

# The Perils of Success in the Workplace: Comparison Target Responses to Coworkers' Upward Comparison Threat<sup>1</sup>

STEPHANIE C. HENAGAN<sup>2</sup>

*Department of Management  
Northern Illinois University*

ARTHUR G. BEDEIAN

*Rucks Department of Management  
Louisiana State University*

This field study investigated the coping behaviors utilized by award-winning real-estate agents who, as a consequence of their outperformance, perceived that they were the targets of threatening upward comparisons by those they had outperformed. We hypothesized that outperformers' comparison target discomfort (i.e., discomfort associated with being a target of upward comparisons) would moderate the relationships between comparison threat experienced by those outperformed and outperformers' modest self-presentation, avoidance behaviors, and socially motivated underachievement. Our results provide partial (and counterintuitive) support for our hypotheses, confirming that comparison target discomfort plays a complex role in determining outperformers' behavioral responses to being the target (real or imagined) of upward comparisons.

Organizations use incentives, such as salary increases, bonuses, prizes, and award banquets to encourage superior job performance. In doing so, they not only recognize certain behaviors and levels of accomplishment as worthy of emulation, but they also single out high achievers as visible targets for upward comparisons made by their outperformed peers. In that such comparisons are characteristic of interpersonal relationships in which individuals are concerned with how they will be evaluated by others, high achievers can be expected to be cognizant that their successes may prompt those outperformed to experience discomfort as they judge their relative standing.

Consensus has recently begun to build that self-conscious emotions (e.g., shame, pride, social anxiety, guilt, embarrassment) associated with comparative self-evaluations play a central role in motivating people's behavior (Leary, 2007). That such emotions may, in turn, affect not only the behavior

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<sup>2</sup>Correspondence concerning this article should be addressed to Stephanie C. Henagan, Department of Management, Northern Illinois University, DeKalb, IL 60115. E-mail: shenagan@niu.edu

of those outperformed, but also those who see themselves as targets of upward comparisons is now recognized by social psychologists (Exline & Lobel, 1999b).

Noting that further exploration is needed to map out the course and direction of high achievers' responses to their own successes, a growing number of social psychologists have focused on the coping behaviors of those who may experience discomfort as a result of their superior performance (Exline & Geyer, 2003; Exline & Lobel, 1997, 1999b, 2001; Exline, Single, Lobel, & Geyer, 2004; Geyer & Exline, 2004). To date, however, such explorations have been solely laboratory based, involving college students or adolescents within circumscribed contexts (academic grades: Exline et al., 2004; giftedness: Cross, Coleman, & Terhaar-Yonkers, 1991; competition within close, personal relationships: Exline & Lobel, 2001). Laboratory studies are advantageous for honing hypotheses in a controlled environment. At some point, however, it is important to move outside a laboratory framework to determine if such results may be extrapolated to individuals within an applied setting.

The specific purpose of the present study is to advance our understanding of the social psychological processes associated with high achievement in an applied setting by investigating (a) possible consequences of organizations publicly recognizing superior performance; and (b) the coping behaviors utilized by high achievers who, as a result of such recognition, perceive themselves to be targets of upward comparisons. To do so, we explored the experiences of real-estate agents whose sales records clearly and visibly marked them as having outperformed their peers and who, thus, may be cognizant that their colleagues would engage in relative performance comparisons. Given the important role that reward recognition plays in motivating job performance, it is of both practical and theoretical interest to address the potential negative consequences of organizations publicly recognizing superior performance and to appreciate the courses of action (i.e., behaviors) that those who outperform others (i.e., outperformers) enact to avoid feelings of discomfort associated with being a possible target of upward comparisons.

Our conceptual scheme, which is presented in Figure 1, thus proposes that the negative affect others experience as a result of engaging in upward comparisons and feelings of discomfort that outperformers experience as a result of believing they are targets of upward comparisons will interact to influence outperformer behavior. The outperformer behaviors we have selected for investigation are fundamental dimensions that previous research has shown underlie discretionary human interactions in situations of emotional discomfort associated with being the target of an upward comparison (for a review, see Exline & Lobel, 1999b). In the following discussion, we use the shorthand *comparison target discomfort* to refer to such feelings. Similarly, we employ

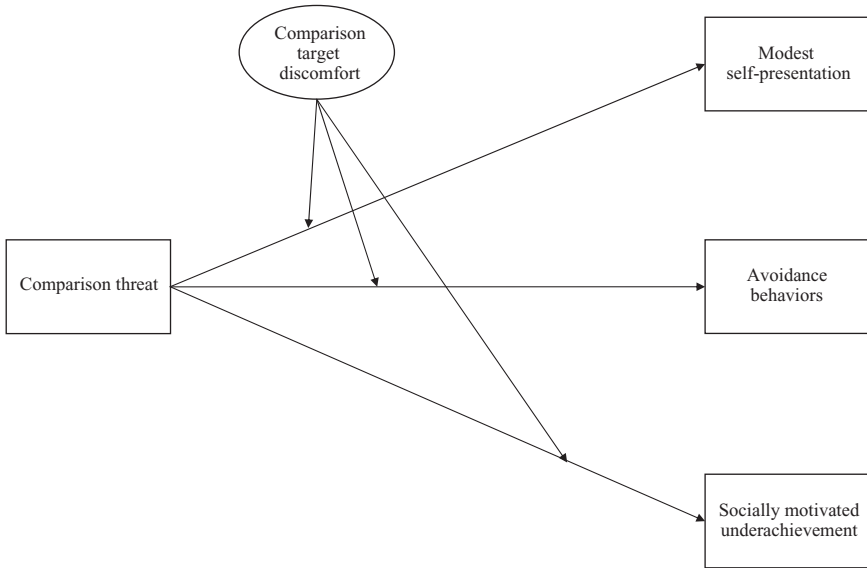


Figure 1. Conceptual model of interaction effect of comparison threat and comparison target discomfort on modest self-presentation, avoidance, and socially motivated underachievement.

the phrase *comparison threat* to refer to the negative affect experienced by those engaged in upward comparisons.

### Social Comparison Theory and Comparison Threat

In developing his theory of social comparison processes, Festinger (1954a, 1954b) hypothesized that individuals possess an innate drive to evaluate their opinions and performance by reference to other people. This may take place by comparison to physical reality (e.g., one’s performance in a foot race) or, in the absence of objective criteria, by comparison to others. A major tenet of social comparison theory is that people generally prefer to compare themselves to similar, rather than dissimilar others (for a review, see Kilduff, 1990). Whereas Festinger’s (1954a, 1954b) theory has been revised over the years, research has shown repeatedly that individuals are, indeed, motivated to seek such evaluations for the purposes of self-appraisal, self-improvement, and self-enhancement (Gibbons & Buunk, 1999).

More recently, “classical” social comparison theory has been extended to address the forces underlying social comparison processes (e.g., Krueger, 2000); the conditions under which social comparisons occur (e.g., Gibbons &

Buunk, 1999); and the influence of social comparisons on outcomes such as subjective well-being (e.g., Diener & Fujita, 1997), emotional reactions (e.g., Buunk, Ybema, van der Zee, Schaufeli, & Gibbons, 2001), and work productivity (e.g., Vrugt & Koenis, 2002). Perhaps most notably for the present purposes, the critical similarity dimension of social comparison theory has been reconceptualized to include comparisons with others judged to be either more fortunate (i.e., upward comparisons; Collins, 1996) or less fortunate (i.e., downward comparisons; e.g., Buunk & Gibbons, 2007) in terms of some specific characteristic.

Following this broader conception of social comparison processes, social psychologists, in particular, have begun to investigate the consequences of comparisons against qualitatively different standards (Kruglanski & Mayseless, 1990). Of relevance to the present study is empirical evidence suggesting that both types of social comparisons are capable of producing a wide-ranging set of emotional reactions (for a review, see Smith, 2000). Specifically, research has shown that downward comparisons frequently lead to positive feelings in the presence of emotions such as excitement, enthusiasm, and joy (e.g., Aspinwall & Taylor, 1993; Wills, 1981), whereas upward comparisons often lead to negative feelings in the presence of emotions such as anger, sadness, and contempt (e.g., Tesser, 1988).

Research has also shown that upward comparisons involving externally awarded outcomes (e.g., performance rewards) are especially prone to result in self-conscious emotions on the part of those outperformed (resentment, bitterness, edginess: Kruglanski & Mayseless, 1990; envy: Schaubroeck & Lam, 2004). Such emotions may be either self-focused or other-focused (Buunk, Kuyper, & van der Zee, 2005; Smith, 2000). That is, the emotions of those outperformed may center on either their own feelings of personal inferiority or feelings of resentment toward a comparison target who has outperformed them.

### Comparison Target Discomfort

In the case of upward comparisons, Exline and Lobel (1999b) proposed that beyond the aversive self-conscious emotions typically experienced by individuals who evaluate their performance against others judged to be more fortunate, there may also be less commonly recognized consequences for those who outperform others. For instance, as a result of experiencing self-conscious emotions, those who have been outperformed may evidence various signs of threat and, the more they do so, the more likely outperformers will be aware of these emotions and react accordingly. Those who experience self-conscious emotions when they engage in upward comparisons

have been shown to respond by exaggerating the ability of comparison targets (Alicke, LoSchiavo, Zerbst, & Zhang, 1997), strategically differentiating themselves (Mussweiler, Gabriel, & Bodenhausen, 2000), or psychologically distancing themselves (Tesser, 1980). In this way, outperformers may sense that their achievements pose a threat to those outperformed and may engage in subsequent behaviors intended to attenuate such threat.

Even if comparers do not openly exhibit signs of threat from engaging in upward comparisons, targets of such comparisons may still behave in ways that reflect a concern as to how others may be judging their superior achievements. According to Leary (2007), theory surrounding self-conscious emotions suggests that humans assess themselves based on “the perspectives of real or imagined other people” (p. 329) and on “how they think they are being evaluated or might be evaluated by others” (p. 330). These assessments lead to emotional reactions involving guilt, shame, embarrassment, social anxiety, and pride, which then guide the self-regulation of interpersonal behavior. Thus, even though outperformers may take pride in their superior achievements, such accomplishments may simultaneously lead to feelings of discomfort emanating from a concern as to how others may be judging and responding to one’s achievements. Based on accumulating research (Keltner & Buswell, 1997; Leary, Britt, Cutlip, & Templeton, 1992), we further reason that outperformers who are affected by comparison target discomfort will be more likely to engage in behaviors (i.e., modest self-presentation, avoidance, and socially motivated underachievement) intended to minimize the negative inferences and feelings of those outperformed. In effect, such expressive behaviors on the part of outperformers serve as social signals intended to diminish the discomfort associated with self-conscious emotions perceived in others whom they have outperformed.

### *Moderating Role of Comparison Target Discomfort*

Self-regulation theory holds that human behavior is regulated by the exercise of self-influence (Bandura, 1991). Accordingly, it suggests that the anticipation of social consequences can lead individuals to regulate their subsequent actions. Self-regulation is believed to occur through three principal steps:

1. Self-monitoring one’s behavior, its determinants, and its effects;
2. Self-judgment of one’s behavior in relation to personal standards and environmental circumstances; and
3. Self-reactions.

With respect to self-monitoring (Step 1), self-regulation theory encompasses the notion that individuals recognize their achievements in terms of “the conditions under which they occur and the immediate and distal effects they produce” (Bandura, 1991, p. 250). In regard to engaging in self-judgment (Step 2), it follows that individuals not only assess their behavior in relation to standards derived from their own performance, but also in relation to the achievements of others within their environment. Finally, self-regulation theory contends that individuals choose their self-reactions accordingly (Step 3). In line with social comparison theory, self-regulation theory suggests that if individuals have performed well in comparison to their standards, they regulate their behavior by engaging in positive emotions (e.g., excitement, enthusiasm, joy). In contrast, if they fail to fulfill their performance expectations, they exercise aversive emotions (e.g., anger, sadness, contempt). Individuals would normally be expected to prefer emotional reactions resulting from positive consequences.

With respect to anticipating social consequences that can lead individuals to regulate their subsequent actions, as outlined by Exline and Lobel (1999b), the extent to which outperformers will experience emotional discomfort requires that they (a) perceive themselves to be the target of an upward comparison; (b) believe that the resulting comparison will pose a threat to a referent; and (c) feel some concern about the well-being of the referent, about their interpersonal relationship with the referent, or that the referent may try to retaliate as a result of feeling threatened. Comparison target discomfort is, therefore, a result of anticipating that relevant interpersonal relationships, others, or the self could be adversely affected by one’s superior performance (Exline & Lobel, 1997, 2001).

In line with self-regulation theory, the outperformer behaviors (i.e., modest self-presentation, avoidance, and socially motivated underachievement) selected for investigation in the present study may be viewed as regulated action preferences, as they are means of manipulating the real or anticipated feelings of those outperformed. Because those engaging in upward comparisons tend to show outward manifestations of the comparison threat they are experiencing (Alicke et al., 1997; Mussweiler et al., 2000; Tesser, 1980), the existence of comparison threat in peers should increase the likelihood that outperformers will engage in the aforementioned regulated action preferences with the intention of reducing such threat. This relationship, however, should be more salient for outperformers who are affected by comparison target discomfort than for those who are not. Therefore, those outperformers who do experience comparison target discomfort will be more likely to engage in such behaviors. Outperformers who have not experienced feelings of discomfort either may not have perceived themselves as comparison targets, or they may be unconcerned and, thus, would have no reason to

engage in behaviors to minimize comparison threat. This would explain why some outperformers present themselves modestly, engage in avoidance behaviors, and purposefully underachieve, whereas others do not. Comparison target discomfort is thus expected to interact with the degree to which those outperformed experience comparison threat (see Figure 1).

### *Modest Self-Presentation*

Modest self-presentation has been studied as an appeasement behavior enacted by outperformers to maintain favorable personal relationships with those they have outperformed. For instance, modest self-presentation has been shown to be a strategy utilized by gifted students to overcome the social stigma of being superior to their peers (Cross et al., 1991). Similarly, modest self-presentation has been found to be common among women when they are concerned about how others will evaluate them (Berg, Stephan, & Dodson, 1981). Of special relevance to the present investigation, research has indicated that a modest self-presentational style is often motivated by a concern for protecting others' self-esteem in the face of negative social comparison information (Daubman, Heatherington, & Ahn, 1992).

Outperformers experiencing comparison target discomfort, therefore, make cognitive choices about how to present themselves in terms of likeability, dominance, intelligence, potency, or morality (Vonk, 2001). Modesty and downplaying the importance of one's achievements have been shown repeatedly to be highly effective in influencing others' reactions to high levels of performance. Consequently, they are commonly used by outperformers to influence their self-presentations (Schlenker & Leary, 1982).

As a form of appeasement behavior, modest self-presentation is generally chosen out of a concern about social disapproval or a desire to protect the feelings or self-images of those outperformed. Vonk (2001) has shown that self-presentational tactics are used most often in the presence of colleagues, as opposed to other types of acquaintances, such as subordinates and family members, and such tactics are used most frequently with an ingratiation motive (i.e., to smooth social interactions or to make others feel comfortable). Because modest self-presentation is one means of alleviating the concerns individuals may have about others' reactions to their achievements, it is reasonable to expect that it will be used by outperformers who recognize coworkers' comparison threat. We propose the following:

*Hypothesis 1.* Outperformers' comparison target discomfort will moderate the relationship between comparison threat experienced by those outperformed and outperformers' use of

modest self-presentation, such that the relationship will be stronger for outperformers experiencing higher levels of comparison target discomfort.

### *Avoidance*

It is likewise reasonable to expect that situations involving face-to-face contact will increase outperformers' awareness of any discomfort they may have caused to those they have outperformed. Thus, it is likely that, in their daily workplace interactions, outperformers may act to avoid contacts with colleagues that prompt comparison target discomfort. As Exline and Lobel (1999b) explained, "People feel burdened, frightened, awkward, or sad when interacting with those who are suffering or distressed, thus leading to avoidance of such contact" (p. 320).

Avoiding all direct contact with coworkers may not be an option, but outperformers may shy away from highlighting their superior achievements by refraining from discussing their performance, by changing the subject, or by leaving when their performance is discussed (Exline & Lobel, 2001). Drawing attention to one's achievements may understandably risk the good will of those outperformed. It would thus be expected that to avoid feelings of discomfort associated with being a target of upward comparisons, outperformers would refrain from engaging in such behavior. Avoidance behaviors shield both outperformers and those they have outperformed from possible awkward or hostile exchanges and, thus, may help to ease any concerns that outperformers may have regarding negative peer reactions to their achievements. We propose the following:

*Hypothesis 2.* Outperformers' comparison target discomfort will moderate the relationship between comparison threat experienced by those outperformed and outperformers' use of avoidance behaviors, such that the relationship will be stronger for outperformers experiencing higher levels of comparison target discomfort.

### *Socially Motivated Underachievement*

Fear of success was described by Tresemer (1977) as a motive to avoid high performance because of the expectation that negative consequences will result from successful achievements. Hyland (1989), however, theorized that fear of success is not itself a motive, but rather an indication that individuals



are experiencing conflicting goals: maintaining success versus maintaining interpersonal relationships. Thus, in an employment context, if outperformers perceive that their successes will conflict with maintaining coworker good will, they may be motivated to avoid success (for evidence of this phenomenon, see Schnitzer, 1977).

In certain circumstances, maintaining positive interpersonal relationships may be more important to some individuals than is performance-derived status (Santor & Zuroff, 1997). For instance, in a study of individuals performing an anagram task, participants solved fewer problems (i.e., “let up”) when a likeable experimental confederate performed unsatisfactorily (White, Sanbonmatsu, Croyle, & Smittipatana, 2002). In discussing this outcome, White et al. concluded that “people sometimes purposefully underachieve out of concern for others or a desire to maintain relationships” (p. 162). This phenomenon has been labeled *socially motivated underachievement* (SMU) and involves deliberately putting forth less than maximum effort to address social concerns, such as alleviating the distress of struggling others, encouraging others, or maintaining relationships. To the extent that outperformers recognize that those they have outperformed are experiencing comparison threat, it is reasonable to expect that they will more likely engage in SMU (and other such behaviors) to minimize discomfort. We propose the following:

*Hypothesis 3.* Outperformers’ comparison target discomfort will moderate the relationship between comparison threat experienced by those outperformed and outperformers’ socially motivated underachievement, such that the relationship will be stronger for outperformers experiencing higher levels of comparison target discomfort.

## Method

### *Sample*

Real-estate agents at four firms, located in either the Southeast or the Northwest, who had been recognized by their respective supervisors for superior sales performance at their firm’s previous year’s annual award ceremony were the study’s focal sample. There are several reasons why real-estate firms are an especially appropriate setting for this purpose. First, real-estate agents are typically recognized for their superior sales performance at an annual award ceremony. Thus, outperformers are easily identified, as they are publicly recognized at these companywide events. In settings

in which the competitive achievements of outperformers are publicly rewarded, outperformers may be especially cognizant that others are likely to engage in relative comparisons to evaluate their own statuses (Ruble & Frey, 1991). Second, such recognition is an objective and unambiguous indicator of outperformance and, thus, is difficult to dispute or otherwise manipulate (Alicke, 2000). Third, as all real-estate agents engage in sales, all are eligible for awards that recognize outstanding sales performance. Fourth, because commissions associated with sales are agents' principal source of remuneration, sales are a self-relevant comparison domain for all agents. As such, the effects of social comparisons related to sales (and, in turn, remuneration) are likely to be salient to the goals of those who have been outperformed, a criterion generally believed to be necessary for strong emotions to surface (Smith, 2000). Theories of referent selection emphasize that two dimensions—availability of information and referent relevance—underlie referent choice (Kulik & Ambrose, 1992; also see Locke, 2007). Both dimensions are clearly present in a real-estate setting. Finally, real-estate firms offer various types of recognition, ranging from highest sales among new agents to highest overall sales in the entire organization. This variety allows for a large sample of award recipients who are all outperforming others and, excepting the one top salesperson in the organization, are at the same time being outperformed.

At the time of the study, the four firms employed 121 (15.7% award recipients), 68 (22.1% award recipients), 224 (66.5% award recipients), and 92 (37% award recipients) real-estate agents, respectively, for a total of 505 agents, 217 of whom were award recipients. An ANOVA revealed no significant differences in age, organization tenure, gender, or ethnicity among participants across firms. Contrasts did show that award recipients associated with the largest firm had significantly higher organization tenure. Tenure, however, was not reliably correlated with any other study variable, except (as would be anticipated) age. The mean participant age for the smallest firm was significantly lower, but it was also the newest firm. Again, age was not significantly associated with any other study variable, with the exception of organization tenure.

### *Procedure*

Data for hypothesis testing were gathered using two surveys delivered either by mail or by hand. Both surveys were distributed approximately 1 to 2 months after the annual award ceremonies were held at each firm and were returned directly to the first author. Award-recipient surveys were distributed to those who were identified as having been recognized for outstanding sales

performance at their firm's annual award ceremony. This survey assessed the hypothesized moderating variable (i.e., comparison target discomfort), the dependent variable socially motivated underachievement, and participants' genders and ages.

The final section of the survey asked award recipients to select from a list of their coworkers 5 to 10 with whom they worked closely and who they thought would be willing to complete a short survey and return it directly to the researchers. This first survey was sent to the 217 award recipients. Exactly 121 surveys were received, for a response rate of 55.8% (individual firm response rates ranged from 47% to 80%). One award recipient's data were removed as a result of an incomplete survey. All participants were assured confidentiality. Information pertaining to participant job titles, organization tenure, award level, and addresses was collected from archival records, where available.

Of the 121 award recipients (94 females, 24 males, 3 did not report gender) who responded, a majority were Caucasian (84.3%), with 4.2% being Native American, 3.4% African American, 0.8% Asian, and 0.8% Pacific Islander. Some 4.2% indicated multiple ethnicities, and 2.5% did not respond to this item. The majority (80%) of the award recipients were female. Award recipient ages ranged from 21 to 79 years ( $M = 54.0$  years,  $SD = 11.5$ ). Organization tenure ranged from 5 months to 32 years ( $M = 7.5$ ,  $SD = 7.4$ ). Of the award recipients, almost one third (27.3%) had previously received more than 10 awards, 28.2% had received between 5 and 10 awards, 33.6% had received 1 to 4 awards, and 10.9% were receiving their first award.

The dependent variables modest self-presentation and avoidance were assessed using a second survey sent to three randomly selected coworkers from among those listed by each award-winning agent. Assessing these variables through coworker surveys helped to avoid common source bias and to limit social desirability responding that may distort personal-report data. These coworkers were also asked to supply the same demographic information as described previously, as well as to indicate how frequently they interacted with the award recipient about whom they were responding and how long they had been acquainted. Frequency of interaction (ranging from once per year to 5 or more times per week) was at least once per week for 76.3% of the coworker/award-recipient dyads, and average length of working relationship was 109 months ( $SD = 128.6$ , range = 1–900 months).

Finally, information related to the study's independent variable (i.e., comparison threat) was collected in the same survey. The comparison threat data collected from the peers of each award recipient were averaged to indicate the general level of comparison threat being experienced by an award recipient's peers. Some of the peers were also award recipients, but because of the multitude of award levels recognized, all but the highest selling agent at

each firm had the potential to experience comparison threat. Data for these three study variables were provided by one or more coworkers (1 coworker = 21%, 2 coworkers = 49%, 3 coworkers = 30%) for 118 of the responding award recipients (final response rate = 54%).

### *Measures*

Unless otherwise noted, all measures were rated on a 5-point response scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The responses were averaged such that a higher score indicated a greater degree of agreement.

*Comparison threat.* The degree of discomfort experienced by the identified coworkers as a result of engaging in upward comparisons following their firm's most recent annual award ceremony was assessed using two sets of items. These were adapted from items developed by Exline and her colleagues (Exline & Lobel, 1999a, 2001; Exline et. al., 2004) to measure comparison target discomfort. In the first set of items, the coworkers were asked to indicate "the extent to which you agree or disagree that the following statements are true of your own feelings in light of the most recent awards ceremony. As a result of the recent awards ceremony . . ."

1. I feel embarrassed about my accomplishments.
2. I feel sad that I did not receive the award I wanted.
3. I feel disappointed in myself.
4. I feel frustrated that I have not achieved what other salespeople have achieved.
5. I feel irritated that I have not achieved what other salespeople have achieved.
6. I feel anxious because I have not achieved what other salespeople have achieved.
7. I feel envious of the achievements of those who have recently received awards.

In the second set of items, the coworkers were asked "In regard to those (in general) who received greater recognition than you did at the recent sales awards ceremony, to what extent do you agree or disagree that you feel . . ."

8. awkward being around them.
9. inferior to them.
10. hostile toward them.
11. intimidated by them.
12. that you would like them to fail in the future.
13. vengeful toward them.
14. that you will reject them.

A principal axis factor analysis of the 14 items resulted in a two-factor solution (eigenvalues  $> 1$ ) accounting for 62.2% of the item variance. Items with significant loadings (Items 1–7; factor loadings ranging from .512 to .923) on Factor 1 represented internally focused feelings about one's own achievements (i.e., embarrassed, sad, disappointed) and thus were labeled *internal threat*. Items with significant loadings (Items 9–14; factor loadings ranging from  $-.521$  to  $-.986$ ) on Factor 2 represented externally focused feelings, or feelings towards award recipients (i.e., inferior, intimidated, vengeful) and thus were labeled *external threat*. These factors coincided with Smith's (2000) distinction among social-comparison-based emotions that focus on the self as opposed to a referent other. Internal reliability estimates (Cronbach's  $\alpha$ s) for these two factors were .90 and .91, respectively. Responses to the items representing each factor were averaged to provide separate measures of internal and external threat. The study's hypotheses were each tested with respect to internal and external comparison threat.

*Comparison target discomfort.* Feelings of discomfort associated with being a target of upward comparisons were assessed by asking award recipients to indicate the extent to which they were concerned that their superior performance (indicated by their recent sales awards) had caused their coworkers to experience negative affect, as evidenced by such emotions as embarrassment, sadness, and anger. Specifically, award recipients were asked "To what extent would you say you are concerned about each of the following?" which was followed by seven emotionally charged statements ( $\alpha = .91$ ) that were adapted from Exline and her colleagues (Exline & Lobel, 1999a, 2001; Exline et al., 2004). Sample statements include "That your coworkers feel embarrassed about their own accomplishments as a result of the recent award(s) you received," "That your coworkers feel irritated that they have not achieved what you have," and "That your coworkers feel envious of your achievements." The items were rated on a 5-point scale ranging from 1 (*not at all concerned*) to 5 (*very concerned*). A principal axis factor analysis of the seven items found support for a single-factor solution accounting for 59.5% of the item variance. The factor matrix showed acceptable loadings ( $> .50$ ), ranging from .636 to .893.

*Modest self-presentation and avoidance.* The identified coworkers were also requested to focus on the recently received sales award(s) of the specific award recipient by whom they had been identified and subsequently to rate the extent to which they believed that person had engaged in modest self-presentation (i.e., derogation of one's achievements) and avoidance behaviors (i.e., actions designed to avert highlighting having received an award, either through refraining from discussing the award or by staying away from others). Modest self-presentation was measured with four items ( $\alpha = .66$ ). Sample items include "Mentions a recent year when they did not receive any

awards,” and “Says they were just lucky to have received the award(s).” Avoidance was measured with five items ( $\alpha = .91$ ). Sample items include “Changes the subject when someone brings up the awards(s),” and “Leaves the room when the award(s) is (are) brought up.” Items for both measures were derived from Exline and Lobel (2001). Principal axis factor analyses of the modest self-presentation and avoidance items resulted in two general factors accounting for 41.6% and 67.4% of the item variance, with item loadings ranging from .689 to .786 and .from 705 to .843, respectively.

For each award recipient for whom multiple coworker surveys were received, modest self-presentation and avoidance scores were averaged across identified coworkers. Interrater agreement was assessed by calculating the  $r_{wg}$  statistic and assuming a uniform null distribution (James, Demaree, & Wolf, 1984) for each variable. Scores for  $r_{wg}$  range from 0 (*no agreement*) to 1 (*perfect agreement*). Values for  $r_{wg}$  at or above .70 traditionally have been considered to indicate acceptable agreement among raters (for a discussion of this statistic, see Brown & Hauenstein, 2005) and, thus, justify aggregation of raters’ scores. Median interrater agreement was .92 for both modest self-presentation and for avoidance. Given the potential limitations of the  $r_{wg}$  statistic (i.e., scale dependency, sample size dependency, and bias from erroneously assuming a uniform null distribution), an alternative measure of agreement ( $\alpha_{wg}$ ), which eliminates these potential problems, was also calculated (Brown & Hauenstein, 2005). Results of these calculations were similar to those previously mentioned, with medians of .84 and .89 for modest self-presentation and avoidance, respectively.

*Socially motivated underachievement.* Purposeful underachieving out of a desire to maintain relationships with others was assessed using the five-item ( $\alpha = .77$ ) mediocrity as a defense against negative consequences of success dimension of Ho and Zemaitis’ (1981) Concern Over Negative Consequences of Success scale. According to Hong and Caust (1985), this measure was meant to gauge “the presentation of mediocre or substandard work to ensure that others not be threatened” (p. 336) and includes the following sample items: “Do less than my very best so that no one would be threatened”; “Deliberately do average or mediocre work so as to allow someone else to do better than I”; and “When I see I am doing very well, let up a little so that I will not considerably outperform my colleagues.” Award winners were asked to indicate the likelihood that they would engage in such behaviors on a 5-point scale ranging from 1 (*very unlikely*) to 5 (*very likely*). Scores were averaged such that a higher score indicated a greater propensity for socially motivated underachievement.

*Control variables.* Two demographic variables that have the potential to affect either comparison target discomfort or the study’s dependent variables were identified as potential covariates. Gender has been shown to account for

differences in the dependent variable modest self-presentation (Daubman et al., 1992), with females scoring higher. It was thought that organization tenure might affect participants' exposure to and comfort with their firm's prevailing award systems and, thus, their associated responses. Finally, to control for the tendency of individuals to present themselves in a favorable light relative to social norms and standards, social desirability was also entered as a covariate. Social desirability was assessed using Ballard's (1992) 13-item short form ( $\alpha = .71$ ) of the Marlowe–Crowne measure (Crowne & Marlowe, 1960), which has been a preferred measure of the vast majority of researchers conducting organizational behavior studies (Moorman & Podsakoff, 1992). Sample items include "I sometimes feel resentful when I don't get my way," "I'm always willing to admit it when I make a mistake," and "I am always courteous, even to people who are disagreeable."

### *Analysis*

Descriptive statistics, internal consistency reliability estimates, and inter-correlations for all study variables are shown in Table 1. All significant correlations were in the hypothesized directions. Correlations between potential covariates (i.e., gender, tenure, social desirability) and the study variables ranged from  $\pm .00$  to  $\pm .19$ , indicating that the data were neither confounded by demographic differences nor substantially contaminated by socially desirable responding. Despite some low to moderately significant correlations among study variables, tolerance value scores were all above the suggested .10 minimum, indicating that multicollinearity was not a concern (Hair, Black, Babin, Anderson, & Tatham, 2006).

Hierarchical multiple regression in SPSS 14.0 was used to test our hypotheses. Separate analyses were conducted for each of the three dependent variables (i.e., modest self-presentation, avoidance, socially motivated underachievement). The control variables of gender, tenure, and social desirability were entered at Step 1 in all regression analyses. They were subsequently removed, however, because of an absence of effects, as well as to maximize statistical power and to eliminate the possibility of biased parameter estimates as a result of the inclusion of unnecessary control variables (Becker, 2005).

### Results

This study hypothesized that comparison target discomfort would moderate the relationships between comparison threat (experienced by those

Table 1  
*Means and Intercorrelations of Study Variables*

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8
1. Internal comparison threat	2.11	0.55	(.90)							
2. External comparison threat	1.33	0.30	.28	(.91)						
3. Comparison target discomfort	1.87	0.80	.06	.12	(.91)					
4. Modest self-presentation	1.95	0.68	.12	.20	.06	(.66)				
5. Avoidance	2.82	0.95	.18	-.09	-.02	.48	(.91)			
6. Socially motivated underachievement	1.26	0.47	.12	.02	.10	.18	.04	(.77)		
7. Social desirability	3.52	0.48	.05	.00	.13	-.10	.07	-.11	(.71)	
8. Gender	0.20	0.40	.00	-.06	-.18	.01	-.01	-.06	-.01	—
9. Tenure	92.61	88.77	.18	.15	.05	.10	.19	.01	.12	-.13

*Note.*  $n = 118$ .  $r \cong |0.18|$ ,  $p < .05$  (two-tailed). Coefficient alpha reliability estimates appear in parentheses.



outperformed) and outperformers' modest self-presentation, avoidance behaviors, and socially motivated underachievement such that these relationships would be stronger for outperformers experiencing higher levels of comparison target discomfort. Results of the hierarchical multiple regression analyses testing the study's hypotheses appear in Table 2. The nature and direction of all significant interactions were examined graphically (see Figures 2 and 3). Separate regression lines were plotted based on a mean  $\pm 1$  *SD* split for comparison target discomfort. That is, regression lines were plotted for the interactive relationships for individuals who scored high on comparison target discomfort and for those who scored low on comparison target discomfort.

Hypothesis 1 predicted that outperformers' comparison target discomfort would moderate the relationship between comparison threat (experienced by those outperformed) and outperformers' modest self-presentation, such that the relationship would be stronger for outperformers experiencing higher levels of comparison target discomfort. Whereas our results did indicate a significant, direct relationship between external threat and modest self-presentation ( $r = .20, p = .037$ ), the interaction effects of internal and external threat and comparison target discomfort on modest self-presentation were not significant.

Hypothesis 2 predicted that outperformers' comparison target discomfort would moderate the relationship between comparison threat (experienced by those outperformed) and outperformers' use of avoidance behaviors, such that the relationship would be stronger for outperformers experiencing higher levels of comparison target discomfort. The interaction effect between internal threat and comparison target discomfort was significant ( $\beta = 1.01, p = .047$ ), thus supporting comparison target discomfort as a moderator of the internal-threat/avoidance-behavior relationship. Because the interaction was significant, it was plotted and interpreted. As Figure 2 shows, the strongest, positive relationship between internal threat and avoidance behaviors occurred when comparison target discomfort was high. In contrast, neither a main effect for external threat on the use of avoidance behaviors nor an interaction effect between external threat and comparison target discomfort in predicting the use of avoidance behaviors was present.

Hypothesis 3 predicted that outperformers' comparison target discomfort would moderate the relationship between comparison threat (experienced by those outperformed) and outperformers' socially motivated underachievement, such that the relationship would be stronger for outperformers experiencing higher levels of comparison target discomfort. We had reasoned that, to the extent that outperformers were concerned that negative consequences would result from their award recognition, they would be motivated to exert less effort. Our results, however, suggest a more complex dynamic.

Table 2  
*Results of Hierarchical Regression Analyses*

Comparison threat	Modest self-presentation				Avoidance				SMU			
	$\beta$	<i>p</i>	<i>R</i> <sup>2</sup>	$\Delta R^2$	$\beta$	<i>p</i>	<i>R</i> <sup>2</sup>	$\Delta R^2$	$\beta$	<i>p</i>	<i>R</i> <sup>2</sup>	$\Delta R^2$
Step 1												
Internal threat (IT)	0.12	.22	.01	.01	0.18†	.06	.03	.03†	0.12	.21	.01	.01
Step 2												
IT	0.11	.25	.03	.01	0.18†	.06	.03	.00	0.11	.23	.02	.01
Comparison target discomfort (CTD)	0.11	.25			0.00	1.00			0.10	.31		
Step 3												
IT	0.20	.43	.03	.00	-0.28	.26	.07	.04*	0.01	.97	.03	.00
CTD	0.28	.53			-0.85†	.05			-0.10	.83		
IT × CTD	-0.20	.70			1.01*	.05			0.23	.66		
Step 1												
External threat (ET)	0.20*	.04	.04	.04*	-0.09	.37	.01	.01	0.02	.84	.00	.00
Step 2												
ET	0.19†	.05	.05	.01	-0.09	.37	.01	.00	0.01	.94	.01	.01
CTD	0.10	.32			0.02	.82			0.10	.29		
Step 3												
ET	0.51†	.08	.06	.01	-0.07	.83	.01	.00	0.57†	.05	.05	.04*
CTD	0.74	.18			0.07	.91			1.21*	.03		
ET × CTD	-0.76	.24			-0.05	.94			-1.31*	.04		

Note. *n* = 118. SMU = socially motivated underachievement. Step 1 represents the regression of comparison threat on the criterion. Step 2 represents the simultaneous regression of comparison threat on both the criterion and the moderator variable (CTD). Step 3 represents the simultaneous regression of comparison threat on the criterion, the moderator variable, and the interaction term.

†*p* < .10. \**p* < .05.

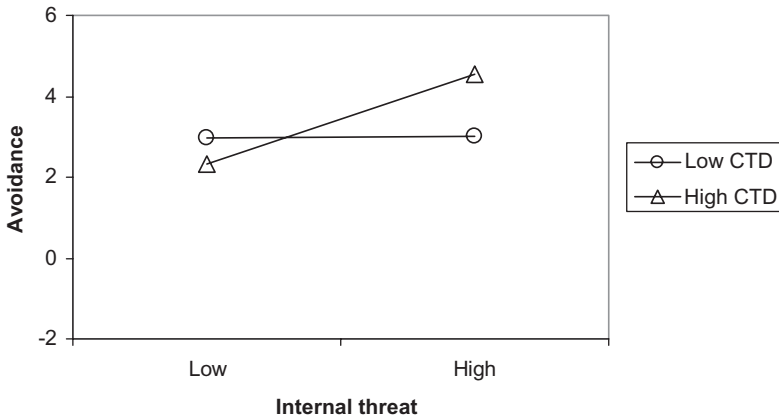


Figure 2. Interaction of internal threat and comparison target discomfort predicting avoidance behaviors. CTD = comparison target discomfort.

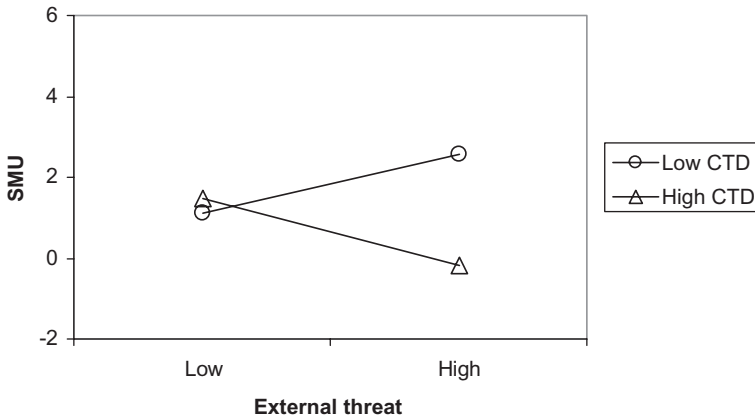


Figure 3. Interaction of external threat and comparison target discomfort predicting socially motivated underachievement. CTD = comparison target discomfort; SMU = socially motivated underachievement.

As shown in Figure 3, the interaction of external threat and socially motivated underachievement was significant ( $\beta = -1.31, p = .047$ ), but in the opposite direction from that predicted. A negative-sloped regression line was plotted for outperformers who experienced discomfort at being the target of upward comparisons, while a positive-sloped regression line was plotted for those who experienced less comparison target discomfort. This would

indicate that in the face of coworkers experiencing external comparison threat, those high achievers who were more sensitive to being the target of upward comparisons in the workplace were less likely to reduce subsequent efforts than were those who experienced less sensitivity. Neither a main effect for internal threat on SMU nor an interaction effect between internal threat and comparison target discomfort in predicting SMU was present.

### Discussion

Our results indicate that comparison target discomfort plays a complex role in determining outperformers' behavioral responses to perceiving that they are targets of upward comparisons. First, the findings related to Hypothesis 1 suggest that whereas the outperformers studied did utilize modest self-presentation when their coworkers were experiencing externally focused threat, doing so was not contingent on comparison target discomfort. This intimates that other forces—such as social expectations associated with concern for protecting others' self-esteem in the face of negative social comparison information—are at play when choosing this particular response to coworkers' comparison threat.

Interestingly, coworkers' internally focused threat was not related to outperformers' use of modest self-presentation, implying that outperformers found a behavioral response on their part was required in the face of others' feelings of resentment toward them, but not so when others were simply feeling ashamed about their own achievements. One possible explanation may be that coworkers' internally focused threat was much less obvious to outperformers than was externally focused threat. Whether our findings are specific to the real-estate sample utilized here is a question to be addressed in future research.

The findings related to Hypothesis 2 suggest that, as hypothesized, avoidance behaviors designed to avert highlighting having received an award—either through refraining from discussing the award, changing the subject, or leaving when their performance is discussed—were not universally used by outperformers when others were experiencing comparison threat. Instead, those outperformers who were experiencing higher levels of comparison target discomfort utilized this behavioral response, and only in the face of coworkers' internally focused threat. It may be possible that as the target of their coworkers' externally focused feelings of anger, resentment, or hostility, the outperformers in this study became annoyed and, thus, refrained from engaging in avoidance behaviors that would have minimized their coworkers' discomfort. This would be in direct contrast with their behavior in circumstances in which their coworkers were simply embarrassed, sad, or disappointed.

A possible explanation for the surprising findings related to Hypothesis 3 lies in Hyland's (1989) contention that socially motivated underachievement is an indication that individuals are experiencing conflicting goals (i.e., maintaining success vs. maintaining interpersonal relationships). Following this logic, our data suggest that in the presence of externally focused threats, the outperformers in our sample perceived the cost of avoiding high performance to be greater than the cost of losing coworker good will. How interpersonal relationships with coworkers influence the behavior of outperformers is unknown as yet. If outperformers are preoccupied by comparison threats (whether internally or externally focused), it would be reasonable to expect that, at a minimum, their cognitive efficiency and creativity would suffer. Thus, whereas the interaction effects associated with Hypotheses 2 and 3 indicate that the outperformers in our study were "sensitive" to the impact of their sales performance on others, they also imply that when external threat is present, outperformers did not opt to deflect attention away from their superior performance or to alter their performance for the sake of alleviating the negative affect experienced by their coworkers. The fact that comparers are experiencing external threat implies that they are engaging in contrast, or antagonism, with outperformers (Buunk & Ybema, 1997; Smith, 2000), which may lead to outperformers' decreased concern with salvaging the relationships in question.

In the face of coworkers' externally focused threat, the self component of comparison target discomfort may be a stronger force than concerns for others or relationships with others. These self-concerns may contribute to different behavioral choices than the other concerns involved in comparison target discomfort. When peers are displaying evidence of externally focused threat (e.g., retaliation, sabotage), outperformers may perceive their working environments as more competitive. Competitive environments foster a drive to achieve more in relation to others (Kohn, 1992), in essence creating a zero-sum situation in which the achievements of one are at the expense of others. In fact, this type of environment has been shown to foster other-focused negative responses (e.g., retaliation, sabotage) from those who are less successful (Moos, 1979). Further, competition can foster envy and resentment by creating perceptions of restricted access to desired outcomes that some receive at the expense of others (Kohn, 1992). In such environments, a concern for the self is likely to outweigh concerns for others' well-being or interpersonal relationships with others.

When an environment cultivates competitiveness, individuals are encouraged to strive primarily for success, rather than be concerned with their impact on others. Outperformers experiencing comparison target discomfort in the face of external threat would thus be less likely to reduce their subsequent performance efforts. Future studies should explore the nuances of the

three concerns involved in comparison target discomfort and their differential impacts on outcome behaviors.

### *Study Limitations*

The contributions of this study must be considered in light of its limitations, and its limitations should be viewed as opportunities for further research into the impact of upward comparison processes on job performance. The cross-sectional nature of our study design and the participant response rate are both potentially limiting factors when considering the immediate results. Longitudinal examination of the relationships in question would be beneficial in determining the time relevance of the effects of a single incidence of outperformance. At the same time, whereas participation by all study participants is always desired, the response rate of 54% acquired here is considered generally acceptable for academic studies in the behavioral sciences (Baruch, 1999).

Questions remain as to who experiences comparison target discomfort and what factors prompt comparison threat. Future studies exploring what considerations likely trigger these responses would be informative. In this respect, as our analyses were correlational in nature, we cannot rule out the possibility that our results were driven by variables we did not assess. For example, personality traits (e.g., rudeness, neuroticism) or equity sensitivity may play a role in comparison processes (Buunk & Gibbons, 2007). The use of alternative methods for assessing outcomes (e.g., modest self-presentation, avoidance behaviors) would also be of interest, as coworkers in this study may not have been a reliable source of outperformer behaviors. Self-assessments or supervisor assessments of these behaviors could be utilized, although increased potential for common source bias exists in the case of personal reports. Further, coworkers chosen by award recipients may not be those who are experiencing the greatest comparison threat. A purely random sampling of coworkers could have resulted in greater variance of comparison threat and, thus, stronger study results. These coworkers, however, may not have been qualified to provide information on the behavior of award recipients.

The arrows in Figure 1 may operate in the reverse direction or the hypothesized effects may be bidirectional. This concern is minor in the present instance, as the specified model was based on reasonably sound a priori theoretical considerations and yielded statistically significant results. Future longitudinal examinations of comparison target discomfort and comparison threat would be of interest in determining causality, as well as whether these responses vary by career stage and across forms of recognition and rewards.

Reactions to recognition may vary across individuals, depending on personal characteristics (e.g., empathic concern, perceived work-environment competitiveness). Because competition is inherently comparative (Tesser, 1988), it gives rise to a strong need for social comparison information (Gibbons & Buunk, 1999). Further, competitive environments stimulate a differentiation, rather than an assimilation mindset, wherein employees engage in social comparisons to search for differences, rather than similarities (Stapel & Koomen, 2005). It also may be useful to consider a wide range of situational factors to explore how comparison target discomfort and comparison threat become part of an organization's culture or under what circumstances different work-group dynamics attenuate or accentuate such emotions (Brown, Ferris, Heller, & Keeping, 2007).

A final limitation involves generalizability of the current results beyond the real-estate sample used in the present study. The general applicability of the immediate results to other occupational groups (both unionized and non-unionized), would be verified by replication with other samples drawn from different industries. Of particular interest is whether the reported results can be extrapolated to other employee groups who, unlike real-estate agents, experience great degrees of interdependence with coworkers. Additionally, our results were obtained using real-estate agents in the United States. It would also be of interest to know whether our findings generalize to less individualistic non-Western cultures. Individuals from Eastern cultures may be less likely to engage in upward comparisons and, thus, experience comparison threat or comparison target discomfort.

### *Implications*

It has been suggested that managers often think employees should be unemotional in their interactions with one another (Hymowitz, 2006). Our results suggest, however, that emotions influence the behavior of both outperformers and those outperformed. A body of literature indicates that the need to fit in and to maintain a minimum quantity of positive interpersonal relationships (i.e., good will) is an all-encompassing drive (van Beest, Wilke, & van Dijk, 2003). As our data show, outperformers experience discomfort when their coworkers are threatened by being outperformed. In this regard, the human brain is designed to be sensitive to the slightest measure of social pain (Eisenberger & Lieberman, 2005). Being able to detect that others are threatened by one's behavior is adaptive to the degree that it guides appropriate coping responses. Research has established that such responses can direct individuals toward fight, flight (i.e., avoidance), freezing, or becoming more socially attentive so that the chance of future pain is minimized (van Beest & Williams, 2006).

To the extent that being the target of upward comparisons negatively influences outperformer behavior by creating circumstances in which conflict may arise as a result of externally focused threats, organizations should obviously take heed. The results of our study suggest that outperformers may engage in acts of modest self-presentation in response to referents who focus their negative affect externally, but that their choice to engage in such behaviors is not related to feelings of concern or empathy. This implies that outperformers engage in an alternative calculus when choosing a reaction to this form of threat. Similarly, our results show that outperformers will select avoidance techniques when referents experience internal threat, but do not do so as a response to others' external threat. The dynamics underlying this distinction and referents' reactions to avoidance behaviors are potential avenues of future investigation. Further, the unexpected negative relationship we found between external threat and socially motivated underachievement merits further investigation. In particular, it would be of interest to know more about how, in the presence of externally focused threats, outperformers weigh the cost of avoiding high performance, as compared to the cost of losing coworker good will.

Given the differing results we reported for external and internal comparison threat, researchers are encouraged to explore the forces driving referents' negative affect toward contrasting internal or external elements. Factors such as the competitiveness of a work environment or the presentational framing of recognition and rewards may play a role in determining whether referents' feelings of threat are internally or externally directed. A better understanding of such factors would enable managers to anticipate and avoid the effects of detrimental interpersonal workplace interactions.

With respect to both outperformers and those outperformed, it would also seem important for organizations to assure that such externally focused emotions as envy, resentment, and vengefulness do not become "bottled up" and lead to outbursts of dysfunctional behavior (Ashkanasy & Ashton-James, 2006). This concern has practical implications for taking steps to address openly any such tendencies through open forums or human resource training programs. Gibbons and Buunk (1999) have shown that individuals vary in their sensitivity to the behavior of others or what has been termed their *social comparison orientation*. People who score high in social comparison orientation have a heightened tendency to compare themselves with others across different social domains. Of particular concern is research suggesting that social comparison orientation can amplify the impact of environmental cues on emotional and behavioral reactions (Thau, Aquino, & Wittek, 2007). Managing these reactions so that they can be constructively harnessed would seem wise, as would instituting training programs to



minimize antagonistic responses to the success of others (e.g., workplace violence, interpersonal conflicts).

In this vein, Buunk, Zurriaga, and González (2006) showed that in making social comparisons, individuals can view those better off (i.e., outperformers) either as a potential future or in disparaging terms. Among their findings, they reported that in contrast to individuals who engage in upward identification (i.e., a positive response to perceiving better-off others as a potential future), individuals who respond with ill will to seeing others who are better off are more likely to cope through less adaptive social comparison strategies, such as blaming others and depression. Such pernicious responses should concern all organizations, especially those whose activities require a cooperative social climate (Buunk, Zurriaga, Peiró, Nauta, & Gosalvez, 2005). Given the capacity of people to deny their feelings and to misreport or be mistaken about their emotions, however, training programs or other ameliorative efforts would no doubt be challenging. Moreover, as research has suggested that people are generally loath to admit painful feelings, they may refuse to acknowledge the need for guidance in managing their emotions (Smith & Kim, 2007).

A further implication of our results relates to the use of annual banquets, award ceremonies, press announcements, and the like to recognize and sustain outstanding employee performance. If organizations wish to reap maximum benefit in terms of continued employee motivation, such activities should be balanced against individual employee preferences for public recognition and the propensity of those outperformed to feel threatened by the success of others and to engage in externally focused threatening behavior. Whereas individuals vary in their concern for social acceptance and regard for their feelings of others, there are no doubt social costs to be incurred by individuals who are viewed by their coworkers as threatening as a result of their relative accomplishments. In contrast, if such individuals are ostracized or excluded, and their fundamental need to belong outweighs their desire for higher performance, an organization's overall success may be compromised.

Such actions would be of special concern where employee performance is dependent on an individual's status in a face-to-face group and where the organization's success is dependent on a collective group effort. Our results suggest that by rewarding individual performance and, in turn, giving rise to both comparison threat on the part of those outperformed and comparison target discomfort on the part of outperformers, the likelihood of group-oriented behavior necessary for collective success will be reduced, especially in situations in which comparison threat is externally focused in the form of feelings of inferiority, intimidation, and vengefulness. The potential for interpersonal conflict to erupt in circumstances in which tensions exist between a desire for social acceptance and a desire to maximize individual achievement would appear to be great.

An added factor in the present study is that real-estate agents interact with individuals within and outside their local firms. Being the object of an upward comparison may have social costs within one's group. In interactions with individuals outside one's group (e.g., homeowners, homebuyers), however, such contrast effects may have social benefits. Being a firm's number-one agent would arguably increase one's visibility among likely clients. Whether and how these two forces might coexist awaits future research.

The results of this study offer insight into the complex social psychological dynamics inherent in outperforming others in a relevant domain and shed light on relational effects influencing employees' behavioral choices following success in the workplace. Specifically, we found evidence of a connection between comparison threat experienced by those who were outperformed and high achievers' use of behavioral tactics intended to alleviate such threat. We found further evidence that this relationship is moderated by how much discomfort the high achievers are experiencing as a result of having outperformed others. Our findings did differ depending on whether coworkers' negative affect was focused toward themselves or toward higher achieving coworkers. By shedding light on relational effects influencing employees' behavioral choices following success in the workplace, our findings have practical implications for managers interested in encouraging and maintaining high employee performance.

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