied Waste) by low vs. high performance (3= highest rank given to most similar and most unfavorable and 7 = lowest rank given to most similar and most unfavorable) – *Study 1*

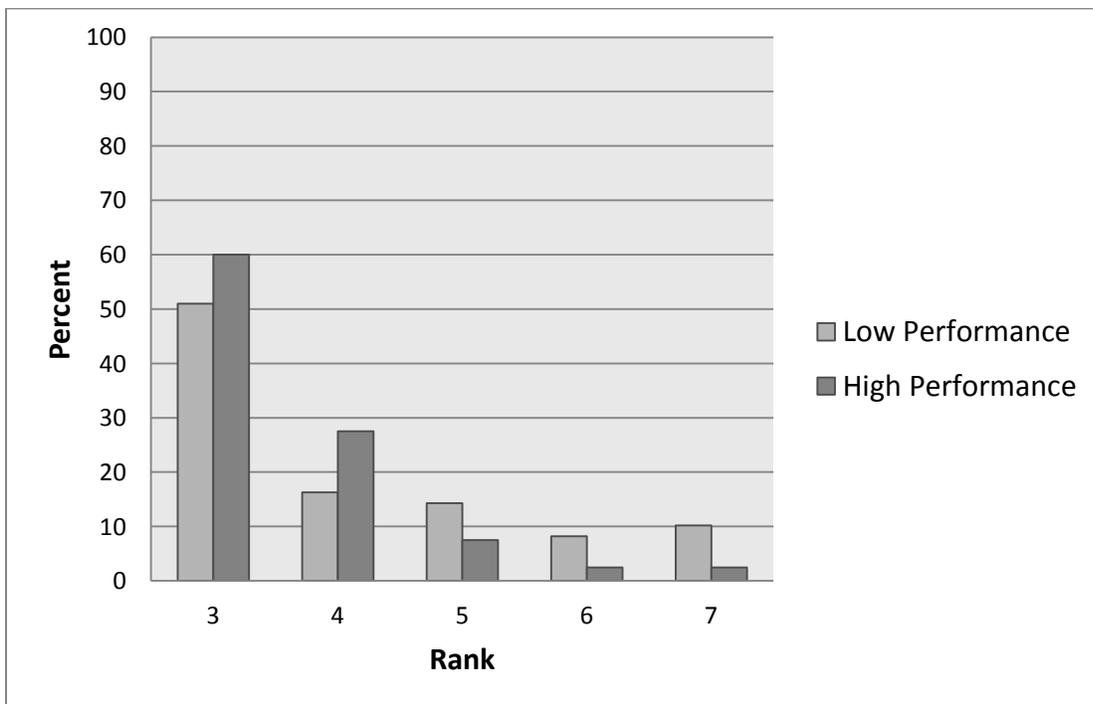


Table 2

Frequencies of rank given to the two groups of comparison organizations that were most similar to Allied Waste and most unfavorable to Allied Waste (i.e. had higher performance than Allied Waste) by low vs. high performance and by self-assessment vs. self-enhancement prime (3= highest rank given to most similar and most unfavorable and 7 = lowest rank given to most similar and most unfavorable) – *Study 2*

Conditions			Rank				
			3	4	5	6	7
Low Performance N = 36	Self-assessment N = 20	Freq.	10	5	2	1	2
		Pctg.	50.0	25.0	10.0	5.0	10.0
	Self-enhancement N = 16	Freq.	6	3	4	1	2
		Pctg.	37.5	18.8	25	6.3	12.5
	Overall	Freq.	16	8	6	2	4
		Pctg.	44.4	22.2	16.7	5.6	11.1
High Performance N = 40	Self-assessment N = 17	Freq.	14	2	1	0	0
		Pctg.	82.4	11.8	5.9	0	0
	Self-enhancement N = 23	Freq.	16	4	0	2	1
		Pctg.	69.6	17.4	0	8.7	4.4
	Overall	Freq.	30	6	1	2	1
		Pctg.	75.0	15.0	2.5	5.0	2.5
Overall N = 76		Freq.	46	14	7	4	5
		Pctg.	60.5	18.4	9.2	5.3	6.6

Figure 2

Frequencies of rank given to the two groups of comparison organizations that were most similar to Allied Waste and most unfavorable to Allied Waste (i.e. had higher performance than Allied Waste) by low vs. high performance and by self-assessment vs. self-enhancement prime (3= highest rank given to most similar and most unfavorable and 7 = lowest rank given to most similar and most unfavorable) – *Study 2*

