Could It Happen to You? Predicting the Impact of Downward Comparisons on the Self

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A variety of intervention programs seek to change people’s self-perceptions and behavior through downward social comparisons. It is hoped that exposure to a worse-off other, someone who has suffered as a result of engaging in irresponsible or risky activities, will frighten individuals into altering their self-definitional and motivation to adopt more responsible behaviors. For example, Canadian government-sponsored commercials dramatize cases of citizens who have landed in prison after being caught with illegal drugs; such messages are designed to deter others from making a similar mistake. Similarly, under the “Scared Straight” program in the United States, at-risk teenagers are exposed to prison inmates; it is reasoned that contact with the inmates will encourage the teens to develop more responsible self-identities and discourage them from engaging in criminal activities. Still other programs seek to promote safer sex by highlighting examples of individuals who contracted AIDS after engaging in risky sexual practices. Such cases are designed to exert their impact on individuals by frightening them.

It is not clear, however, that these scare tactics will always be effective. In many cases, the worse-off other may be deemed irrelevant to the self and have no impact whatsoever. Moreover, even when a worse-off other is perceived to be relevant, it is not clear whether the impact on the self will be positive or negative.

Individuals exposed to an inferior other may simply bask in their own superiority without being frightened into changing their behavior. It is thus unclear how downward comparisons affect individuals’ self-perceptions and goals.

When Do Worse-Off Others Exert an Impact on the Self?

The literature on analogical reasoning provides insight into what determines whether individuals draw comparisons between themselves and another person (cf. Thagard & Kunda, 1998). In forming an analogy, individuals use information about a familiar source to make inferences about a less familiar target (Holyoak & Thagard, 1997). For example, students can learn about the structure of the atom, an unfamiliar target, by thinking of it as a minute solar system, a more familiar source (Reeves & Weisberg, 1994). Individuals are more likely to draw analogies if they perceive clear correspondences, or parallels, between the target and source (Holyoak & Thagard, 1997). In the case of social comparisons, individuals use what they know about another person, the source, to make inferences about themselves (Lockwood & Kunda, 2000). To the extent that one perceives strong correspondences between oneself and the other, the other will seem more “psychologically close” (Tesser, 1988) and so will exert a greater impact on the self.

In general, individuals may be unlikely to draw spontaneous analogies between themselves and worse-off others. To the extent that individuals have positive illusions about their own abilities and future prospects (Taylor & Brown, 1988), they will see greater parallels between themselves and successful rather than unsuccessful others (cf. Buunk & Ybema, 1997). Better-off others thus provide more information about what one is, what one should be, or what one will likely become in the future. Indeed, in his original theory of social comparison processes, Festinger (1954) argued that comparisons will be characterized by a “unidirectional drive upward”; that is, individuals will tend to seek information about others whose performance exceeds their own. Given that most individuals are optimistic about their future prospects (Taylor & Brown, 1988), it is unclear how downward comparisons affect individuals’ self-perceptions and goals.

This research was supported by a grant from the Social Sciences and Humanities Research Council of Canada. Partial reports of this data were presented at the July 2000 International Congress of Psychology in Stockholm, Sweden. I am grateful to Ziva Kunda, Dan Dolderman, William Lockwood, Lisa Sinclair, and Anne Wilson for comments on an earlier version of this article and to Natalie Foong, Linor Gerchak, Stephanie Cassin, and Tanya Leavitt for their assistance with data collection.

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Brown, 1988) and do not expect to encounter difficulties in pursu-
ing their goals (Buehler, Griffin, & Ross, 1994), a worse-off target is unlikely to be perceived as a relevant source of information about the self. Indeed, individuals may exaggerate the dissimilarities between themselves and a worse-off other as a means of protecting their own perceived superiority (Gump & Kulik, 1995). Because individuals are unlikely to perceive strong correspondences between themselves and a worse-off other, their self-views will not typically be affected.

Under certain conditions, however, the experiences of an inferior other may become more relevant to the self. If one’s positive self-perceptions are in some way threatened, for example, one may use a downward comparison as a means of restoring one’s positive self-regard (e.g., Hakmiller, 1966; Wills, 1981). Indeed, previous research indicates that individuals experiencing self-threats such as low self-esteem (Aspinwall & Taylor, 1993), a negative mood (Gibbons, 1986), or a serious physical illness (e.g., Wood, Taylor, & Lichtman, 1985) are more strongly affected by comparisons to worse-off others than are individuals not experiencing such difficulties (for reviews, see Gibbons & Gerrard, 1991; Wood & VanderZee, 1997). Downward comparisons may be particularly relevant to threatened individuals because they provide an opportunity for mood or self-esteem repair: By drawing an analogy between one’s own circumstances and those of a less fortunate other, one can remind oneself that things could, after all, be worse. In addition, because threatened individuals are by definition experiencing personal difficulties, they might simply see a greater number of correspondences between themselves and another person who is also struggling with problems.

It is also possible, however, that individuals not experiencing a specific threat might, at times, use a worse-off other to make inferences about themselves. Even if one is not currently experiencing problems, one may nevertheless be prompted to consider the parallels between oneself and the other. Research on analogical reasoning suggests that a short period of reflection may influence the kinds of analogical mappings that individuals make: Individuals initially form analogies on the basis of obvious, superficial similarities between the target and source; however, when asked to think more deeply about the parallels between the two elements, individuals draw analogies on the basis of more complex patterns of relations (Markman and Gentner, 1993). For example, in one study, participants viewed two cartoon frames, one in which a woman is receiving food from a food bank employee and one in which a woman is feeding a squirrel. When asked to map the woman in the first frame onto an element in the second frame, participants initially chose the most obviously similar element: the woman in the second frame. However, after reflecting briefly on the frames, participants mapped the woman onto the squirrel, noting that both are receiving food. Participants had become aware of alignments between the target and source that had not been immediately apparent (Markman & Gentner, 1993).

Reflection may perform a similar function in social comparisons: Individuals may become aware of less obvious correspondences between themselves and another person (Lockwood, 1998; Thagard & Kunda, 1998). In the case of downward comparisons, similarities between the self and the other may not be evident at first glance, but if individuals reflect on the parallels between themselves and the unsuccessful other, they may see the other as a more relevant source of information about themselves. I examined this possibility.

Do Worse-Off Others Threaten or Enhance the Self?

Imagining how one might become like a worse-off other may increase the likelihood that one will draw an analogy between oneself and the other. However, it is not clear whether the self-inferences that one draws from this analogy will be positive or negative. When one considers one’s circumstances relative to those of an inferior other, one can either delight in one’s own superiority or feel alarmed at the prospect of falling prey to a similarly unhappy fate. What determines whether the outcome of the comparison will be self-enhancing or threatening? Previous research found that the impact of upward comparisons—comparisons to superior others—depended on the perceived attainability of the other’s success (Lockwood & Kunda, 1997, 1999). When individuals could imagine a similarly outstanding future self, they were inspired by the other’s accomplishments; when they could not imagine a similarly successful self, they were demoralized.

The ease with which one can imagine a self like the other may also be crucial in determining downward comparison effects. Typically, when individuals imagine a specific outcome, such as winning a free trip or subscribing to cable, they come to believe that they are more likely to experience this outcome in the future (Gregory, Cialdini, & Carpenter, 1982). Thus, if individuals reflect on how they might become like a worse-off other, they may see themselves as vulnerable to this outcome and consequently may be threatened by the downward comparison. The other will serve as a representation of a feared self, a self that individuals are concerned that they may become in the future (Markus & Nurius, 1986). However, one’s ease or difficulty of imagining a specific scenario may also serve as a cue regarding the likelihood of this outcome (Schwarz et al., 1991). If individuals’ vulnerability to this outcome is low, they will have difficulty generating plausible parallels between themselves and the other, and the downward comparison will be a pleasing reminder of their own relative superiority. In contrast, when individuals are at high risk for experiencing a similar fate, they will find it easy to imagine a negative outcome for themselves; they will consequently feel worse about themselves, reminded of the unpleasant fate that may await them. The process of reflecting on parallels between oneself and the worse-off other may thus lead one to feel either superior or threatened, depending on one’s vulnerability to the other’s fate.

In general, anything that constrains one’s ability to imagine a self like the worse-off other will reduce perceived vulnerability. For example, one may see the other’s fate as implausible because of one’s personal experience: An investor who has successfully weathered numerous financial crises may be undaunted by news of a friend’s bankruptcy, whereas a less experienced individual, who is uncertain about his or her ability to cope with market fluctuations, may find this news more distressing. One may also see the other’s fate as implausible because of reality constraints: A woman who is not sexually active is unlikely to see herself as vulnerable to the predicament of a friend coping with an unplanned pregnancy or a sexually transmitted disease.

On dimensions in which one moves in a sequence of stages over time, one’s ease of imagining a self like the other may also be determined by temporal considerations. If a worse-off other is at
one’s own or an earlier stage in life on the comparison dimension, this individual is unlikely to be seen as a plausible future self; to the extent that one has already gained experience on this dimension, one may be sufficiently familiar with one’s own capabilities to know that a similar outcome is improbable. A 1st-year university student, for example, is unlikely to be threatened by a high school student with failing grades or by another 1st-year student who has dropped out because of poor performance. The student can enjoy his or her superiority to the struggling high school student without fear of returning to high school and failing, and as long as he or she is at least passing his or her courses, the student can also congratulate him- or herself on superiority to the struggling peer; the student knows enough about his or her own academic abilities to feel reasonably sure that he or she will not fall prey to a similarly disastrous outcome. In contrast, if one encounters a student who was doing fine after the 1st year of university but ended up without a job after graduation, one is more likely to feel threatened. When the worse-off other is at a more advanced stage, one may be less certain about one’s capabilities and hence one’s ability to avoid this negative outcome. Even if one is doing well in one’s 1st year, one can end up working in a fast food restaurant after graduation. Thus, whereas downward comparisons to individuals who are at one’s own stage or an earlier stage are likely to be self-enhancing, comparisons to individuals at a more advanced stage are likely to be threatening; one can be certain about one’s superiority to a worse-off other at a past or present stage, but one cannot be certain that one will maintain superiority to a worse-off other at a future stage.

The Impact of Downward Comparisons on Self-Perceptions

Much of the early research on downward comparisons focused on the self-enhancing impact of worse-off others. In his influential downward comparison theory, Wills (1981) argued that people use comparisons to worse-off others to boost their own self-views: By focusing on another’s misfortune, one can enhance one’s own sense of well-being (cf. Taylor & Lobel, 1989). Certainly, there is considerable evidence in the literature to support this view. However, in these studies, individuals were not typically comparing themselves with a target who represented a plausible future self.

For example, several of the studies that support the notion that downward comparisons have a positive impact focused on comparison selection as a dependent measure. Individuals who were experiencing threats such as depression (Gibbons, 1986; Study 1), a serious illness (Wood et al., 1985), a failure experience (Pyszczynski, Greenberg, & LaPelle, 1985; Swallow & Kuiper, 1993), or a serious smoking problem (Gibbons, Gerrard, Lando, & McGovern, 1991) reported a preference for comparisons to less fortunate others over comparisons to more fortunate others. Researchers have typically interpreted such findings as evidence that whereas upward comparisons are threatening, downward comparisons are rewarding. In these studies, however, individuals had the opportunity to choose their comparison targets and may have selected downward comparisons that posed little threat to the self. For example, a cancer patient may choose to compare herself to another patient who has poor coping skills, rather than to another patient whose illness is more severe; whereas she can be reasonably confident that her coping skills will remain superior, she may be less certain that her illness will not worsen (cf. Wood & VanderZee, 1997). When one does not have the luxury of choosing one’s comparison targets, exposure to worse-off others may be more threatening.

Another set of studies has examined the impact of downward comparisons that are forced rather than selected. This research also suggests that comparisons to worse-off others have a positive impact, particularly for individuals who are experiencing some form of threat. However, in these studies, participants were typically exposed to a comparison other who was unlikely to represent a possible self for participants. For example, students who were depressed (Gibbons, 1986; Study 2) or in a negative mood (Aspinwall & Taylor, 1993; Study 1) reported more favorable moods after exposure to a worse-off peer. Similarly, low self-esteem students exposed to a peer who was coping poorly with academic life experienced a self-esteem boost (Aspinwall & Taylor, 1993; Study 2). However, when individuals compare themselves with an inferior peer, someone who is at their own career or academic stage but who is experiencing greater problems, the comparison may result in self-enhancement because of temporal constraints; in most cases, these individuals know enough about their own abilities to feel reasonably certain that they will not suffer an equally distressing outcome.

A number of studies suggest that, when one does perceive oneself to be susceptible to the misfortune of the other, downward comparisons can pose a threat to the self (cf. Aspinwall, 1997; Blanton, 2001; Brickman & Bulman, 1977; Buunk, Collins, Taylor, Van Yperen, & Dakof, 1990; Wood & VanderZee, 1997). For example, sexually active students exposed to an HIV-positive individual had stronger intentions to get tested for HIV than did students exposed to an HIV-negative individual (Evers, Bishop, Gerhan, & Weisse, 1997; Gump & Kulik, 1995); apparently, the worse-off other triggered concerns among the students that they themselves might have contracted the disease in previous sexual encounters. Similarly, individuals who felt uncertain about the future of their marriage reported experiencing distress when they were exposed to marriages that were worse than their own (Buunk et al., 1990); to the extent that these individuals believed that their own relationship might decline, the worse-off couple served to foreshadow a grim marital future. In addition, cancer patients reported that comparisons with more seriously ill patients could be upsetting, reminding them that their own illness might worsen (Wood & VanderZee, 1997). These studies suggest that when one is vulnerable to the other’s negative outcome, downward comparisons evoke feared selves.

The Impact of Worse-Off Others on Regulatory Orientation

Downward comparisons that threaten self-evaluations may also affect individuals’ self-regulatory strategies. Whereas upward comparisons represent a desired self, an outcome that individuals hope to approach, downward comparisons represent a feared self, an outcome that individuals hope to avoid (cf. Carver and Scheier, 1998). Better- and worse-off others may consequently spark different self-regulatory goals. In his analysis of self-regulation, Higgins (1998) argued that both promotion and prevention strategies are important in achieving desired end states. Promotion-oriented individuals, who are focused on advancement, growth, and accom-
plishment—their ideal selves—tend to pursue strategies aimed at approaching desirable outcomes. Prevention-oriented individuals, who are focused on protection, safety, and responsibility—the selves they believe they “ought” to be—tend to pursue strategies aimed at avoiding undesirable outcomes (Higgins, 1997, 1998). Regulatory focus can be measured as a chronic personality trait (e.g., Shah, Higgins, & Friedman, 1998; Shah & Higgins, 2001), but may also be induced temporarily by cues in the environment (e.g., Förster, Higgins, & Idson, 1998; Higgins, Roney, Crowe, & Hymes, 1994; Higgins, Shah, & Friedman, 1997; Roney, Higgins, & Shah, 1995). The presence of a social comparison target may be one such situational cue. An outstanding other represents a desirable outcome and thus may activate promotion goals. In contrast, an unsuccessful other represents an undesirable outcome and thus may activate prevention goals. However, prevention orientation should be enhanced only among individuals who perceive themselves to be vulnerable to a worse-off other’s negative outcome; if a similar future self seems implausible, there is no need to be concerned about avoiding this outcome, and prevention goals should be unaffected.

The Impact of Worse-Off Others on Motivation

In addition to influencing global self-regulatory goals, social comparisons may also elicit more specific behavioral motives. Just as one can be motivated to become more like a successful other (e.g., Lockwood & Kunda, 1999), one may be motivated to avoid becoming like a worse-off other. Research in the area of counterfactual thinking has shown that by considering negative outcomes that were narrowly avoided, one can frighten oneself into working hard to avert such outcomes in the future (McMullen & Markman, 2000). Similarly, worse-off others may serve as a guide for avoiding undesirable outcomes: A 1st-year student who fears becoming like a 4th-year drop-out may become determined to keep up with class readings and spend more time at the library. Thus, although individuals may feel worse about themselves if they fear a similarly unpleasant fate, they may simultaneously be encouraged to strive to prevent this outcome by working hard. I tested this possibility directly.

In this article, the impact of downward comparisons on the self is examined. In Studies 1 and 2, I explored whether a worse-off other would influence self-perceptions spontaneously or only when participants reflected on the parallels between themselves and the other. I predicted that the other would have an impact only when individuals were prompted to draw a self–other analogy. In addition, I examined whether vulnerability to the other’s misfortunes would determine the direction of the other’s impact on the self. In Study 1, participants’ vulnerability was low, and I therefore expected the other to have a positive impact on self-perceptions. In Study 2, participants’ vulnerability was high; I therefore expected that participants’ self-evaluations would drop, but that their prevention focus would be enhanced. In Study 3, I examined self-evaluative, self-regulatory, and motivational responses to worse-off others under conditions of low and high vulnerability.

Study 1: The Impact of a Poorly Coping Other When Perceived Vulnerability Is Low

In Study 1, I created a situation in which participants’ vulnerability to a worse-off other’s misfortunes was low; I focused on whether imagining becoming like the other would determine whether the other had any impact on self-perceptions. In previous studies, downward comparison information had the greatest impact on individuals who were experiencing a self-threat (cf. Taylor, Wayment, & Carillo, 1996); here, I constructed a situation in which the self was not experiencing a specific threat, and I examined whether participants would nevertheless draw a link between themselves and the other after a brief period of reflection.

Student participants were exposed to a peer, another student who was coping poorly with the 1st year of university. They then took part in a simulation exercise in which they were asked to think about how they might become like the poorly coping peer or about the activities that they might perform on a typical day. I expected that the worse-off other would influence participants only when they were forced to consider the other as a possible future self. Typically, when one imagines a possible future outcome, one comes to see that outcome as more likely to happen (Gregory et al., 1982). In this case, however, the outcome would seem highly implausible to participants, so I predicted a contrast effect (Schwarz et al., 1991): Because the worse-off other was at their own academic stage, participants would have sufficient experience and information regarding their academic abilities and standing to view such an outcome as improbable. They would find it difficult to imagine a similarly negative future self, and the comparison would consequently be self-enhancing. I also considered the possibility that participants’ perception of their own academic performance might affect how they responded to the comparison: I expected that participants who were experiencing the fewest academic difficulties, and who would consequently perceive a negative outcome to be especially implausible, would be most positively affected by the comparison.

Method

Participants. Participants were 20 male and 45 female introductory psychology students who participated for course credit. Participants’ gender had no effects on any of the variables and therefore is not discussed further.

Procedure. Participants were invited to take part in a study on adjustment to university life. They were told that researchers were collecting data about students’ impressions of how other individuals were coping with life transitions and about their own academic experiences and adjustment. Participants then read a self-description, ostensibly written by a previous participant in the study, another introductory psychology student. The target described experiencing increasing academic difficulties over the year and finished the self-description with the comment,

Things got even worse this term. I have found my classes harder, and my marks have been going down. I’m finding it hard to keep up. Right now, I am really not doing as well as I wanted to. I am very worried about finals this term. I am worried that I may not pass this year. My social life has also not gone so well, and I haven’t been able to stay involved in many extracurricular activities. I would say that overall, my year has gone very poorly.

After reading the description of the former student, participants went on to the simulation exercise. In the simulation condition, participants were told

We are interested in finding out what leads students to experience the kind of transition you just read about. As a first-year student yourself, you probably have some idea of the kinds of things that can happen to
students. What do you think could cause you to have a similar academic experience?

Participants were then asked to take 3 min to imagine a scenario that was as realistic as possible. In the no-simulation condition, participants were asked to take 3 min to imagine a scenario including the kinds of activities that might happen to them on a typical day. Participants in both groups were then asked to write down the scenario they had imagined.

Next, participants went on to Part 2 of the study, in which they were asked to provide information about their own adjustment and plans for the future. First, participants rated themselves on a set of 10 positive items (e.g., successful, capable) and 10 negative items (e.g., incompetent, unintelligent) designed to tap into their self-perceptions of success. Participants rated themselves on these items using an 11-point scale ranging from 1 (not at all true) to 11 (very true).

Participants then rated how likely it was that they would become like the person they read about. Ratings were made on a 9-point scale with endpoints labeled 1 (not at all likely) and 9 (very likely). They also completed a manipulation-check item in which they rated how their own academic adjustment compared with that of the student they read about; they made this rating on a 7-point scale ranging from −3 (I am doing much worse than this student) to +3 (I am doing much better than this student).

Finally, participants rated themselves on two items assessing the extent to which they were concerned about their academic performance (“To what extent do you expect to experience academic difficulties in the future?”); these items were included as part of a “general demographic information” questionnaire in which participants also provided their age, gender, academic interests, and cultural background. Ratings were made on a 9-point scale with endpoints labeled 1 (not at all) and 9 (very much). Participants completed these items after they had finished the main life-transitions questionnaire.

A no-target control condition was also included, in which participants completed the same typical day scenario exercise as the no-simulation participants, without first reading about the poorly coping student, and then rated themselves on the self-rating and academic performance items. In sum, there were three conditions: downward target with simulation, downward target with no simulation, and no-target control.

Results and Discussion

Plausibility of scenario descriptions. To confirm that participants found it difficult to generate a plausible account of how they could become like this worse-off other, two raters coded the plausibility of simulation participants’ open-ended descriptions. Whereas some participants indicated that the target’s outcome was relatively unlikely for themselves (e.g., “in order for me personally to change my ways and become similar to that student many of my habits and routines would have to change”), others indicated that this outcome was relatively likely, for example:

I can see this situation happening very easily. Being away from home for the first time, I am living on my own with no curfew and no one keeping tabs on where I am. It is tempting to go out to the bar during the week with my friends, where I usually drink too much and come home too late. This causes me to miss my classes the next day.

Raters coded the plausibility of participants’ scenario descriptions on a 4-point scale with endpoints of 1 (unlikely to happen) and 4 (likely to happen). Interrater reliability was high ($r = .83$). For each participant, the scores given by the two raters were averaged. Overall, ratings of the plausibility of the imagined scenarios were low ($M = 1.63$), suggesting that participants did not see themselves as vulnerable to the target’s negative fate.

It was hypothesized that participants would be unlikely to generate a feared self, a vivid account of how they themselves might experience a similar outcome, in response to exposure to the 1st-year student. In many cases, participants appeared to be imagining a more generic situation, a situation that could happen to the average student rather than to themselves specifically. Two independent judges coded scenario descriptions for two types of responses: description of a feared self and description of a hypothetical student. Agreement between the two coders was 83% for the feared-self category and 88% for the hypothetical-student category. Discrepancies were resolved through discussion. There was no overlap among participants coded as describing a hypothetical self and those coded as describing a feared self. A number of students (37%) described neither a feared self nor a hypothetical student. For example, several students simply described activities without specific reference to themselves or another person (e.g., “Things are done differently from high school . . . The classes are taught quicker and involve more independent studying. There is always too much work with too little time”).

Participants were considered to have activated a feared self if they specifically described concerns that they were like, or might become like, the person they had read about, for example:

For me, this year is the first year I am my own boss and I make all my decisions. Even though I was fairly independent before, it’s now even more overwhelming. . . . I think it would be very easy for me to end up like the person I read about.

Only 21% of participants expressed concerns about experiencing a similar fate. Participants were considered to have activated a hypothetical student if their scenario described experiences in the second person, for example:

You’re studying all the time and so you just focus on getting your assignments done, so your reading falls behind. . . . It would be easy to miss out on a social life if you lived in an apartment or something with none or few roommates or even just by not ever saying anything to anyone in your classes.

Or in the third person, for example:

All of a sudden it’s exams [and] former smart students panic. . . . Instead of having confidence in themselves, they just see themselves slipping. People with high grades, and popularity in high school, I think, come to university with expectations that are too high.

Such a hypothetical student appeared in 42% of the participants’ descriptions.

Overall, when asked to describe how they might experience a similar outcome, participants were more likely to respond by generating a generic student than a feared future self. The open-ended data thus suggests that participants did indeed find it difficult to generate a plausible future self like the target.

Self-ratings. I averaged positive and negative self-rating items into a single index of success, after first reverse scoring the negative items (Cronbach’s $\alpha = .90$). A one-way analysis of variance (ANOVA) revealed a significant effect of condition, $F(2, 62) = 3.41, p = .04$ (see Figure 1).

I had predicted that the simulation participants would rate themselves more positively than both the no-simulation and no-target control participants would rate themselves, but that the no-
simulation participants would not differ from controls. I tested this prediction with two orthogonal contrasts. First, I compared the simulation group to the no-simulation and no-target control groups; I assigned a weight of +1 to the simulation group, and weights of −.5 to each of the no-simulation and control groups. This contrast was significant, $F(1, 62) = 6.49, p = .01$; simulation participants rated themselves more positively than both no-simulation and control participants did. The second contrast compared no-simulation (+1) and control (−1) participants; self-ratings in these groups did not differ significantly ($F < 1$). Thus, the poorly coping peer did not exert a spontaneous impact on participants’ self-perceptions; rather, the target had a positive impact only on participants who had imagined becoming like the other in the future.

If simulation participants were positively affected by the worse-off target because they believed themselves to be safe from a similarly negative outcome, then those participants who generated the least plausible descriptions of how they might become like the target should have experienced the greatest self-enhancement. Consistent with this prediction, self-ratings of participants in the simulation condition were negatively correlated with plausibility ratings ($r = −.46, p = .02$).

**Likelihood of becoming like target.** Ratings of the likelihood of becoming like the target did not differ for participants in the simulation and no-simulation condition ($F < 1$). Imagining a scenario can lead one to believe that the scenario is more likely to occur (Gregory et al., 1982); in this case, however, because the scenario was highly implausible, the simulation exercise did not boost participants’ beliefs about the likelihood of the event. One might expect that simulation participants would view the negative future outcome as even less likely than no-simulation participants would; this did not occur, presumably because even no-simulation participants, when asked to consider this outcome for themselves, recognized it to be unlikely.

Within the simulation group, likelihood of becoming like the target was positively correlated with scenario plausibility ratings ($r = .43, p = .03$), confirming that participants who found it most difficult to imagine a self like the target also viewed this outcome as highly unlikely.

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**Comparative adjustment.** All but one of the participants indicated that they were doing better than the target they had read about. Thus, the target was indeed perceived as a downward comparison. Ratings of participants in the simulation condition ($M = 1.79$) did not differ from those in the no-simulation condition ($M = 1.54, F < 1$).

**Academic concern.** Participants’ responses to the two academic difficulties questions were positively correlated ($r = .41, p = .005$); these items were averaged to form an overall measure of academic concern. Levels of academic concern did not differ among the three target-type conditions ($p > .25$). Academic concern was positively correlated with the scenario plausibility ratings ($r = .37, p = .07$) and with ratings of likelihood of becoming like the target ($r = .45, p = .002$).

It was hypothesized that academic concern would determine the strength of the contrast effect produced by the 1st-year target. That is, individuals with low academic concern would be strongly boosted by the simulation target, whereas those with high concern would benefit less, if at all. Presumably, participants who were least concerned about their academic achievements would have the greatest difficulty imagining a self like the unsuccessful other and so would perceive the greatest contrast between their own circumstances and those of the other. To test this possibility, I regressed self-ratings on academic concern and comparison condition; the multiple regression analysis revealed a significant Academic Concern × Comparison Condition interaction, $F(2, 59) = 4.32, p = .02$ (see Figure 2).

I then tested for differences between the target groups at specified levels of the academic concern measure (West, Aiken, & Krull, 1996). At low levels of academic concern (1 SD below the academic concern mean), participants in the simulation condition rated themselves significantly more positively than no-target control participants rated themselves, $t(61) = 3.53, p = .0008$, and marginally more positively than no-simulation participants did, $t(61) = 1.88, p = .06$. The self-ratings of low academic concern participants in the no-simulation condition were marginally higher than those of no-target participants, $t(61) = 1.70, p = .09$. In contrast, at high levels of academic concern (1 SD above the academic concern mean), self-ratings of participants in the simulation condition did not differ from no-target controls, $t(61) = 0.55, p = .59$, or no-simulation participants, $t(61) = 0.08, p = .93$; no-simulation participants did not differ from no-target controls, $t(61) = 0.69, p = .49$. Thus, only the participants with low academic concern were boosted by the downward comparison, and those in the simulation condition experienced the greatest self-enhancement.

In sum, participants drew strong inferences about themselves only when they reflected on the parallels between themselves and
the worse-off other. The target had a marginally significant impact on the self-perceptions of no-simulation participants low in academic concern, but the worse-off other’s impact was considerably stronger among those participants who imagined becoming like the other. This suggests that although individuals may not typically view downward targets as relevant sources of information about themselves, it can be relatively easy to influence the mappings that individuals form between themselves and another person; simply considering the parallels between oneself and a worse-off other can boost the impact of the other on one’s self-view.

When individuals do form an analogy between themselves and the worse-off other, ease of imagining a plausibly similar future self determines whether or not self-perceptions are positively affected. In this study, the poorly coping peer had the most positive impact on simulation participants who were currently experiencing few or no academic difficulties. These individuals had sufficient evidence about their academic skills to view this outcome as highly implausible. As a result, they could enjoy their superiority to the peer without any fear that they might experience this fate in the future. Among participants for whom the target’s negative outcome was less implausible, those with higher academic concern, the self-enhancement effect was eliminated.2

Study 2: The Impact of a Poorly Coping Other When Perceived Vulnerability Is High

In Study 1, participants’ vulnerability to the other’s negative outcome was low, and the impact of the other was therefore positive. If, however, individuals believe themselves to be highly susceptible to the other’s negative situation, the comparison should be threatening rather than self-enhancing. I explored this possibility in a second study. I exposed students to a recent university graduate who was coping poorly with the transition to a postgraduate career. As in Study 1, participants were asked either to imagine how they might become like the other in the future or to imagine their activities on a typical day. Again, I expected that only those participants who imagined a future self like the other would be influenced by the other. However, because this individual was at a more advanced life stage than the participants, and thus represented a more plausible future self, I predicted that the self-enhancement effect obtained in Study 1 would be reversed: Instead of enjoying their superiority, individuals would fear becoming like the other in the future and consequently would actually view themselves less positively. In addition, I predicted that the downward comparison would change participants’ regulatory orientation; following the downward comparison, those participants who reflected on parallels between themselves and the worse-off other would become more focused on preventing negative outcomes.

Method

Participants. Participants were 16 male and 23 female 2nd- and 3rd-year students. They were each paid $7 Canadian (about $5 US) for taking part in the study. Participants’ gender had no effects on any of the variables and therefore is not discussed further.

Procedure. Participants were invited to take part in a study on life transitions. They were told that, as part of this project, the researchers were collecting data from past and present students about their impressions of life transitions during and after university and about their own academic experiences and adjustment.

Participants were asked to read a description, ostensibly written by a recent graduate from their own major who had experienced difficulties after completing university. In each case, the target described experiencing increasing academic difficulties over the 4 years of the undergraduate program and finished the self-description with the comment,

I tried to get a job, but it’s harder than I expected. I haven’t been able to find a good job. I have spent a lot of time working in fast food places, and doing some pretty boring stuff. I really expected that things would be easier after I graduated, but people are right when they say that it’s tough out there. Right now I’m pretty down about things. I’m not sure where I’m going to go from here—I can’t afford to go back to school, but I also can’t find a good job . . . this is not where I expected to be at this point in my life!

As in Study 1, participants in the simulation condition were then asked to describe a realistic scenario in which they could become like the person they read about. No-simulation participants were asked to describe a scenario regarding their typical daily activities.

Next, participants rated themselves on the same set of self-rating items used in Study 1. They then indicated the extent to which they were characterized by three prevention goals (“I am more concerned with avoiding failure than with achieving success,” “I see myself as someone who is primarily striving to become the self I ‘ought’ to be”—to fulfill my duties, responsibilities, and obligations, and “I am very concerned about discrepancies between who I am now, and who I think I ought to be”) and three promotion goals (“My major goal in school right now is to achieve my academic ambitions,” “I see myself as someone who is primarily striving to reach my ‘ideal self’”—to fulfill my hopes, wishes, and aspira-

2 One might expect that, for students higher in concern, the impact of the target would actually be reversed: They would see the failing other as a potential future self and so would feel worse about themselves. This was not the case; even those students who were moderately high in concern recognized that they were not doing as badly as the target, and so did not view the target as a plausible self. However, differences among comparison groups were tested at levels of concern that were only moderately low (−1 SD) and moderately high (+1 SD). When group differences are tested at more extreme levels (i.e., 2.5 SD above the academic concern mean), the reversal effect is present; that is, among students who are extremely worried about their situation, simulation participants rated themselves lower than controls rated themselves, F(1, 59) = 3.63, p = .06.
tions,” and “Overall, I am more oriented toward achieving success than preventing failure”). Ratings were made on a 9-point scale ranging from 1 (not at all true of me) to 9 (very true of me).

As in Study 1, participants then rated how likely it was that they would become like the target; ratings were made on a 9-point scale with endpoints labeled 1 (not at all likely) an d 9 (very likely). Finally, participants rated how their own level of adjustment compared with that of the target; they made this rating on a 7-point scale ranging from –3 (I am doing much worse than this person) to +3 (I am doing much better than this person).

A no-target control condition was also included in which participants completed the same typical day scenario exercise as the no-simulation condition without first reading about the poorly coping recent graduate; they then rated themselves on the self-rating and goal-orientation items. In sum, there were three conditions: downward target with simulation, downward target with no simulation, and no-target control.

Results and Discussion

Plausibility of scenario descriptions. As in Study 1, two independent raters coded the plausibility of participants’ open-ended descriptions of how they might become like the worse-off other in the future. Ratings were made on a 4-point scale ranging from 1 (unlikely to happen) to 4 (likely to happen). Interrater reliability was high ($r = .78$). For each participant, the scores given by the two raters were averaged. Overall, the plausibility ratings were relatively high ($M = 3.42$), suggesting that participants did perceive themselves to be vulnerable to the target’s negative fate.

Using the same criteria as in Study 1, two raters coded the scenarios for descriptions of a feared self or a hypothetical student. Interrater reliability was 77% for the feared-self coding and 92% for the hypothetical-student coding. Discrepancies were resolved through discussion. Fully 69% of participants generated a feared self, whereas none described a hypothetical student. These proportions differed significantly from those in Study 1, in which only 21% of participants described a feared self ($z = 2.81, p = .003$), and 42% described a hypothetical student ($z = 3.42, p < .0003$). Thus, in contrast to Study 1, in which a generic student predominated in the scenario descriptions, participants here were far more likely to activate a feared self; whereas the target in Study 1 represented an implausible outcome, the target here represented a more plausible future self. Because these proportions are compared across studies, however, this conclusion remains tentative.

Self-ratings. I averaged self-rating items into a single index of self-ratings of success after first reversing the negative items (Cronbach’s $\alpha = .91$). A one-way ANOVA revealed a significant difference among the three target conditions, $F(2, 36) = 3.37, p = .05$ (Figure 3). The planned contrast comparing the simulation group (+1) to the no-simulation (−1) and control (−5) groups was significant, $F(1, 36) = 5.85, p = .02$; prevention goals were boosted only among participants who had imagined becoming like the other in the future. Prevention goals of no-simulation participants did not differ from those of controls ($F < 1$).

The finding that prevention focus was heightened among simulation participants suggests that the downward comparison did not simply induce feelings of helplessness. Participants had not merely given up because they believed they had no control over their level of academic achievement; rather, they had adopted a prevention strategy. Although their self-views had become less positive, they were nonetheless concerned with avoiding future difficulties.

A different pattern emerged on the promotion items. Promotion items were averaged into a single index of promotion orientation (Cronbach’s $\alpha = .81$). A one-way ANOVA revealed a significant effect of target condition, $F(2, 36) = 4.34, p = .02$ (see Figure 4). The planned contrast comparing the simulation group to the no-simulation and control groups was significant, $F(1, 36) = 7.73, p = .01$. Participants in the no-simulation condition did not differ from no-target controls ($F < 1$). Thus, participants who had imagined becoming like a worse-off other experienced a decline in their focus on achieving success; the promotion orientation of those who had not imagined this outcome for themselves was unchanged.
about themselves, and the stronger their prevention focus became.

The more likely participants perceived the outcome to be, the more positively correlated with prevention orientation ($r = .90$), marginally negatively correlated with self-ratings ($r = -.35$, $p = .09$), and positively correlated with prevention orientation ($r = .37$, $p = .06$). The more likely participants perceived the outcome to be, the more plausible the scenario they generated, the worse they felt about themselves, and the stronger their prevention focus became.

**Figure 4.** Prevention orientation of participants in no-target, no-simulation, and simulation conditions (Study 2).

It is somewhat surprising that both prevention and promotion orientations were affected by the downward comparison in the simulation condition. I had predicted that a worse-off other would boost participants’ focus on avoiding negative outcomes without influencing their aims to achieve positive outcomes. It may be that, as participants become more concerned with averting negative events, they simultaneously become less focused on pursuing positive events. Indeed, the prevention and promotion subscales were negatively correlated ($r = -.41$, $p = .01$).

Overall, the pattern of results on the prevention- and promotion-goal items suggests that imagining a self like the worse-off other had a strong impact on participants’ regulatory focus. Participants who had imagined becoming like the worse-off other experienced a decline in their focus on achieving success, but their goals to avoid failure were boosted. In contrast, participants who read about the worse-off other without imagining a similar fate for themselves did not experience any change in either their promotion or their prevention goals. Thus, individuals who are forced to consider that the worse-off other might represent an undesirable future self may be less inclined to pursue success but more motivated to avoid failure.

**Likelihood of becoming like target.** Simulation participants indicated that they were more likely to become like the target ($M = 4.67$) than did no-simulation participants ($M = 2.69$), $F(1, 23) = 7.83$, $p = .01$.

As in Study 1, the simulation exercise was designed to force participants to consider the target as a possible self. In Study 1, however, this possible self was implausible; imagining the outcome did not make it seem any more likely and, instead, served to make salient participants’ own superiority. In Study 2, the future self represented by the target was distressingly plausible, and consequently, after completing the simulation exercise, participants viewed the negative outcome as more likely.

**Likelihood of becoming like target.** Simulation participants rated their own adjustment to be less superior to the target ($M = 1.22$) than did no-simulation participants ($M = 2.15$), $F(1, 20) = 3.97$, $p = .06$. Because the simulation exercise was successful in boosting participants’ belief that they could become like the target, they were less confident regarding their superiority. It is important to note, however, that even simulation participants perceived their own adjustment to be better than that of the target; the target was indeed seen as a downward comparison. Participants believed that they were superior to this individual in the present, but when they imagined how they might suffer a similar fate, they were forced to recognize that their superiority might eventually be undermined.

In sum, Study 2 provides additional support for the hypothesis that although a worse-off other may not exert a spontaneous influence on individuals’ self-views, it may be relatively simple to encourage individuals to draw a self–other analogy, making the worse-off other a more relevant source of information about the self. As in Study 1, participants were affected by the worse-off other only when they reflected on the parallels between themselves and the other. Study 2 also provides support for the hypothesis that if one can imagine a plausible future self like a worse-off other, one experiences a threat to one’s self-view. The self-evaluations of participants in the simulation condition dropped; however, their prevention orientation was boosted, suggesting that downward comparisons may serve a self-regulatory function: The worse-off other represents an undesired end state and therefore elicits goals aimed at averting this unpleasant outcome.

**Study 3: The Impact of a Poorly Coping Other Under Conditions of Low and High Perceived Vulnerability**

Taken together, Studies 1 and 2 suggest that the degree to which one is vulnerable to a worse-off target’s outcome will determine whether the target has a positive or negative impact on the self. However, although the open-ended coding of the imagined scenarios revealed evidence consistent with this possibility, neither of these studies provides explicit evidence that perceived vulnerability determines whether the worse-off other threatens or enhances
self-views. In Study 3, I examined the role of perceived vulnerability more directly.

I also used Study 3 to rule out the possibility that two other variables, perceived control and perceived similarity, might have been responsible for the effects obtained in Studies 1 and 2. Previous researchers have suggested that individuals will be negatively influenced by a worse-off other if they believe they have little control over the comparison dimension (e.g., Aspinwall, 1997; Buunk et al., 1990; Testa & Major, 1990; Taylor et al., 1996). However, it is possible that individuals may perceive comparisons to worse-off others to be threatening even if they believe they can to some extent determine their own standing; a student who believes that she has control over her grades through studying may nonetheless feel alarmed when she encounters a more advanced student who is failing. If she sees the worse-off other as a possible future self, then merely imagining such a negative future may be a sobering experience, leading to a more negative self-view. Thus, it may be that one’s perceived vulnerability to the other’s fate, and not simply one’s degree of control, determines whether the comparison is threatening or enhancing. To rule out control as an alternative explanation, I included a measure of perceived control in Study 3.

It is also conceivable that participants were more negatively affected by the recent graduate than by the 1st-year student because of similarity differences; if they believed themselves to be more similar to the recent graduate, they may have found it more difficult to contrast their own circumstances with those of the target. This seems unlikely, given that participants were actually closer in age and career stage to the 1st-year target; however, to test this possibility, I included a measure of perceived similarity.

Finally, although Study 2 provides some evidence that downward comparisons can enhance prevention orientation when a feared academic self is activated, there is no evidence that such prevention goals lead to a boost in specific academic motives. In addition, the promotion and prevention subscales in Study 2 were negatively correlated, suggesting that these items did not tap into independent self-regulatory strategies. In Study 3, I modified and augmented the measure of prevention and promotion orientation, adding items tapping more directly into avoidance and approach strategies. I also included a measure of participants’ motivation to work hard.

First-year students read about either a 1st-year student coping poorly with adjustment to university life or a recent graduate coping poorly with the transition to a postuniversity career. As in Studies 1 and 2, participants were asked to imagine how they might become like the other in the future. Participants then rated themselves on items tapping into their self-evaluations, regulatory orientation, motivation to work hard, perceived similarity, perceived control over future success, and perceived vulnerability to the fate of the worse-off other. I expected that participants exposed to the poorly coping 1st-year peer would see themselves as relatively invulnerable to the peer’s negative fate, and their self-perceptions would therefore be enhanced; they would be able to enjoy their superiority without feeling any need to work harder. In contrast, I expected that participants exposed to the poorly coping graduate would see themselves as more vulnerable to this negative outcome; their self-perceptions would be deflated, but they would also become more prevention-focused and more motivated to work hard to avoid such outcomes.

Method

Participants. Participants were 66 female introductory psychology students who participated for course credit. Only female participants were included because the majority of students in the available participant pool were female.

Two participants were excluded because they disbelieved the cover story; 2 (aged 28 and 31 years, respectively) because they had had previous careers and would therefore be unlikely to perceive the recent graduate to be at a more advanced career stage than themselves, and 5 because they had changed their major and therefore had read about a recent graduate target in a nonrelevant career area. Altogether, 57 participants were included in the analyses.

Procedure. As in Studies 1 and 2, participants were invited to take part in a study on life transitions. They first read a description ostensibly written by a previous participant in the study. In the low-vulnerability condition, participants read about another 1st-year student who was coping very poorly with the transition to a university. In the high-vulnerability condition, participants read about a recent graduate who was coping very poorly after completing a university education. The target self-descriptions were the same as those used in Studies 1 and 2.

Participants then went on to the simulation exercise, in which they were asked to imagine and describe how it might be possible for them to become like the person they read about. A no-simulation condition was not included because Studies 1 and 2 had already established the lack of any comparison effects without the simulation exercise. After reading the self-description, participants rated themselves on the same set of self-rating items used in Studies 1 and 2. Participants then indicated the extent to which they were characterized by a series of global prevention- and promotion-orientation statements. This measure of regulatory focus included the items used in Study 2, but to improve the reliability and independence of the subscales, I added items that tapped into avoidance and approach strategies more directly. Participants rated themselves on nine prevention items (e.g., “I frequently think about how I can prevent failures in my life,” “I often think about the person I am afraid I might become in the future,” and “My major goal in school right now is to avoid becoming an academic failure”) and eight promotion items (e.g., “I frequently imagine how I will achieve my hopes and aspirations,” “I typically focus on the success I hope to achieve in the future,” and “My major goal in school is to achieve my academic ambitions”). Ratings were made on a 9-point scale with endpoints of 1 (not at all true of me) an d 9 (very true of me).

Next, participants indicated whether or not they planned to pursue 13 more specific academic motives (e.g., “I plan to spend more time at the library,” “I plan to use the library more than I did in high school,” and “I plan to stop myself from procrastinating”). Motivation ratings were made on an 11-point scale ranging from 1 (not at all true) to 11 (very true). Participants were then asked to rate how similar they thought the person they read about was to them on a 9-point scale with endpoints labeled 1 (not at all similar) and 9 (very similar).

Participants also rated themselves on eight items designed to tap into perceived control over future success (e.g., “I determine my own level of success” and “How well I do is determined by events I have no control over”). Ratings were made on a 7-point scale ranging from 1 (not at all true) to 7 (very true).

Next, participants rated themselves on four items indicating the extent to which they felt concern about experiencing a similar outcome (e.g., “To what extent do you see yourself as vulnerable to the kinds of problems experienced by the person you read about?” and “How worried are you that you will find yourself in a situation like the person you read about?”). Perceived vulnerability ratings were made on a 7-point scale with endpoints of 1 (not at all) an d 7 (very).

Finally, participants rated how their own level of adjustment compared with that of the recent graduate they read about; they made this rating on
a 7-point scale ranging from −3 (I am doing much worse than this person) to +3 (I am doing much better than this person).

A no-target control condition was also included, in which participants completed the typical scenario exercise without first reading about a poorly coping target; control participants then rated themselves on the self-rating, regulatory focus, motivation, and perceived-control items. In sum, there were three conditions: 1st-year target (low vulnerability), recent-graduate target (high vulnerability), and no target (control).

**Results and Discussion**

**Plausibility of scenario outcomes.** Participants’ open-ended scenarios were coded to confirm that the recent-graduate target represented a more plausible future outcome than did the 1st-year student target. As in Studies 1 and 2, raters coded the plausibility of participants’ open-ended descriptions on a 4-point scale ranging from 1 (unlikely to happen) to 4 (likely to happen). Interrater reliability was high (r = .87, p < .0001). For each participant, the scores given by the two raters were averaged. Descriptions written by participants exposed to the recent graduate (M = 3.63) were judged as more plausible than were those of participants exposed to the 1st-year target (M = 2.15), F(1, 35) = 30.79, p < .0001.

To test whether participants were more likely to generate a feared self after exposure to the recent graduate rather than the 1st-year student, two independent judges coded scenarios for two types of responses: description of a feared self and description of a hypothetical student. Agreement between the two coders was 81% for the feared self category and 100% for the hypothetical student category. Discrepancies were resolved through discussion.

Only 24% of participants exposed to the 1st-year student evinced any concern about experiencing a similar fate, whereas 75% of participants in the recent-graduate condition were fearful of becoming like the other (z = 3.13, p = .002). Among participants exposed to the recent graduate, the target represented a highly relevant example of a possible future self. As one wrote,

> The scenario I have just read happens to be one of my greatest fears at this point in my life... Though I set high goals for myself and admittedly am quite prideful, I do not think that it would be such a stretch for myself to end up in a similar situation.

Clearly, this participant perceived herself to be vulnerable to the negative fate of the target. Other participants articulated even more clearly defined feared selves in response to the simulation exercise. For example, one participant commented:

> The scenario that I imagined is, actually, my worst nightmare. I imagined myself working at [a fast food restaurant], with those little microphones that they wear around their head, and explaining to an angry customer that, “Yes, our coffee does get that hot.” But while I’m standing there, I’m thinking to myself, “How the hell did I end up here with a B.A. in English from the University of Toronto?” Wasn’t the slogan always, “Great Minds for a Great Future?” Well, from the looks of things, my future wasn’t so great, as they put it. But even though I’m just imagining this happening to me, I fear it might actually come true.

Evidently, the downward comparison prompted this student to generate a vivid portrait of a highly negative future self.

Those participants exposed to the recent graduate were clearly concerned about experiencing a similarly gloomy life trajectory. In contrast, those exposed to the 1st-year student showed little evidence that a feared self had been generated, focusing instead on how such a dismal fate might be experienced by a generic student. As in Study 1, these participants typically described a student in their scenario in the second person (e.g., “I think to get as far gone as that young lady you would have to be very depressed, and once you got behind... you would think that there was no way out and fall behind”) or third person, for example:

> A student living off campus and far away from their home might find difficulty making close friendships... even the best students find their grades significantly lower than when they were in high school. This lowering of grades hurts the student’s self-confidence and then they begin to question if they belong.

Fully 53% of participants exposed to the 1st-year student generated a hypothetical student, whereas only 5% of participants exposed to the recent graduate did so (z = 3.14, p = .002).

In sum, the open-ended responses provide strong evidence that the vulnerability manipulation was successful; participants’ reactions to the two targets were strikingly different. In the low-vulnerability condition, participants described scenarios in which a generic student could suffer a negative fate without imagining how they themselves could experience this miserable outcome. In contrast, in the high-vulnerability condition, participants clearly mapped their own lives onto that of the target, generating a similarly dismal future self.

**Self-ratings.** I averaged positive and negative self-rating items into a single index of success, after first reverse scoring the negative items (Cronbach’s α = .89). The effect of condition was significant, F(2, 54) = 7.71, p = .001 (see Figure 6). A Fisher’s protected least significant difference (LSD) test revealed that, as expected, participants exposed to the 1st-year target rated themselves more positively than did controls (p = .05) or participants exposed to the recent graduate (p = .0002). Participants exposed to the recent graduate rated themselves less positively than controls rated themselves (p = .05). Thus, whereas the 1st-year target enhanced self-perceptions, the recent-graduate target deflated self-perceptions.

![Figure 6](image-url) Self-ratings of participants in no-target, 1st-year, and recent-graduate conditions (Study 3).
As in Studies 1 and 2, self-ratings of participants exposed to a target were negatively correlated with plausibility ratings ($r = -0.47, p = .003$); those participants who perceived themselves to be least vulnerable to the target’s outcome, and so had the most difficulty articulating a realistic scenario, were most positively affected by the target.

**Prevention and promotion orientation.** Prevention items were averaged into a single index of prevention orientation (Cronbach’s $\alpha = .83$). There was a significant effect of comparison condition, $F(2, 54) = 8.52, p = .0006$ (see Figure 7). A Fisher’s protected LSD test revealed that, as predicted, participants exposed to the recent graduate had a significantly stronger prevention orientation than the no-target control participants ($p = .02$) and participants exposed to the 1st-year student ($p = .0001$). Unexpectedly, the prevention orientation of participants exposed to the 1st-year student was somewhat lower than that of no-target controls ($p = .09$).

Prevention orientation was positively correlated with the coded plausibility of the open-ended scenarios ($r = .63, p < .0001$); the students who articulated better-developed feared selves in response to the comparison were more likely to focus on the avoidance of negative future outcomes.

Promotion items were averaged into a single index of promotion orientation (Cronbach’s $\alpha = .77$). Promotion ratings did not differ significantly across condition, $F(2, 54) = 2.18, p = .12$. Promotion orientation was not correlated with the plausibility of the scenario description ($r = -.14, p = .42$).

Thus, consistent with Study 2, when participants’ vulnerability to the target’s outcome was high, the worse-off other boosted prevention orientation. When vulnerability was low, prevention orientation tended to be reduced; it may be the case that when one’s self-perceptions are enhanced by a downward comparison, one becomes complacent about the future and less concerned with avoiding possible negative outcomes.

In contrast to Study 2, however, participants in the high-vulnerability condition did not show a significant drop in promotion orientation. In Study 2, participants may have viewed the three promotion items as direct opposites of the three prevention items; indeed, there was a strong negative correlation between the promotion and prevention subscales ($r = -0.41, p = .01$). In Study 3, the regulatory focus scale included a larger set of items for each type of orientation, and the prevention subscale, in particular, was more reliable; the correlation between promotion and prevention items was weaker and nonsignificant ($r = -0.15, p = .28$), suggesting that this scale may have provided a better measure of independent prevention and promotion goals. The prevention and promotion results in Study 3 suggest that worse-off others can boost individuals’ focus on preventing negative outcomes without altering their focus on promoting positive outcomes.

**Motivation ratings.** Motivation items were averaged into a single index of academic motivation (Cronbach’s $\alpha = .81$). A one-way ANOVA revealed a significant effect of comparison condition, $F(2, 54) = 4.41, p = .02$ (see Figure 8). A Fisher’s protected LSD test revealed that, as predicted, participants exposed to the recent graduate were more motivated than no-target control participants ($p = .007$) and those participants exposed to the 1st-year student ($p = .03$). The motivation ratings of participants exposed to the 1st-year student did not differ from those of no-target controls ($p = .87$). Thus, participants who were vulnerable to the outcome experienced by the target were more motivated to work hard than were participants who were less vulnerable to this outcome or participants exposed to no target.

Motivation ratings were positively correlated with the coders’ ratings of the scenario’s plausibility ($r = .36, p = .03$). To the extent that participants generated a scenario that seemed highly likely to occur, their intentions to work hard were more pronounced. Moreover, among participants exposed to a downward target, motivation ratings were positively correlated with prevention orientation ($r = .52, p = .001$). Those participants who were most strongly concerned with avoiding future failure were also the most highly motivated. Motivation was not correlated with promotion orientation ($r = -.08, p = .69$).

**Similarity to target.** Similarity ratings of participants exposed to the recent graduate ($M = 6.35$) were marginally higher than those of participants in the 1st-year condition ($M = 4.94$), $F(1, 35) = 3.48, p = .07$. It was predicted that similarity, however, would not account for the obtained differences on the dependent measures. When similarity was controlled for, the difference between the 1st-year student and recent-graduate target conditions remained highly significant for scenario plausibility ratings, $F(1, 34) = 25.09, p < .0001$, self-ratings, $F(1, 34) = 10.90, p = .002$, prevention orientation, $F(1, 34) = 14.96, p = .0005$, and motivation ratings, $F(1, 34) = 5.11, p = .03$. Thus, the differences between the target conditions do not appear to be the result of differences in perceived similarity to the targets.

**Perceived control.** I averaged perceived control items into a single index after first reverse scoring the negative items (Cronbach’s $\alpha = .83$). A one-way ANOVA revealed no significant differences among the target conditions ($F < 1$), suggesting that perceived control cannot account for differences in self-ratings, prevention orientation, and motivation among these groups. Across conditions, ratings on the 7-point control scale were high ($M = 5.50$), indicating that participants generally believed that they had a high degree of control over their future success. This is consistent with the possibility that even those participants in the high-vulnerability condition believed they could work to avoid a similarly negative outcome. If one has some control over one’s fate, one can strive to avert future failures; one can imagine a
plausible undesirable outcome without necessarily believing this outcome to be beyond one’s control. Indeed, perceived control was not significantly correlated with the plausibility of participants’ scenarios ($r = .07, p = .68$).

**Perceived vulnerability.** It was predicted that participants’ concern that they could become like the other, their perceived vulnerability to the target’s outcome, would mediate the impact of target condition on the dependent variables. That is, to the extent that the target activated participants’ feelings of vulnerability, their self-ratings would be diminished and their motivation to avoid this negative outcome would be enhanced. I conducted a series of mediation analyses to test this possibility.

Perceived vulnerability items were averaged into a single index (Cronbach’s $\alpha = .80$). Participants exposed to the recent graduate rated their vulnerability higher ($M = 4.48$) than did participants exposed to the 1st-year student ($M = 3.24$). To test whether perceived vulnerability would mediate the impact of the target type on self-ratings, I conducted a series of regression analyses (Baron & Kenny, 1986). I first regressed self-ratings on target type and obtained a significant effect ($\beta = .55, p = .0004$). Next, I regressed the mediator, perceived vulnerability, on target type and obtained a significant effect ($\beta = .51, p = .001$). Third, I regressed self-ratings on target type and perceived vulnerability. Perceived vulnerability had a significant effect on self-ratings ($\beta = .38, p = .02$). The effect of target type on self-ratings was lower in the third than in the first equation ($\beta = .36, p = .03$). The mediated effect of target type on self-ratings was significant ($z = 2.04, p = .04$).

Next, I tested whether perceived vulnerability mediated the effect of target type on prevention orientation. I first regressed prevention orientation on target type and obtained a significant effect ($\beta = .60, p < .0001$). Second, I regressed the mediator, perceived vulnerability on target type, and obtained a significant effect ($\beta = .51, p = .001$). Third, I regressed prevention orientation on both perceived vulnerability and target type. The effect of perceived vulnerability on prevention motivation was significant ($\beta = .40, p = .008$), and the effect of target type on prevention motivation was lower in the third than in the first regression equation ($\beta = .40, p = .009$). The test of the mediated pathway was significant ($z = 2.24, p = .025$).

Finally, I considered the possibility that perceived vulnerability would mediate the impact of target type on motivation ratings. However, the correlation between motivation and perceived vulnerability was not significant ($r = .23, p = .17$), so the conditions for testing mediation were not met.

Taken together, these mediation analyses shed light on the process by which downward comparisons influence self-evaluations and regulatory focus. A worse-off other who represents a plausible future self activates strong concerns about one’s vulnerability to a similar fate; as a result, one feels worse about oneself, but one’s goals to prevent this outcome are enhanced. In contrast, when the worse-off other is not a plausible future self, one will not be concerned about experiencing a similar fate; one contrasts one’s own superior circumstances to those of the target, and one’s self-perceptions are boosted.

**Comparative adjustment.** Participants exposed to the 1st-year student indicated that they were more superior to this target ($M = 1.65$) than did participants exposed to the recent graduate ($M = .70$), $F(1, 35) = 6.85, p = .01$. This difference is not surprising, given that participants believe they are more vulnerable to the fate of the recent graduate than that of the 1st-year student. In both conditions, however, participants perceived their own adjustment to be superior to that of the target, suggesting that the target was indeed perceived to be a downward comparison.

**General Discussion**

Taken together, these studies suggest that downward comparisons do not exert a spontaneous impact on the self, but do influence self-evaluations, regulatory focus, and motivation only if individuals are encouraged to draw an analogy between themselves and the worse-off other. The direction of the other’s impact will be determined by their susceptibility to the other’s misfortunes: If individuals believe themselves to be reasonably safe from experiencing the other’s negative fate, the comparison will enhance their self-evaluations; if, however, they believe themselves to be at high risk of experiencing a similarly unpleasant fate, the comparison will deflate their self-perceptions, but boost their motivation to prevent this negative outcome.

This research provides important insights into what makes another person a relevant comparison other. Because individuals generally see themselves in highly positive terms and believe themselves to be unlikely to experience negative future events (Taylor & Brown, 1988), they will not typically see a worse-off other as a useful source of information about the self. However, as Studies 1 and 2 suggest, it may be relatively easy to render seemingly irrelevant downward targets more relevant. The worse-off other did not exert a spontaneous impact on the self, but a brief period of reflection influenced the analogical mappings that individuals formed between themselves and the other, leading them to draw inferences about themselves. Thus, if we can highlight correspondences between an individual and a superficially irrelevant comparison target, the target will exert a stronger influence on the self.

In these studies, participants were encouraged to draw parallels through a simulation exercise. However, it is possible that, for some individuals, the relevance of a worse-off other is more
immediately apparent. For example, individuals who are strongly self-focused at the time they encounter a worse-off other may be more aware of self–other correspondences. In addition, individuals who are encountering personal difficulties of their own may spontaneously perceive similarities between themselves and another person in unfortunate circumstances, noting that they both are struggling with some kind of problem. This possibility is consistent with a long tradition of research suggesting that downward comparisons are most relevant for individuals experiencing a threat to the self (e.g., Taylor et al., 1996; Wills, 1981). Nevertheless, the present studies indicate that when nonthreatened individuals are encouraged to draw such parallels, they too are affected by the downward comparison.

Among those individuals who drew an analogy between themselves and the other, the direction of the worse-off other’s impact depended on whether individuals could imagine a plausible similar outcome for themselves. In Studies 1 and 3, participants exposed to a poorly coping 1st-year student were positively affected. Because the other was a student in their own peer group, participants were unlikely to see themselves ending up in a similarly negative situation; these individuals knew enough about their own capabilities to be reasonably sure they could avoid such a fate, and, consequently, their self-ratings were boosted by the comparison. When one believes one is safe from a similarly dismal outcome, one can derive satisfaction from one’s superiority. In contrast, in Studies 2 and 3, participants exposed to a poorly coping recent graduate were threatened by the comparison. Because they could imagine, with relative ease, that they too might graduate without finding a good job, these students’ self-evaluations were deflated. However, although their self-ratings dropped, their focus on preventing failure was enhanced. In Study 3, mediation analyses provide further evidence that, to the extent that a worse-off other activates concerns about experiencing a similar outcome, self-ratings will be diminished but prevention goals will be enhanced.

Previous theorists have suggested that the direction of downward comparison outcomes will be determined by perceived control: Downward comparisons are most likely to pose a self-threat when individuals believe they cannot determine their standing on the comparison dimension and thus cannot ensure that they will not themselves experience a similarly negative outcome (e.g., Aspinwall, 1997; Buunk et al., 1990; Major, Testa & Bylsma, 1991; Taylor et al., 1996; Wood & VanderZee, 1997); under these circumstances, one can only dread one’s own future misery, with no hope of avoiding it. In Study 3, however, participants’ ratings of perceived control indicated that they did in fact believe they had a high degree of control over their future level of success. In addition, participants exposed to the recent graduate experienced enhanced motivation: They were actively planning to pursue activities aimed at averting the negative fate experienced by the target, again suggesting that they believed they had some control over their future prospects. Thus, the threatening impact of the recent graduate target seems to be the result of high perceived vulnerability rather than low perceived control. Perceived control may nevertheless be important in determining the extent to which downward comparisons enhance motivation. It is possible that among individuals who believe that they have little or no ability to improve their standing on a comparison dimension, a worse-off other will threaten the self without boosting motivation. In one study, for example, students scoring high on dispositional pessimism who consistently compared themselves to worse-off others experienced depression and performance decrements (Gibbons, Blanton, Gerrard, Buunk, & Eggleston, 2000); for these individuals, the potential for future improvement likely seemed low, and, consequently, downward comparisons were not motivating. It may be that worse-off others will activate prevention goals only when perceived control is high.

These studies have important practical as well as theoretical implications. It has long been assumed in popular culture that worse-off others can motivate individuals to change their behaviors. Various health-promotion and educational programs showcase examples of individuals who have suffered a negative outcome, suggesting, “You’d better change your habits if you don’t want to end up like that.” Presumably, if one is frightened of becoming like a worse-off other in the future, one will alter one’s activities to prevent this negative outcome from occurring. However, this motivation effect has not to date been addressed in the social comparison literature. Studies 1 and 2 indicate that individuals may be unaffected by such examples unless they are prompted to consider parallels between themselves and the negative example. Studies 2 and 3 suggest that when downward comparisons do exert an impact, they can indeed affect one’s motivation, but in a very specific way: by boosting one’s focus on prevention. Thus, downward comparisons can serve an important self-regulatory function, encouraging one to avoid potentially damaging situations that may lie ahead.

In this article, I have discussed how downward comparisons can influence individuals’ regulatory strategies. It is also possible that chronic regulatory focus will affect how one responds to different social comparisons: Individuals may be most influenced by comparisons that are congruent with their existing regulatory focus. For example, individuals who are generally prevention oriented may be more motivated by downward comparisons; a worse-off other exemplifies the unpleasant outcome that they themselves are focused on averting. Indeed, prevention-focused individuals may be motivated to draw parallels between themselves and worse-off others even when they are not experiencing a specific self-threat. In contrast, individuals who are typically promotion focused are most likely to draw inferences about themselves when they are exposed to a better-off other; the superior other represents a positive outcome and provides them with a guide to achieving future success. Thus, chronic or temporarily induced individual differences in self-regulatory focus may be important in determining whether individuals are more likely to select, and to be motivated by, upward or downward comparisons.

This interplay between social comparison and regulatory focus may have important practical applications. Programs that seek to change individuals’ behaviors through social comparison processes may need to take into account both the perceived vulnerability and the initial regulatory focus of the individuals involved. For example, consider a program that highlights the example of an individual who has developed lung cancer, assuming that this individual’s unhappy circumstances will frighten other smokers into changing their behavior. It is not clear that the worse-off other will have any impact on other individuals or, if there is an effect, that the impact will be in the desired direction. Some smokers may simply fail to draw a parallel between the target and themselves, whereas others, who perceive their vulnerability to the other’s condition to be low, may simply take comfort from their own
superiority (“I only smoke one pack a day—I’m much better off than that guy!”). Among individuals who do perceive themselves to be vulnerable, it may be that prevention-focused individuals, who are more sensitive to the presence of negative outcomes, will be more strongly influenced by the other’s plight than promotion-focused individuals are. Promotion-oriented smokers may be more strongly affected by a successful example of a former smoker who has adopted a healthier lifestyle. A variety of health-related programs can be framed in either promotion (achieve good health) or prevention (avoid illness) terms; the success of such programs may depend on whether the framing of the program is congruent with the self-regulatory strategies of the target audience.

References


Received August 3, 2001
Accepted August 5, 2001

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