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Effect of Personal Injustice on Attributions for the Success of Others

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The current research tested competing predictions on whether the experience of personal injustice would increase or decrease internal attributions of others' success. Compared with the control condition, Study 1 found that individuals gave less credit to another person for his promotion after they recalled their own unfair experience. Study 2 revealed that personal injustice led weak just-world believers, but not strong just-world believers, to perceive a lottery winner to be less deserving. Study 3 showed that these effects were mediated by resentment. The findings demonstrate that thinking about one's own injustice can lead to a more cynical outlook on others' positive outcomes.

Compared with the hi-tech boom in the 1990s and prosperity in the housing market in the early 21st century, the U.S. economy between 2008 and 2009 was in the worst recession since the Great Depression. A lot of companies were on the verge of bankruptcy. To save the dying companies from going out of business and bring the economy back eventually, the government stepped in and offered \$700 billion to various financial organizations in 2008. In this context, it was disclosed in early 2009 that American International Group (AIG), which received \$170 billion in taxpayer bailouts, planned to pay about \$165 million in bonus to its executives. At the same time, retirement money in Government Retirement Accounts dropped substantially. Many people saw the shrinkage of their Individual Retirement Accounts (IRAs) balances as unfair and undeserved. How did the perception that they have suffered from injustice affect their opinion of positive outcomes such as the controversial AIG bonus payouts (Ackerman, 2009)?

Research on emotions suggests that perceived injustice, and its accompanying feelings of anger and resentment (Feather & Nairn, 2005; Weiner, Graham, &

Chandler, 1982), can create less charitable interpretations of others and their outcomes. These negative feelings triggered in one unfair situation can automatically elicit hostile cognitions in other, unrelated situations because of the carryover effects of resentment (e.g., Bower & Forgas, 2001; Goldberg, Lerner, & Tetlock, 1999; Lerner, Goldberg, & Tetlock, 1998). Therefore, when individuals perceived the shrinkage of their IRA as unfair, they may have been resentful. The elicited resentment and anger could have led them to blame the recipients of AIG bonuses.

By contrast, the justice-motive theory (Lerner, 1980) suggests that perceived injustice can create very different interpretations of others and their outcomes. According to the justice-motive theory, people have a fundamental need to believe the world is a just place. Upon encountering injustice, the justice motive is activated. Individuals first try to eliminate the injustice to maintain their just-world belief. If individuals do not have the opportunity or ability to eliminate the injustice, however, they persuade themselves that no injustice has occurred by blaming the victim (e.g., Covati, Foley, & Coffman, 2001; DePalma, Madey, Tillman, & Wheeler, 1999; Lerner & Simmons, 1966) or lionizing the winner (e.g., Callan, Ellard, & Nicol, 2006; Dion & Dion, 1987; Johnston, 2009; Lerner, 1965). It is therefore possible that when people perceived the shrinkage of their IRA as unfair,

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they were also motivated to seek justice in the situation. As they failed to change the status quo, they may have tried to persuade themselves that the Wall Streeters deserved to receive the bonus. The perceived injustice thus might have led individuals to justify AIG bonus payouts.

In this way, research on emotional reactions to injustice and the justice-motive theory have contradictory predictions of the relationship between the perceived injustice and attributions for the positive outcomes of others. The current study attempts to address this difference by exploring how the perception of personal injustice affects attributions for the positive outcomes of others.

THE CARRYOVER EFFECT OF RESENTMENT AND ANGER

Research on emotions posits that every emotion has its specific cognitive and motivational properties (Arnold, 1960; Frijda, 1988; Lerner & Keltner, 2000, 2001; Smith & Ellsworth, 1985). The associated appraisal tendencies carry over to affect appraisals of subsequent events, even those that are unrelated to the situation eliciting the emotion (e.g., Keltner, Ellsworth, & Edwards, 1993; Tiedens & Linton, 2001). In addition, the motivational properties of the emotion can be carried over to subsequent situations and influence people's judgments and decisions (Young, Tiedens, Jung, & Tsai, 2011).

According to this line of research on emotions and decision making, resentment developed by personal injustice can affect attributions about others' outcomes. When individuals think that they have been treated unfairly, they can feel resentful or angry (Lazarus, 1991), which can lead to more hostile attributions about the behaviors of others¹ (e.g., Goldberg et al., 1999; Lerner et al., 1998; Quigley & Tedeschi, 1996). For instance, Goldberg et al. (1999) found that anger about a crime could influence judgments about the perpetrator's unrelated acts, ultimately leading to more punitive judgments about the perpetrator. Similarly, Quigley and Tedeschi (1996) found that anger experienced in one situation can elicit a motive to blame people in other situations.

Because resentment and anger can bias individuals' judgments and decisions, regardless of whether the current decisions relate to the source of one's resentment, they can harm interpersonal and intergroup relations. Research has shown that anger makes employees feel less trust for their coworkers even though these people have

nothing to do with the source of the employees' anger (Dunn & Schweitzer, 2005). Angry people also have more prejudicial attitudes toward an outgroup than individuals in other emotional states, enhancing the potential of deleterious effects in intergroup relations (DeSteno, Dasgupta, Bartlett, & Cajdric, 2004).

These findings suggest that individuals who experience injustice may feel resentful of others' good fortune and give others less credit for their positive outcomes.

THE JUSTICE-MOTIVE THEORY AND ATTRIBUTIONS

The relationship between perceived injustice and attribution has also been studied by the justice-motive theory. According to the justice-motive theory (Lerner, 1980), people have a fundamental need to believe that the world is a just place where they get what they deserve. Upon encountering injustice, the justice motive is activated. Individuals try to eliminate the injustice by helping the innocent victim (e.g., Covati et al., 2001; DePalma et al., 1999; Lerner & Simmons, 1966). However, if individuals do not have the opportunity to help or to compensate the victim, they persuade themselves that no injustice has occurred. One way to do this is to blame the victim by making internal attributions for the suffering, which maintains one's belief in justice.

The justice-motive theory has been tested with various targets such as the unemployed (Skarlicki, Folger, & Tesluk, 1999), victims of poverty (Pancer, 1988), the handicapped (Murphy-Berman, Sullivan, & Berman, 1993), AIDS patients (Murphy-Berman & Berman, 1990; Triplet & Sugarman, 1987), rape victims (Gilmartin-Zena, 1983; Karuza & Carey, 1984), cancer patients (Braman & Lambert, 2001), and numerous others (for reviews, see Hafer & Bogue, 2005; Lerner, 1980; Lerner & Miller, 1978). One of the consistent findings in the justice-motive research is that the justice motive leads to more internal attributions for the misfortunes of others but a greater tendency to help or compensate victims when given a chance.

The justice-motive theory also holds for reactions to the positive outcome of others. Because individuals have the need to believe that the world is a just place, they often associate good characteristics with good outcomes. When someone wins a lottery, the person is likely to be judged to deserve it because "good things happen to good people" (Callan et al., 2006). Similarly, when someone is selected to receive a reward for a team project, the person is likely to be evaluated to have a better performance than a partner, even if the selection was dictated by chance (Johnston, 2009; Lerner, 1965). For the same reason, people like physically attractive others because good-looking people are perceived to possess good character

¹Resentment and anger share many commonalities, although some scholars have posited subtle distinctions between the two emotions (Mackie & Smith, 2002; Solomon, 1993).

(Dion & Dion, 1987). Therefore, the justice motive leads individuals to make more internal attributions for the positive outcome of others and to like people with positive outcomes.

From the justice-motive perspective, when individuals feel that they have been unfairly treated, their justice motive is activated. This activated justice motive leads individuals to make more internal attributions for the positive outcome of others.

WORKING HYPOTHESES

The central problem, though, is that personal injustice arouses not only the justice motive but also resentment. Although the research on emotional reactions to injustice predicts that personal injustice causes resentment, which reduces internal attributions for other's positive outcomes, the justice-motive theory predicts that personal injustice activates justice motive, which gives rise to internal attributions. Therefore, it is an open question as to whether personal injustice decreases internal attributions due to resentment or increases internal attributions due to activation of the justice motive. We argue that when the perception of injustice is brought out by personal injustice, individuals give less credit to others for their positive outcomes because of the carryover effect of resentment. People usually are primarily concerned with justice in their own experiences and are secondarily concerned with justice in the experiences of others (Miller, 1977). As Lerner and Miller (1978) stated,

People will be concerned primarily with their own world, that is the environment in which they must live and function. To witness and admit to injustices in other environments does not threaten people very much because these events have little relevance for their own fates. As events become closer to their world, however, the concern with injustices increases greatly, as does the need to explain or make sense of the events. (p. 1031)

Therefore, only when individuals feel that they have gotten what they deserve is there a possibility that they would believe that the world is a just place. They are then motivated to help the victim or lionize the winner to maintain the just-world beliefs. If individuals feel that they themselves are not fairly treated their focus will be on their own plight (Miller, 1977). Under these circumstances resentment gets a higher priority than the justice motive for others. Rather than being motivated to make the world fairer for others, for example, helping others in need or respecting the person with positive outcomes, individuals interpret the positive outcomes of others with resentment, and give less credit to others for their positive outcomes. Accordingly, resentment, rather than the justice motive, should be the dominant motivating force in

most people, except for those who are constantly motivated to believe the world is a just place (Furnham, 2003).

Following this logic, we hypothesized that when the perception of injustice is elicited by personal injustice, individuals give less credit to others compared to the baseline. In addition, the perceived, personal injustice should affect the attributions via resentment. The purpose of the current research was to empirically test these hypotheses.

STUDY 1: PERCEPTION OF INJUSTICE AND ATTRIBUTIONS FOR PROMOTION

Study 1 examined the effect of personal injustice on attributions for another's positive outcome. We created two experimental conditions: In the personal injustice condition, we asked participants to recall an unjust personal experience; in the control condition, we asked participants to describe one interesting event that happened to them yesterday (adapted from Dalbert's, 2002, procedure). Then we presented all participants with a scenario in which a manager led a work team of equally high-performing employees. In the scenario participants were told that a manager was asked to choose only one of his team members for promotion. Participants then made attributions for the employee's promotion. We hypothesized that, when the perception of injustice is activated by recalling their own unfair experience, they will give less credit to the employee for his promotion compared to when it is not.

To examine whether personal injustice does have a different effect on attributions compared with the injustice of others, we included a third condition—the injustice of others condition. In this condition, we asked participants to recall an unjust event that happened to others. We expected that individuals would make more internal attributions for the employee's promotion compared to the baseline, as shown by prior research on the justice-motive theory (e.g., Callan et al., 2006; Kray & Lind, 2002).

Method

Participants. Seventy-two individuals (37 women, 35 men) at a public university participated in this experiment in an Introduction to Management course. The average age of the sample was 22.82 ($SD = 5.75$) years old, and the median was 21.00. They were informed that participating in this study was voluntary. Participants who signed up on the consent form received a questionnaire titled "Phil's Story Questionnaire."

Materials and procedure. Participants were randomly assigned to one of three conditions. In the personal injustice condition, participants were asked to

recall the most unjust thing that happened to them (other than others) and describe it in detail. Participants in the injustice of others condition were asked to recall the most unjust thing that happened to others (other than themselves) and describe it in detail. In the control condition, participants were asked to recall and describe an interesting event that happened to them yesterday.

All participants then read a scenario titled “Phil’s Story.” The scenario stated, “Phil has managed a work team in which all team members have equally-high performance for almost two years. ... Recently, he was asked to choose only one of their team members for promotion. ... After much deliberation, he chose Ed” (see the complete version in Appendix A). After reading the scenario, participants completed a questionnaire that asked for their attributions for Ed’s promotion.

Attributions. Before participants provided their responses to the questions, they were instructed first that “Ed’s success could be a joint product of factors associated with himself and factors associated with external environment.” In addition, “factors associated with himself” was illustrated by high ability, working hard, or good moral character, whereas “factors associated with external environment” was illustrated by task easiness or luck. Then participants were asked to rate the extent to which each factor contributed to Ed’s promotion on six items ($\alpha = .86$). Sample items included “Ed’s success is mainly due to 1 (factors associated with external environment) to 7 (factors associated with himself)” and “To what extent do you think the cause of Ed’s success was something that reflected on 1 (situation) to 7 (personal aspect of Ed)?”

Manipulation check. To make sure that the instruction of activating the perception of injustice provided to participants was understood as intended, participants in the personal injustice condition were asked to rate how fairly they were treated in the situation that they had described, from 1 (*not at all*) to 7 (*very*). Participants in the injustice of others condition were asked to rate how fairly the person was treated in the situation that they had described, from 1 (*not at all*) to 7 (*very*). In the control condition, participants were asked to respond to both questions.

Results

We read through participants’ responses to make sure participants wrote an event as intended. All the participants in the personal injustice condition did write about a personal injustice rather than simply an injustice directed at others that they have witnessed. In the control condition, the interesting events of yesterday denoted in participants’ responses did not reflect acts of personal or

another’s injustice. In the injustice of others condition, all but one participant wrote about an injustice that they have witnessed rather than an event they have experienced. One participant in this condition wrote the story of the “Death of Jesus Christ.” It was extremely unlikely that this participant had been physically present at that event. His response was thus excluded from analysis because he did not follow the instructions.

The manipulation check indicated that participants were affected by their perception of injustice as intended—participants in the personal injustice condition ($M = 2.25$, $SD = 1.48$) reported being treated less fairly than participants in the control condition ($M = 4.56$, $SD = 1.47$), $t(45) = 5.37$, $p < .001$, $d = 1.57$. Similarly, participants in the injustice of other condition ($M = 1.79$, $SD = 1.06$) reported the target person being treated less fairly than participants in the control condition ($M = 3.75$, $SD = 1.92$), $t(46) = 4.38$, $p < .001$, $d = 1.26$.

A one-way between-participants analysis of variance was conducted to compare the effect of injustice activation on the attributions to another’s promotion in personal injustice, control, and injustice of others conditions. There was a significant effect of injustice activation on the attributions, $F(2, 68) = 13.58$, $p < .001$. Planned comparisons indicated that the mean score for the personal injustice condition ($M = 3.59$, $SD = 0.91$) was significantly lower than the control condition ($M = 4.35$, $SD = 0.87$, $p = .004$), indicating that attributions for the other person’s success were more about the external environment after recalling personal injustice compared to the control condition. In addition, the mean score for the injustice of other condition ($M = 4.92$, $SD = 0.84$) was higher than the control condition (Figure 1; $p = .03$), indicating more internal attributions for another’s after recalling another’s injustice compared to the control condition. Taken together, these results suggest that different ways to activate injustice perception do have an effect on attributions to another’s promotion. Specifically, our results suggest that when the injustice perception is activated by personal injustice, individuals give less credit to others for their success than in the control condition. However, when the justice motive is activated by the

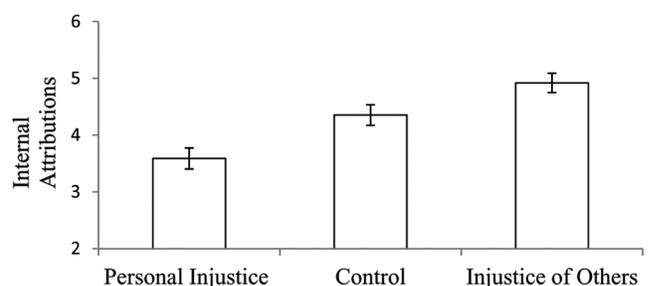


FIGURE 1 Internal attributions as a function of perceived injustice (Study 1).

injustice of others, individuals give more credit to others for their positive outcomes compared to the baseline.

Discussion

The results of Study 1 are consistent with prior findings in that when the injustice perception is activated by the injustice of others, individuals are motivated to maintain justice in the world. Therefore, they make more internal attributions to an outcome (for a review, see Hafer & Begue, 2005). The finding does not contradict prior research on emotions, because witnessing injustice experienced by others can cause a sympathy or sadness but not anger and resentment (Feather & McKee, 2009). Sympathy or sadness has not been shown to result in hostile attributions.

More important, the current study found that when the injustice perception is activated by personal injustice, individuals give less credit to the employee for his promotion. Prior research has shown that when people are unfairly treated, they tend to resent high achievers (Feather, 2008; Feather & Nairn, 2005) and are less willing to help others (Miller, 1977; Miller & Smith, 1977). In line with these findings, the current study found that, when the perception of injustice was activated by recalling their own unfair experience, individuals gave less credit to Ed for his promotion. Our study, together with prior findings indicate that when the injustice perception is activated by personal injustice, individuals displayed different cognitive, affective, and behavioral reactions compared with when the injustice perception is activated by the injustice of others.

STUDY 2: PERSONAL INJUSTICE AND ATTRIBUTIONS FOR WINNING A LOTTERY

To examine whether the relationship between personal injustice and fewer attributions to another's positive outcome revealed in Study 1 was robust, in Study 2 we tested this hypothesis in another context—someone winning a lottery. In addition, we intended to explore whether individuals with strong just-world beliefs had different response compare with individuals with weak just-world beliefs.

As previously discussed, personal injustice may arouse both the justice motive and resentment. The justice motive theory predicts that the justice motive increases internal attributions, whereas the research on emotional reactions to injustice predicts that resentment decreases internal attributions. Study 1 showed that thinking about one's own injustice experience led to fewer internal attributions, which suggested that resentment got higher priority than the justice motive. However, the motivation to believe in a just world varies by individuals (see Furnham,

2003, for a review). For individuals who hold strong just-world beliefs, the experience of personal injustice does indeed pose a problem of justice. The justice motive should increase the motivation to justify other's benefits, resulting in higher internal attributions, which might easily override the potentially more subtle resentment effect. Indeed, research has shown that individuals with strong just-world beliefs are motivated to look for fairness in situations even when their own outcome is unfavorable (Hagedoorn, Buunk, & Van de Vliert, 2002). Nonetheless, this should not necessarily be the case for individuals with weak just-world beliefs. These individuals still primarily experience resentment, which should lower any internal attributions of another's fortune.

Therefore, we hypothesized that when strong just-world believers encounter personal injustice, they should make approximately the same level of internal attributions to another's lottery win because of their strong need for justice. In contrast, for weak just-world believers, when their injustice perception is activated by personal injustice, they should give less credit to another person for his lottery win, the same pattern as we found in Study 1.

Method

Participants. Sixty-one individuals (36 women, 25 men) at a public university participated in this experiment in exchange for \$5. The average age of the sample was 21.77 ($SD = 7.39$, $Mdn = 20.00$). They were recruited by e-mail list serve for voluntary participants in behavioral studies. Participants who signed up received a link to the online studies titled Social Attitudes Questionnaire and Lottery Questionnaire. The online session was thus billed as comprising two separate and unrelated studies.

Materials and procedure. Participants signed up to participate in a study called Social Attitudes Questionnaire, which entailed completing BJW-others scale (Lipkus, Dalbert, & Siegler, 1996; $\alpha = .89$). (BJW is "Belief in a Just World.") Participants responded to each item on a 7-point scale, from 1 (*strongly disagree*) to 7 (*strongly agree*).

One week later, all participants who completed the Social Attitudes Questionnaire were eligible to participate in a study called Lottery Questionnaire. Participants were randomly assigned to one of two conditions. In the personal injustice condition, like in Study 1, participants were asked to recall the most unjust situation they had ever experienced in their lives, and then they wrote about their personal experience in detail. Participants in the control condition were asked to recall and describe the most interesting event that happened to them yesterday.

All participants then read a news story titled "Ottawa Barber, Client Share \$32M Lottery Win." It was screen-printed from the Lottery Post website (<http://www>.

lotterypost.com/news/177726). Participants were told that due to the quality of the scanner, the resolution of the image was a little low, but the characters were legible. The purpose of adding this information was to contribute to the realism.

The news was about two Ottawa men, Haddad and Detorre, who had won a \$32 million lottery after decades of buying tickets together. After reading the news, participants completed a questionnaire that asked for their attributions for Haddad's winning the lottery.

Attributions. Before participants provided their responses to the questions, they were instructed first that "Haddad's winning the lottery could be a joint product of factors associated with himself and factors associated with external environment." Then participants were asked to rate the extent to which each factor contributed to Haddad's winning the lottery on six items ($\alpha = .92$) that were the same in structure as those used in Study 1.

Manipulation check. The same manipulation check as Study 1 was used.

Results

We used the same coding procedure as in Study 1 to check whether participants followed the instructions. All responses were included for analysis.

Participants were affected by the injustice manipulation as intended: Participants in the personal injustice condition ($M = 2.35$, $SD = 1.35$) reported being treated less fairly than participants in the control condition ($M = 4.97$, $SD = 2.12$), $t(59) = 5.74$, $p < .001$, $d = 1.47$.

Consistent with the general belief that winning a lottery is purely determined by chance, most of the ratings were below the midpoint on the scale (4) of the six internal-external bipolar scales, which means participants made mostly external attributions. To test whether the just-world beliefs could moderate the relationship between the injustice perception and the attributions to another's lottery win, we regressed internal attribution on the injustice perception manipulation, mean-centered BJW score, and the interaction between the injustice perception and BJW score. BJW score did not produce a significant main effect ($b = .09$, $SE b = .19$, $p = .65$). However, the injustice perception marginally negatively related to internal attributions ($b = -.27$, $SE b = .15$, $p = .07$). In addition, the effect of the manipulation differed as a function of participant endorsement of just-world beliefs (interaction $b = .47$, $SE b = .19$, $p = .02$).

Simple slopes analyses (see Figure 2) indicated that participants with a weak belief in a just world (1 SD below the mean) gave less credit to another person for his winning a lottery when the perception of injustice is activated by personal injustice, compared to when it was not

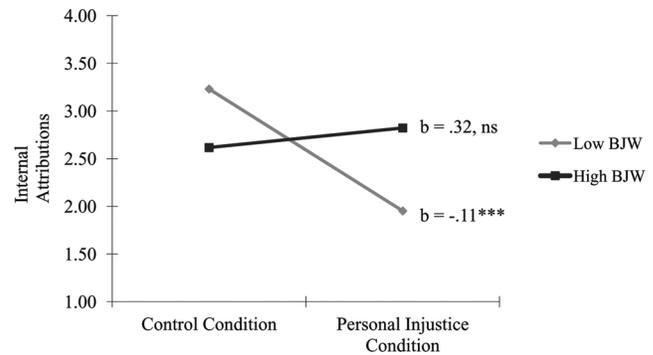


FIGURE 2 Internal attributions as a function of personal injustice and BJW score (Study 2).

activated ($b = -1.08$, $SE b = .25$, $p = .001$). In contrast, participants with a strong belief in a just world (1 SD above the mean) made the same amount of internal attributions for another's success to the chance-related event in the personal injustice activation condition as in the control condition ($b = .32$, $SE b = .40$, $p = .47$).

Discussion

Consistent with Study 1, Study 2 found that when individuals with weak just-world beliefs recalled their own unfair experience, they gave less credit to another person for his winning the lottery compared with when they did not recall an unfair experience. This was contrary to the prediction of justice-motive theory. In addition, we found that individuals with strong just-world beliefs made the same level of internal attributions for someone else's lottery win when they recalled their own unfair experience as when they did not. In this way, strong just-world believers' justice motive for others was less likely to be influenced by personal injustice. Although winning a lottery was purely determined by chance, they were still less likely to rely on external attributions and less likely to reject personal factors as causes even when their injustice experience was activated. This is consistent with prior findings about individuals with strong just-world beliefs: They are motivated to look for fair elements in situations even when their own outcome is unfavorable (Hagedoorn et al., 2002) and make more internal attributions for an outcome than individuals with weak just-world beliefs (Appelbaum, Lennon, & Aber, 2006; Dion & Dion, 1987; Mohiyeddini & Montada, 1998).

Although individuals with strong versus weak just-world beliefs have different attributions on another's positive outcomes, we did not find a main effect of dispositional BJW on attributions to the lottery win, which does not support justice-motive theory (Lerner, 1980). Therefore, Study 2 provided no reliable evidence that the justice motive was involved in translating the experience of personal injustice into attributions for

positive outcomes of others. In Study 3, we directly tested whether resentment is the way through which personal injustice affect the attributions.

STUDY 3: RESENTMENT: THE MEANS THROUGH WHICH PERSONAL INJUSTICE AFFECTS ATTRIBUTIONS

Study 3 investigated whether resentment can account for the pattern revealed in Study 2. The scenario we used in Study 3 was similar to that in Study 1. Participants were asked to make attributions for an employee's promotion. We hypothesized that, among weak just-world believers, recalling their own unfair experience would make them resentful, which in turn would lead them to adopt a more adverse attributional style for another's positive outcome—making fewer internal attributions for the employee's promotion. In contrast, among strong just-world believers, recalling their own unfair experience would not show any effects on resentment and therefore would not affect their attributions for the employee's promotion.

Method

Participants. Seventy-three individuals (53 women, 20 men) at a public university participated in this experiment in exchange for \$4. The average age of the sample was 22.00 ($SD=8.80$, $Mdn=19.00$). The recruitment procedure was the same as those in Study 2, except that the second study of Study 3 was entitled Promotion Study.

Materials and procedure. Like Study 2, participants signed up to participate in a study called Social Attitudes Questionnaire, which entailed completing the BJW-others scale (Lipkus et al., 1996; $\alpha=.86$). One week later, all participants who completed the Social Attitudes Questionnaire were eligible to participate in a study called Promotion Study. Similar to Study 2, participants were randomly assigned to one of two conditions. In the personal injustice condition, participants were asked to recall the most unjust situation they had ever experienced in their lives and to write about it in detail. Participants in the control condition were asked to recall and describe an interesting event that happened to them yesterday. They then completed a questionnaire that asked their feelings of resentment ($\alpha=.82$). According to the Oxford Dictionary, *resentment* is "bitter indignation at being treated unfairly" (<http://oxforddictionaries.com/definition/english/resentment>). It can be seen as the opposite of deservingness (feeling that one has been treated fairly). We thus developed four items to measure resentment: "Thinking back to what you wrote about,

how resentful/angry were you about the situation?" "How much do you think you deserve what you described? (reverse coding)," "To what extent do you think that you were responsible for what you wrote about? (reverse coding)" (These two items were adapted from Feather & Nairn's, 2005, study), and "How much do you think you did not deserve what you described?" Participants responded to each item on a 7-point scale from 1 (*not at all*) to 7 (*very much*).

After completed the questionnaire, participants were asked to imagine that they were working for a consulting company and were working on a project for improving the incentive system of a large local insurance company. To make a critical evaluation of the existing incentive system, they designed a survey and collected responses from all levels of the organization. Participants then read a randomly sampled response sheet. To make the scenario more real, participants were told that due to the quality of the scanner, the resolution of the image was a little low.

From the response sheet, participants knew that the respondent was a manager. He "has managed a work team in which all team members have equally-high performance for almost two years. ... Recently, I was asked to choose only one of their team members for promotion. ... After much deliberation, I chose Ed" (see complete version in Appendix B). After reading the scenario, participants completed a questionnaire that asked for their attributions for Ed's promotion.

Attributions. Like Study 1, participants were asked to rate the extent to which internal/external factors contributed to Ed's promotion on the six items ($\alpha=.83$).

Manipulation check. We used the same manipulation check as in Studies 1 and 2.

Results

We used the same coding procedure as in Studies 1 and 2 to check whether participants followed instructions. All the responses were included for analysis.

The manipulation check indicated that participants were affected by the perceived injustice as intended; participants in the personal injustice condition ($M=2.42$, $SD=1.61$) reported being treated less fairly than participants in the control condition ($M=5.84$, $SD=1.21$), $t(71)=10.27$, $p<.001$, $d=2.40$.

Attributions. To test whether we could replicate the findings from Study 2 (that just-world beliefs moderate the relationship between the injustice perception activation and their attributions to others' success), we regressed internal attribution on the injustice perception manipulation, mean-centered BJW score, and the interaction between the injustice perception and BJW score. BJW

score ($b = -.15$, $SE b = .15$, $p = .29$) did not produce a significant main effect. However, the injustice perception negatively related to internal attributions ($b = -.29$, $SE b = .10$, $p = .006$). In addition, the effect of the manipulation differed as a function of people's endorsement of just-world beliefs (interaction $b = .37$, $SE b = .15$, $p = .01$).

To visualize this interaction, we plotted the simple slopes (Aiken & West, 1991; Figure 3). Participants with a weak belief in a just world (1 *SD* below the mean) gave less credit when their injustice perception was activated by their own unfair experience as compared in the control condition ($b = -.97$, $SE b = .19$, $p = .001$). In contrast, the attribution of participants with a strong belief in a just world (1 *SD* above the mean) was unaffected by recalling their own unfair experience ($b = -.40$, $SE b = .22$, $p = .11$).

Resentment. To test whether experimental manipulations affect the resentment of individuals differently, we regressed resentment on the injustice perception manipulation, mean-centered BJW score, and the interaction between the manipulation and BJW score. BJW score ($b = .28$, $SE b = .20$, $p = .17$) did not produce a significant main effect. However, the injustice perception positively related to resentment ($b = 1.21$, $SE b = .14$, $p < .001$). In addition, the effect of the manipulation differed as a function of people's endorsement of just-world beliefs (interaction $b = -.57$, $SE b = .20$, $p = .007$).

As suggested by Aiken and West (1991), we estimated simple slopes at two levels of just-world beliefs: strong (1 *SD* above the mean) and weak (1 *SD* below the mean). Results indicated that for individuals with strong just-world beliefs, ratings of resentment did not differ depending on whether they wrote about an unjust or neutral personal event ($b = -.13$, $SE b = .46$, $p = .79$). By contrast, for individuals with weak just-world beliefs, ratings of resentment were higher if they wrote about an unjust personal event than if they wrote about a neutral personal event ($b = 1.94$, $SE b = .44$, $p = .002$). Accordingly, in the experimental condition, low BJW subjects experienced a

higher level of resentment than the interesting experience they had described in the control condition.

Mediation analysis. We hypothesized for individuals with weak just-world beliefs, recalling their own unfair experience led them to give less credit to the employee for his promotion because of the evoked resentment. To empirically test this hypothesis, we used the SPSS macro described by Preacher and Hayes (2008) to assess if the Injustice Perception \times Dispositional BJW interaction on internal attributions was mediated by resentment, with the main effects of injustice perception and dispositional BJW as covariates. With 5,000 bootstrap samples, the point estimate for the indirect effect was 0.10, with a 95% confidence interval from 0.01 to 0.29. As zero is not in the confidence interval, these results are consistent with the hypothesis that the effect of the interaction between injustice perception and dispositional BJW on internal attributions is at least partially indirect through resentment.

Discussion

Study 3 replicated the pattern that we found in Study 2. Weak just-world believers gave less credit to another person for his promotion after they recalled their own unfair experience compared with when they did not. However, strong just-world believers made similar levels of internal attributions for the promotion after recalling their unfair experience. In addition, the current study suggested that resentment was the way through which the personal injustice affected attributions. Specifically, when weak just-world believers recall their own injustice, they become resentful and further adopt a resentful attributional style in accounting for another's positive outcome. This is consistent with Feather's (2008) and Feather and Nairn's (2005) work—concerns with one's own undeserved outcome might lead one to resent others' successes. In contrast, for strong just-world believers, recalling their own unfair experience did not bring forth too much resentment. They might see their own experience of deprivation as fitting into a broader sense of justice and so did not resent another's positive outcome. Instead, they made the same kind of attributions for the employee's promotion as when they were not asked to recall their own injustice. This is consistent with prior findings that individuals with strong just-world beliefs are better at interpreting events in a meaningful way and have a better mental health—they experience less anger (Dalbert, 2002), exhibit a more positive mood (Bulman & Wortman, 1977), are less likely to be stressful or depressed (Otto, Boos, Dalbert, Schöps, & Hoyer, 2006; Otto & Schmidt, 2007; Ritter, Benson, & Snyder, 1990), and are more satisfied with their lives (Dzuka & Dalbert, 2007; Lipkus et al., 1996).

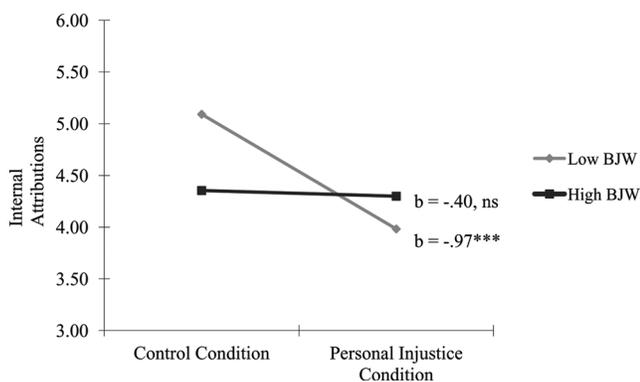


FIGURE 3 Internal attributions as a function of personal injustice and BJW score (Study 3).

GENERAL DISCUSSION

The objective of the current research was to examine how perception of injustice influences attributions for the positive outcome of others when it is activated by personal injustice. In Study 1 we demonstrated that when perception of injustice was activated by recalling their own unfair experience, individuals gave less credit to another person for his promotion. In Study 2 we revealed that in a purely chance-determined context—someone winning a lottery—the pattern from Study 1 only held for individuals with weak just-world beliefs. For those with strong just-world beliefs, their attributions were unaffected by recalling their own unfair experience. In Study 3 we explored the underlying mechanism of the aforementioned pattern. We found that for individuals with weak just-world beliefs, recalling their own unfair experience evoked their resentment, and the elicited resentment was carried over to an unrelated situation and, therefore, they gave less credit to another person for his positive outcome. In contrast, for those with strong just-world beliefs recalling their own unfair experience did not bring out much resentment, and they made similar internal attributions for another's promotion.

Theoretical Implications

The carryover effect of resentment and anger. Resentment is a form of anger that may involve inaction rather than the desire to strike against (Mark & Folger, 1984). Prior work has explored many consequences of anger (for a review, see Lerner & Tiedens, 2006), but not many have explored the consequences of resentment. The current study contributes to this field by specifically exploring the effect of resentment on attributions in unrelated situations.

In addition, prior research focuses on how resentment or anger influences attributions of *negative* events in unrelated situations. A consistent finding is that resentment leads to more punitive attributions for the perpetrator—the person who benefits from the event. The current study extends prior research by testing this resentful attribution style for *positive* events. Our results show that whether the positive outcome comes from a purely chance-determined event or from an ambiguous promotion, most individuals tend to give less credit to others for their positive outcomes when they are resentful. All of these findings suggest that once resentment or anger is activated, it colors the lens through which people perceive the world. Through this lens, individuals do not think those who benefit from the situation deserve what they get. They therefore tend to punish the perpetrator more harshly (Goldberg et al., 1999), are more cynical about people who receive positive outcomes (this study), and feel happy

when the high achievers fail (Feather, 2008; Feather, Volkmer, & McKee, 1991).

Another moderator of the justice-motive theory. Although the general consensus is that the justice motive leads to more internal attributions of an outcome, be it negative or positive, the relationship between the justice motive and internal attributions is not universal and can be strengthened or weakened by several factors such as individual difference in a belief in a just world (e.g., Hafer & Olson, 1998), social identification (e.g., Aderman, Brehm, & Katz, 1974; Chaikin & Darley, 1973), and personality (e.g., Lambert, Burroughs, & Chasteen, 1998). The current study suggests another factor that can influence the relationship between the justice motive and internal attributions—how the justice motive is activated, that is, whether it is activated by the misfortunes of others or by personal injustice. Several studies suggest that individuals have different behavioral and affective reactions to a victim depending on whether the victim is someone else or whether they themselves are the victim. For instance, when the justice motive is activated by the misfortune of others, it makes individuals compensate or help a victim when there is an opportunity (e.g., Covati et al., 2001; DePalma et al., 1999; Lerner & Simmons, 1966). However, when people feel unfairly treated and receive undeserved outcomes themselves (i.e., the justice motive is activated by personal injustice), they are *not* motivated to work for a person in need (Miller, 1977). Similarly, studies have shown that individuals have different affective responses to others when they are the target of injustice. As previously mentioned, when the justice motive is activated by the outcome of others, it makes people *like* others with positive outcomes such as being physically attractive (Dion & Dion, 1987). However, when the justice motive is activated by personal injustice such as receiving undeserved negative outcomes, individuals show *resentment* to the person with positive outcomes, even when the receiver actually deserves the reward (Feather, 2008; Feather & Nairn, 2005). Consistent with these findings, the current study found that when personal deservingness is threatened, most people do not think achievers deserve good outcomes. Instead of lionizing the winner, people give less credit to others for their success.

Practical Implications

The current research suggests that situations may prompt individuals to think about their own unjust outcomes, which leads them to give different explanations for another's success than they would otherwise. Specifically, when individuals feel unfairly treated, they become resentful. Resentment makes them think that others with positive outcomes do not deserve their rewards. In the workplace

feelings of personal injustice can be elicited by any event within or outside organizations. Organizational restructuring, organizational policy changes, unfair treatment from immediate supervisors, coworkers, customers, or subordinates—all can cause feelings of personal injustice. Outside organizations, unjust complaints from customers, and conflicts with family members or friends can lead to a feeling of personal injustice as well. Once the feeling of personal injustice is elicited, it affects the employee's reactions to the positive outcome of others even when it has nothing to do with the injustice.

The current research findings also shed light on the public controversy surrounding the AIG bonus payouts mentioned in the introduction, namely, that even when their company needed a government bailout to survive, AIG executives received large bonuses to which they were contractually entitled. However, the situation in 2009 was that the economy was sliding and pensions, IRAs, and stocks were not secured. The shrinkage of IRA balances likely elicited a feeling of unfairness, and people did not think they deserved these negative outcomes. Therefore, they did not make favorable internal attributions for the executive bonus distribution. In other words, people did not think that those executives deserved the contractually obligated bonuses and consequently flew into rage at the AIG bonus payout (Ackerman, 2009).

Limitations and Future Directions

One limitation of the current work is that it only investigated the effect of one feeling—resentment—on attributions for positive outcomes such as another employee's promotion and another person's lottery win. Future research could investigate whether other feelings, such as guilt or pride, have similar effects on the attributions. In the current study the personal injustice is negative; that is, someone receives bad outcomes due to the injustice. Under the circumstances, resentment is triggered. If the personal injustice is positive (e.g., people recall a scenario in which they are the one who benefits from injustice), how will they attribute another's positive outcomes? Will the activated feeling of guilt or pleasure (Feather & McKee, 2009) serve as a mediator and affect the way people interpret social events?

Another limitation is the samples that we used—all of our participants were residents in the United States, a culture encouraging people to maximize pleasantness and minimize unpleasantness. Once unpleasantness, such as a feeling of resentment appears, it is not surprising that it has great impact on individuals' behaviors. Recent study, however, revealed a different ideology about emotions in East Asian cultures, which value balance of emotions (e.g., Leu et al., 2010). It is, therefore, possible that individuals in East Asian cultures experience different

emotions when facing personal injustice. If so, future research should look at how culture influences the carry-over effect of resentment.

Future studies could see if the attribution pattern would hold if one's injustice was linked to the outcome that one was judging. As in the opening example about AIG, AIG may have actually played a role in the injustice that one has experienced. It would be interesting to see whether under these circumstances the strong just-world believers would still give AIG executives who received large bonuses the credit by making internal attributions for their success.

REFERENCES

- Ackerman, G. (2009). *AIG bonus payments made in the wake of a \$200-billion bailout*. U.S. House Financial Services subcommittee, Washington, DC.
- Aderman, D., Brehm, S. S., & Katz, L. B. (1974). Empathic observations of an innocent victim: The just world revisited. *Journal of Personality and Social Psychology*, 29, 342–347.
- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA: Sage.
- Appelbaum, L. D., Lennon, M. C., & Aber, J. L. (2006). When effort is threatening: The influence of the belief in a just world on Americans' attitudes toward antipoverty policy. *Political Psychology*, 27, 387–402.
- Arnold, M. B. (1960). *Emotion and personality* (Vol. I and II). New York, NY: Columbia University Press.
- Bower, G. H., & Forgas, J. P. (2001). Mood and social memory. In J. P. Forgas (Ed.), *Handbook of affect and social cognition* (pp. 95–120). Mahwah, NJ: Erlbaum.
- Braman, A. C., & Lambert, A. J. (2001). Punishing individuals for their infirmities: Effects of personal responsibility, just world beliefs, and in-group/out-group status. *Journal of Applied Social Psychology*, 31, 1096–1109.
- Bulman, R., & Wortman, C. B. (1977). Attributions of blame and coping in the "real world": Severe accident victims react to their lot. *Journal of Personality and Social Psychology*, 35, 351–363.
- Callan, M. J., Ellard, J. H., & Nicol, J. E. (2006). The belief in a just world and immanent justice reasoning in adults. *Personality and Social Psychology Bulletin*, 32, 1646–1658.
- Chaikin, A. L., & Darley, J. M. (1973). Victim or perpetrator? Defensive attribution of responsibility and the need for order and justice. *Journal of Personality and Social Psychology*, 25, 268–275.
- Covati, C. J., Foley, L. A., & Coffman, K. A. (2001). Surviving spouse's demeanor and role theory in a wrongful death civil trial. *American Journal of Forensic Psychology*, 19, 41–56.
- Dalbert, C. (2002). Beliefs in a just world as a buffer against anger. *Social Justice Research*, 15, 123–145.
- DePalma, M. T., Madey, S. F., Tillman, T. C., & Wheeler, J. (1999). Perceived patient responsibility and belief in a just world affect helping. *Basic and Applied Social Psychology*, 21, 131–137.
- DeSteno, D., Dasgupta, N., Bartlett, M. Y., & Caidric, A. (2004). Prejudice from thin air: The effect of emotions on automatic intergroup attitudes. *Psychological Science*, 15, 319–324.
- Dion, K. L., & Dion, K. K. (1987). Belief in a just world and physical attractiveness stereotyping. *Journal of Personality and Social Psychology*, 52, 775–780.
- Dunn, J. R., & Schweitzer, M. E. (2005). Feeling and believing: The influence of emotion on trust. *Journal of Personality and Social Psychology*, 88, 736–748.

- Dzuka, J., & Dalbert, C. (2007). Student violence against teachers: Teachers' well-being and the belief in a just world. *European Psychologist, 12*, 253–260.
- Feather, N. T. (2008). Effects of observer's own status on reactions to a high achiever's failure: Deservingness, resentment, Schadenfreude, and sympathy. *Australian Journal of Psychology, 60*, 31–43.
- Feather, N. T., & McKee, I. R. (2009). Differentiating emotions in relation to deserved or undeserved outcomes: A retrospective study of real-life events. *Cognition and Emotion, 23*, 955–977.
- Feather, N. T., & Nairn, K. (2005). Resentment, envy, Schadenfreude, and sympathy: Effects of own and other's deserved or undeserved status. *Australian Journal of Psychology, 57*, 87–102.
- Feather, N. T., Volkmer, R. E., & McKee, I. R. (1991). Attitudes towards high achievers in public life: Attributions, deservingness, personality, and affect. *Australian Journal of Psychology, 43*, 85–91.
- Frijda, N. (1988). The laws of emotion. *American Psychologist, 43*, 349–358.
- Furnham, A. (2003). Belief in a just world: Research progress over the past decade. *Personality and Individual Differences, 34*, 795–817.
- Gilmartin-Zena, P. (1983). Attribution theory and rape victim responsibility. *Deviant Behavior, 4*, 357–374.
- Goldberg, J. H., Lerner, J. S., & Tetlock, P. E. (1999). Rage and reason: The psychology of the intuitive prosecutor. *European Journal of Social Psychology, 29*, 781–785.
- Hafer, C. L., & Begue, L. (2005). Experimental research on just-world theory: Problems, developments, and future challenges. *Psychological Bulletin, 131*, 128–167.
- Hafer, C. L., & Olson, J. M. (1998). Individual differences in the belief in a just world and responses to personal misfortune. In L. Montada & M. J. Lerner (Eds.), *Responses to victimizations and belief in a just world* (pp. 65–86). New York, NY: Plenum.
- Hagedoorn, M., Buunk, B. P., & Van de Vliert, E. (2002). Do just world believers process unfair authoritative decisions differently? *Applied Psychology, 51*, 126–145.
- Johnston, J. J. (2009). Evaluation of a fortuitously rewarded other. *European Journal of Social Psychology, 6*, 375–380.
- Karuz, J. J., & Carey, T. O. (1984). Relative preference and adaptiveness of behavioral blame for observers of rape victims. *Journal of Personality, 52*, 249–260.
- Keltner, D., Ellsworth, P. C., & Edwards, K. (1993). Beyond simple pessimism: Effects of sadness and anger on social perception. *Journal of Personality & Social Psychology, 64*, 740–752.
- Kray, L. J., & Lind, E. A. (2002). The injustice of others: Social reports and the integration of others' experience in organizational justice judgments. *Organizational Behavior and Human Decision Processes, 89*, 906–924.
- Lambert, A. J., Burroughs, T., & Chasteen, A. L. (1998). Belief in a just world and right-wing authoritarianism as moderators of perceived risk. In L. Montada & M. J. Lerner (Eds.), *Responses to victimizations and belief in a just world* (pp. 107–126). New York, NY: Plenum.
- Lazarus, R. S. (1991). *Emotion and adaptation*. New York, NY: Oxford University Press.
- Lerner, J. H., Goldberg, J., & Tetlock, P. E. (1998). Sober second thought: The effects of accountability, anger, and authoritarianism on attributions of responsibility. *Personality and Social Psychology Bulletin, 24*, 563–574.
- Lerner, J. S., & Keltner, D. (2000). Beyond valence: Toward a model of emotion specific influences on judgment and choice. *Cognition and Emotion, 14*, 473–493.
- Lerner, J. S., & Keltner, D. (2001). Fear, anger and risk. *Journal of Personality and Social Psychology, 81*, 146–159.
- Lerner, J. S., & Tiedens, L. Z. (2006). Portrait of the angry decision maker: How appraisal tendencies shape anger's influence on cognition. *Journal of Behavioral Decision Making, 19*, 115–137.
- Lerner, M. J. (1965). Evaluation of performance as a function of performer's reward and attractiveness. *Journal of Personality and Social Psychology, 1*, 355–360.
- Lerner, M. J. (1980). *The belief in a just world: A fundamental delusion*. New York, NY: Plenum.
- Lerner, M. J., & Miller, D. T. (1978). Just world research and the attribution process: Looking back and ahead. *Psychological Bulletin, 85*, 1030–1051.
- Lerner, M. J., & Simmons, C. H. (1966). Observer's reaction to the "innocent victim": Compassion or rejection? *Journal of Personality and Social Psychology, 4*, 203–210.
- Leu, J., Mesquita, B., Ellsworth, P. C., Zhang, Z., Yuan, H., Buchtel, E., ... Masuda, T. (2010). Situational differences in dialectical emotions: Boundary conditions in a cultural comparison of North Americans and East Asians. *Cognition and Emotion, 24*, 419–435.
- Lipkus, I. M., Dalbert, C., & Siegler, H. C. (1996). The importance of distinguishing the belief in a just world for self versus for others: Implications for psychological well-being. *Personality and Social Psychology Bulletin, 22*, 666–677.
- Mackie, D. M., & Smith, E. R. (Eds.). (2002). *From prejudice to intergroup emotions: Differentiated reactions to social groups*. Philadelphia, PA: Psychology Press.
- Mark, M. M., & Folger, R. (1984). Responses to relative deprivation: A conceptual framework. In P. Shaver (Ed.), *Review of personality and social psychology* (Vol. 5, pp. 192–218). Beverly Hills, CA: Sage.
- Miller, D. T. (1977). Personal deservingness versus justice for others: An exploration of the justice motive. *Journal of Experimental Social Psychology, 13*, 1–13.
- Miller, D. T., & Smith, J. (1977). The effect of own deservingness and deservingness of others on children's helping behavior. *Child Development, 48*, 617–620.
- Mohiyeddini, C., & Montada, L. (1998). Belief in a just world and self-efficacy in coping with observed victimization: Results from a study about unemployment. In L. Montada & M. J. Lerner (Eds.), *Responses to victimizations and belief in a just world* (pp. 41–54). New York, NY: Plenum.
- Murphy-Berman, V., & Berman, J. J. (1990). The effects of respondents' just world beliefs and target person's social worth and awareness-of-risk on perceptions of a person with AIDS. *Social Justice Research, 4*, 215–228.
- Murphy-Berman, V., Sullivan, M., & Berman, J. J. (1993). Effects of handicap severity, responsibility, and race on impressions of substance-abusing mothers and their children. *Journal of Applied Social Psychology, 23*, 1357–1375.
- Otto, K., Boos, A., Dalbert, C., Schöps, D., & Hoyer, J. (2006). Post-traumatic symptoms, depression, and anxiety of flood victims: The impact of the belief in a just world. *Personality and Individual Differences, 40*, 1075–1084.
- Otto, K., & Schmidt, S. (2007). Dealing with stress in the workplace: Compensatory effects of belief in a just world. *European Psychologist, 12*, 272–282.
- Pancer, S. M. (1988). Salience of appeal and avoidance of helping situations. *Canadian Journal of Behavioral Science, 20*, 133–139.
- Preacher, K. J., & Hayes, A. F. (2008). Contemporary approaches to assessing mediation in communication research. In A. F. Hayes, M. D. Slater, & L. B. Snyder (Eds.), *The Sage sourcebook of advanced data analysis methods for communication research* (pp. 13–54). Thousand Oaks, CA: Sage.
- Quigley, B. M., & Tedeschi, J. T. (1996). Mediating effects of blame attributions on feelings of anger. *Personality and Social Psychology Bulletin, 101*, 632–652.
- Ritter, C., Benson, D. E., & Snyder, C. (1990). Belief in a just world and depression. *Sociological Perspectives, 33*, 235–252.
- Skarlicki, D. P., Folger, R., & Tesluk, P. (1999). Personality as a moderator in the relationship between fairness and retaliation. *Academy of Management Journal, 42*, 100–108.
- Smith, C. A., & Ellsworth, P. C. (1985). Patterns of cognitive appraisal in emotion. *Journal of Personality and Social Psychology, 48*, 813–838.

Solomon, R. C. (1993). *The passions: Emotions and the meaning of life*. Indianapolis, IN: Hackett.

Tiedens, L. Z., & Linton, S. (2001). Judgment under emotional certainty and uncertainty: the effects of specific emotions on information processing. *Journal of Personality & Social Psychology*, 81, 973–988.

Triplet, R. G., & Sugarman, D. B. (1987). Reactions to AIDS victims: Ambiguity breeds contempt. *Personality and Social Psychology Bulletin*, 13, 265–274.

Weiner, B., Graham, S., & Chandler, C. (1982). Pity, anger, and guilt: An attributional analysis. *Personality and Social Psychology Bulletin*, 8, 658–672.

Young, M. J., Tiedens, L. Z., Jung, H., & Tsai, M. H. (2011). Mad enough to see the other side: The effect of anger on hypothesis disconfirmation. *Cognition and Emotion*, 25, 10–21.

APPENDIX A
STUDY 1 SCENARIO

Phil's Story

Phil is a department manager of a large local insurance company. There are six employees (John, Matt, Jenny, Ed, Susan, and Tom) in his department. They have been working together as a team for two years. Phil is proud of his team. In general, all of the employees perform equally well.

As a middle-manager, it is Phil's responsibility to decide who will get promoted, how large of a bonus to assign to each team member, and who will receive opportunities for further training.

This morning, Phil's boss, the head of the company, asked him to choose one of his employees for promotion. It was a difficult decision because all of his employees were good performers. He tried to persuade his boss to give a group-based bonus instead. Although there were several exchanges between them, he could not change his boss's mind. After much deliberation, he chose Ed. Starting next week Ed will be the assistant manager of the department. He will have his own office and receive a 10% raise.

APPENDIX B
STUDY 3 MATERIAL
(color appendix available online)

Pacific Insurance

Dear Employee:

All employees at the Pacific Insurance Company are being asked to participate in an Employee Attitude Survey being conducted over the next two weeks (May 5 to May 19). The survey will consist of approximately 80 questions and should only take 30-45 minutes to complete. To ensure confidentiality of all responses, we have retained an outside firm Boston Consulting, to assist in gathering and analyzing the data.

Your participation in this survey will provide us with valuable feedback to ensure we are focusing our efforts on employee satisfaction and organizational success in the right direction. A comprehensive analysis of the data collected will only take a few weeks. Therefore, we expect to be able to share preliminary results with you as early as June 2.

Thank you in advance for your participation.

Richard Gordon
Director of Human Resources

1. How long have you been employed with the Pacific Insurance Company?

Less than 6 months	6-12 months	1-5 years	5-10 years	Over 10 years
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

2. What department of the company do you work in?

Marketing & Sales	Product	Research & Development	Information Technology	Finance	Customer Support
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. What is your job classification?

Vice president	Senior manager	Manager	Assistant manager	Other
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4. Please use specific examples to describe the incentive system in your company.

I am the manager of the product department. I have six employees (John, Matt, Jenny, Ed, Susan, and Tom) working for me. We have been working together as a team for two years. I am really proud of my team. In general, all of the employees perform equally well.

As a middle-manager, I am responsible for regularly deciding who will get promoted, how large of a bonus to assign to each team member, and who will receive opportunities for further training.

Last Friday, my boss, the vice-president of the company, asked me to choose one of the employees in my department for promotion. It was very hard for me to make the decision because all of the employees are good performers. I tried to persuade him to give a group-based bonus instead. Although there were several exchanges between us, I was not able to change his mind. After much deliberation, I chose Ed. Starting next week, Ed will be the assistant manager of the department. He will have his own office and receive a 10% raise.