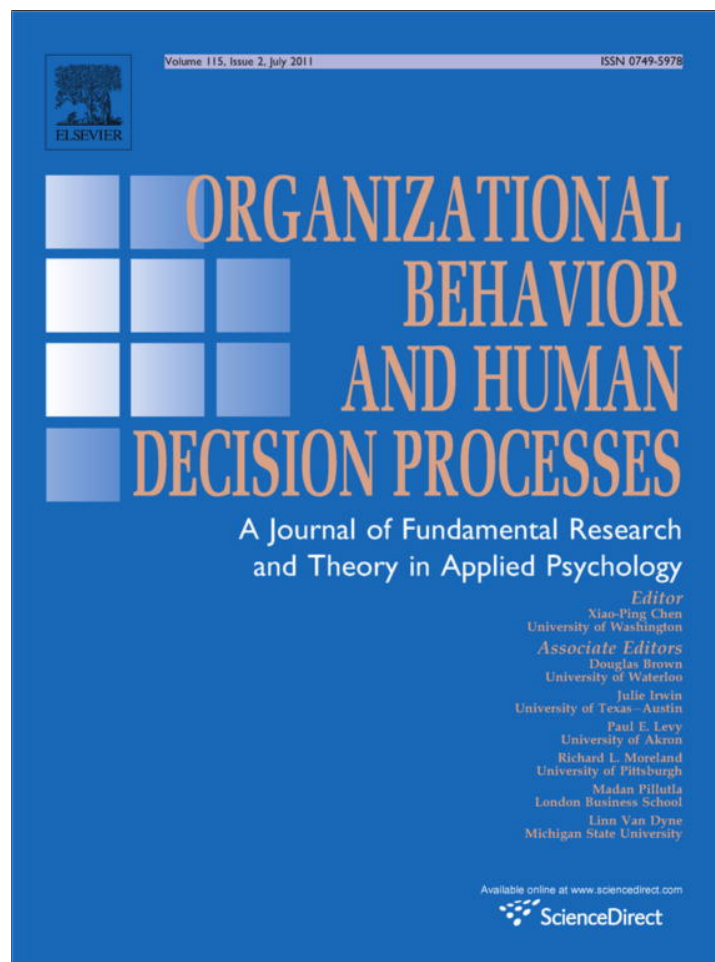


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Preface

The effects of managerial regulatory fit priming on reactions to explanations

Andrew Li^a, Joel Evans^{b,*}, Michael S. Christian^c, Stephen W. Gilliland^d, Edgar E. Kausel^e, Jordan H. Stein^d^a Department of Management, College of Business, West Texas A&M University, WTAMU Box 79016, Canyon, TX 79016, United States^b SKK Graduate School of Business, Sungkyunkwan University, Seoul 110-745, South Korea^c Kenan-Flagler Business School, University of North Carolina, CB#3490, McColl Bldg., Chapel Hill, NC 27599-3490, United States^d Department of Management and Organizations, Eller College of Management, University of Arizona, Tucson, AZ 85721-0108, United States^e Faculty of Economics and Business, University of Chile, Diagonal Paraguay 257, Santiago 6510015, Chile

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ABSTRACT

We investigated the interactive effects of regulatory focus priming and message framing on the perceived fairness of unfavorable events. We hypothesized that individuals' perceptions of fairness are higher when they receive a regulatory focus prime (promotion versus prevention) that is congruent with the framing of an explanation (gain versus loss), as opposed to one that is incongruent. We also hypothesized that these effects are mediated by counterfactual thinking. Three studies revealed that primed regulatory fit (promotion/gain or prevention/loss) led to higher levels of justice perceptions than regulatory misfit (promotion/loss or prevention/gain). Additionally, "could" and "should" counterfactuals partially mediated the relationship between regulatory fit and interactional justice (Study 3).

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Employees frequently perceive negative workplace events as unfair, and often respond to this perceived unfairness through retaliation, decreases in job performance, and withdrawal (e.g., Colquitt, Conlon, Wesson, Porter, & Ng, 2001; Konovsky & Folger, 1991; Shaw, Wild, & Colquitt, 2003). In order to avoid negative work-related reactions, managers often employ explanations as a means of alleviating employees' perceptions of unfair treatment in the wake of negative events (Shaw et al., 2003). Researchers have therefore taken interest in identifying the factors that enhance explanation effectiveness, finding that elements such as the content and delivery characteristics of explanations help to reduce perceived unfairness (e.g., Gilliland et al., 2001; Greenberg, 1994; Shaw et al., 2003). However, research on explanation characteristics has stalled, as studies have reported inconsistent relationships between explanations and fairness judgments (e.g., Davidson & Friedman, 1998; Gilliland & Beckstein, 1996; Shaw et al., 2003). In the current research, we argue that these inconsistencies can be addressed by extending our focus beyond explanation characteristics to include the characteristics of the message recipient.

Focusing solely on message characteristics implies that the efficacy of explanations is completely under the control of the person delivering the message (Shapiro, 1991). However, it is possible for a message to be seen as persuasive and compelling by some and

not by others, dependent largely on the targeted audience's motivation and abilities to process it (Petty & Cacioppo, 1986). Consider the polarized reactions frequently witnessed during political debates, in which recipients demonstrate wide variability in their reactions to the same message.

Based on such observations, researchers have called for a new stream of research addressing recipient characteristics and their interactive effects on explanation effectiveness (Bobocel & Zdzienicki, 2005). However, this "next phase" of research on explanation effectiveness has received much less attention, perhaps due to the assumed impracticality of managing the idiosyncratic characteristics of employees during stressful events. For this reason, managers and scholars have emphasized elements of explanations that are under the control of management, such as message framing and content.

In this research, we address this gap by noting that some recipient characteristics are not inflexible, and propose that managers can simultaneously prime recipients to favorably receive explanations that are crafted to fit the recipients' mindsets. To pursue this thesis, we draw from research on *regulatory focus* of an individual's motivational state (Higgins, 1997) as well as literature on *message framing* (Cesario, Higgins, & Scholer, 2008). The former suggests that individuals can be placed in one of two motivational states, or regulatory foci: promotion focus and prevention focus—with the former linked to desire for growth, success, and achievement, and the latter linked to desire for safety, responsibility, and obligations. Previous studies have shown that regulatory focus is related

* Corresponding author.

E-mail addresses: ali@wtamu.edu (A. Li), jevans@skku.edu (J. Evans).

to justice perceptions (Brebels, De Cremer, & Sedikides, 2008; Cropanzano, Paddock, Rupp, Bagger, & Baldwin, 2008), while other research suggests that regulatory foci can be induced or primed by organizational leaders (e.g., Brockner & Higgins, 2001; Kark & Van Dijk, 2007; Roney, Higgins, & Shah, 1995).

At the same time, managers can control message characteristics by employing either positively-framed (e.g., “the layoff will increase our profitability”) or negatively-framed (e.g., “the layoff will reduce further losses”) messages to account for unfavorable outcomes. We suggest that neither regulatory priming nor message framing alone can optimally increase individuals' justice perceptions, but that congruence between a regulatory prime and the framing of a message can most strongly influence justice perceptions. Specifically, we argue that positively-framed explanations are more favorably received by those primed with a promotion focus, whereas negatively-framed explanations are more favorably received by those primed with a prevention focus—a proposition that is consistent with the notion of regulatory fit (Higgins, 2000).

In addition, we draw on dual-process models of information processing to explore the underlying mechanisms that mediate this relationship. Dual-process models specify that there are two primary systems of information processing, one that is affective, heuristic-based, automatic, and fast, and the other that is rational, effortful, and slow (Evans, 2008). We argue that regulatory fit may promote the use of the more automatic system to process information, resulting in a reduction of counterfactual thinking and a subsequent increase in justice evaluations, an argument consistent with Fairness Theory (Folger & Cropanzano, 2001). If true, this illuminates the missing link between explanations and fairness perceptions and sheds light on the increasingly debated nature of regulatory fit (Aaker & Lee, 2006; Avnet & Higgins, 2006a, 2006b; Kruglanski, 2006; Schwarz, 2006). Past research has suggested that regulatory fit produces a “feeling-right” experience that is used in subsequent judgment processes (Cesario, Grant, & Higgins, 2004). Our study attempts to use dual-process models and fairness theory to shed light on whether the “feeling-right” experience is specific to the reaction to a message and independent from that of hedonic mood—a central question in regulatory fit research (Avnet & Higgins, 2006a; Kruglanski, 2006).

Below, we develop these propositions and examine them in three empirical studies. In a quasi-experimental field study (Study 1), participants were primed with either a promotion or a prevention focus and were given a gain- or loss-framed explanation for a negative event. We examined whether a fit between the regulatory prime and the message framing engenders more fairness perceptions regarding the negative event. In Study 2, we used a field experiment to replicate these findings and to distinguish the effects of regulatory fit priming from hedonic mood. Finally, in Study 3, we used a lab experiment to explore whether the effects of regulatory fit on justice perceptions are mediated by counterfactual thinking.

Explanations and justice perceptions

What should managers do to alleviate employees' negative responses to unfavorable outcomes? One strategy documented in the justice literature is to provide an explanation for the negative event (Bobocel & Zdaniuk, 2005). Explanations, according to Shaw and colleagues (2003), are intended to shed light on the reason or the cause of the event that may not be immediately apparent to the victim. For example, the failure to grant a pay raise to a deserved employee could be explained by telling the employee that a stringent economic condition reduces the availability of discretionary resources. Explanations serve two important purposes. First, they allow affected employees to make sense of negative events.

Second, they convey important messages to employees that they are valued and respected members of the community (Skarlicki, Barclay, & Pugh, 2008). Thus, researchers have argued that the provision of an adequate explanation mitigates negative employee reactions to unfavorable events (Bies & Shapiro, 1988). More specifically, explanations can promote higher fairness evaluations of the decision outcome (distributive justice), the decision-making process (procedural justice), and the way in which the decision is communicated to the recipient (informational justice).

Empirically, the link between the provision of an explanation and victims' fairness perceptions has been equivocal. While some studies have found a positive relationship between explanations and fairness judgments (e.g., Gilliland & Beckstein, 1996; Ployhart, Ryan, & Bennett, 1999), other studies have reported no significant findings (e.g., Davidson & Friedman, 1998). In their meta-analysis, Shaw and colleagues (2003) found that the relationships between procedural and distributive justice and explanations were modest at best, and that there was considerable room for the presence of variables moderating these relationships.

Thus, scholars have attempted to identify factors that could strengthen the relationship between explanations and fairness perceptions. Past research has focused on characteristics of explanations and the manner through which managers deliver these explanations as potential moderating mechanisms. For example, Shapiro (1991) found that explanations that were deemed adequate produced more positive outcomes than explanations that were inadequate. Similarly, Holtz and Harold (2008) reported that explanations from leaders who were perceived as transformational were more positively received. However, the literature is relatively silent on the characteristics of explanation recipients, who play a major role in processing and responding to the explanations. The lack of scholarly interest on explanation recipients stands in sharp contrast to the persuasion literature where message recipients are granted equal status as the messenger and the message in the tripartite distinction of persuasion (*Rhetoric*, Aristotle, see Cesario et al., 2008).

The effects of explanation recipients on fairness perceptions can be clarified by examining the parallels between the literature on explanations and the literature on persuasion. First, a persuasive message, in the form of a political campaign, a TV commercial, or a religious sermon, is intended to steer the targeted audience's attitudes and behaviors in the direction desired by the message (Simons, 1976). Similarly, the use of an explanation is designed to change the victims' attitudes (and subsequent behavior) toward the management and/or the organization. In other words, victims of unfavorable events may become less antagonistic towards their organization upon the receipt of an explanation. Second, like an explanation, a persuasive message may be framed as either a gain or a loss. For example, a politician can emphasize the benefits of a legislative action or the risk of not taking action. Research has shown that message framing has inconsistent effects on persuasiveness (Wilson, Wallston, & King, 1990; Wong & McMurray, 2002). Third, akin to an explanation, the effectiveness of a persuasive message depends on many factors, such as the characteristics of the messenger (e.g., physical attractiveness and sincerity), the message itself (e.g., quality, relevance, and legitimacy), and the message recipient (e.g., high versus low need for cognition). However, while the persuasion literature has explored the interplay between these characteristics, the interactions between the three have not received significant attention in the explanation literature. One important interaction examined in the persuasion literature is the increased appeal of a message as a result of the fit between message recipients' regulatory focus and the framing of the message (Aaker & Lee, 2001; Avnet & Higgins, 2006a; Holler, Hoelzl, Kirchner, Leder, & Mannetti, 2008; Koenig, Cesario, Molden, Kosloff, & Higgins, 2009).

Regulatory focus

According to regulatory focus theory (Higgins, 2000, 2002), individuals' self-regulation systems are characterized by motivational states that generally reflect one of two foci: *promotion* or *prevention*. Individuals with a promotion focus are oriented towards the achievement of positive outcomes, such as advancement and accomplishment, whereas those with a prevention focus are oriented towards the avoidance of negative outcomes, such as failure and disappointment. Thus, these two self-regulation foci differ in their orientation towards gains and losses: people with a promotion focus are more concerned with the presence or absence of gains, whereas people with a prevention focus are more concerned with the presence or absence of losses. These motivational states influence a variety of psychological processes, including decision-making strategies and biases, goal expectancy and valuation, and emotional sensitivity (Higgins, 1997).

Importantly, evidence suggests that regulatory foci may be induced or primed by leaders through the use of language and rhetoric (e.g., Brockner & Higgins, 2001; Kark & Van Dijk, 2007; Roney et al., 1995), making regulatory focus priming a potentially useful motivational component for strategic organizational leadership. For example, Kark and Van Dijk (2007) suggested that leaders who focus on ideals, goals, and achievement are likely to instill a promotion focus in their followers, while leaders who focus on responsibilities and obligations are likely to instill a prevention focus. Consistent with this argument, Neubert, Kacmar, Carlson, Chonko, and Roberts (2008) found that the leadership style of initiating structure that focuses on task completion was related to followers' prevention focus, whereas servant leadership that focuses on employee development and growth was related to followers' promotion focus.

One way in which regulatory focus affects cognitive functioning is through an individual's evaluation of goal-pursuit strategies. The expected value of a particular choice is derived not just from its predicted outcome, but also from congruence between goal-pursuit methods and the individual's motivational state—a phenomenon referred to as “value from fit” (Higgins, 2000). Regulatory fit can be achieved when people perceive congruence between their own regulatory focus and the strategies employed to pursue their goal. Specifically, individuals with a promotion focus are primarily concerned with accomplishment and achievement, and are therefore more likely to favorably evaluate strategies allowing them to maximize gains. In contrast, individuals with a prevention focus are primarily concerned with safety and responsibility, and are more likely to favorably evaluate vigilance strategies designed to prevent losses.

One aspect of regulatory fit important to the current research is that regulatory fit is not limited to perceived congruence between an individual's mindset and his/her own personal goal-pursuit strategies. Rather, individuals can perceive fit among various elements of their environment, as well as between their environment and their own motivational state (Higgins, Idson, Freitas, Spiegel, & Molden, 2003). As an example of the former, Lee and Aaker (2004) found that customers responded more favorably to product advertisements when the gain/loss framing of the advertisement tagline was congruent with the regulatory focus expressed in the advertisement message. As an example of the latter, Camacho, Higgins, and Luger (2003, Study 4) found that participants perceived an after-school program as more appropriate when the program was presented (framed) in a way that was congruent with their own regulatory state.

Regulatory priming, justice, and explanations

In the present study, we investigate the implications of regulatory fit priming in the context of organizational accounts for

unfavorable events. Reactions to managerial explanations for unfavorable events have largely been investigated utilizing frameworks from research on organizational justice. It is worth noting that although justice scholars have not yet investigated the efficacy of regulatory fit priming on explanation effectiveness, two studies have linked regulatory focus to individuals' responses to justice/injustice. Brebels and colleagues (2008) examined the influences of regulatory focus and procedural unfairness on retaliation, and found that individuals with a promotion focus are more likely to engage in retaliation in response to procedural unfairness compared to those with a prevention focus. Additionally, Cropanzano and colleagues (2008) examined the interactive effects of regulatory focus, outcome favorability, and procedural violations on procedural justice perceptions. They found that regulatory focus moderated negative reactions to unfairness, such that individuals with a promotion focus demonstrated the most negative reactions when outcomes were negative and allocation processes were unfair, whereas individuals with a prevention focus demonstrated the most negative reactions when outcomes were negative and allocation processes were fair.

Although Brebels and colleagues (2008) observed that promotion-focused individuals are more likely to retaliate in response to injustice, they did not explicitly examine whether a fit between regulatory focus and procedural information generates more positive outcomes than a misfit, as the theory of value from fit would have predicted. Similarly, Cropanzano and colleagues (2008) emphasized the effects of regulatory focus, *per se*, and not regulatory fit between an individual's focus and the way in which fairness information is presented to them, such as in an explanation. Thus, while regulatory focus appears to be an important influence on justice perceptions, it remains to be seen whether and how justice perceptions are influenced through the priming of regulatory fit, which is within a manager's control and thus a potentially useful addition to the literature on explanation effectiveness.

Regulatory fit mechanisms

Identifying the mechanism through which regulatory fit affects perceived fairness is critical for understanding why these effects occur. Regulatory fit theory proposes that regulatory fit creates the experience of *feeling right* about a decision or judgment (Avnet & Higgins, 2006a). In other words, individuals ask themselves “how do I feel about it?” and they feel “right” when they experience a high level of regulatory fit. Specifically, a feeling of rightness may ensue when promotion-focused individuals are given a gain-framed explanation that addresses their concerns for aspiration and accomplishment, or when prevention-focused individuals are given a loss-framed explanation that addresses their concerns for safety, responsibility, and protection. Thus, individuals feel “right” when the framing of the explanation (gain versus loss) can sustain their regulatory focus (promotion versus prevention). Past research has shown that the feeling of rightness has many implications. For example, individuals who experience fit may infer that they are enjoying what they are doing and that there is no need to stop (Vaughn, Malik, Schwartz, Petkova, & Trudeau, 2006). More germane to the present study, past research has shown that the “right” feeling may transfer to subsequent evaluations (Higgins, 2000). Several studies have shown that individuals who feel right as a result of regulatory fit feel better about a decision they make (Avnet & Higgins, 2006a; Higgins et al., 2003) and assign a greater monetary value to a choice made (Higgins et al., 2003). People also provide more positive evaluations of products advertised with messages framed to be consistent with their regulatory focus (Lee & Aaker, 2004). In sum, these findings are consistent with the feelings-as-information account of regulatory fit (Cesario

et al., 2004), in which the right feeling provides input in the evaluation/judgment process.

Feeling right and justice perceptions

How does “feeling right” influence individuals’ justice perceptions? To answer this question, we consider dual-process models describing how individuals process information (see Evans, 2008 for a review). Dual-process models represent a framework of human cognition theories that span many psychological disciplines. Despite the different ways that they are labeled (e.g., automatic versus controlled, Schneider & Shiffrin, 1977; experiential versus rational, Epstein, 1994; heuristic versus systematic, Chaiken, 1980; associative versus rule-based processing, Smith & DeCoster, 2000; system 1 versus system 2; Stanovich & West, 2000), most of these theories share one conceptual underpinning: the distinction between two systems of information processing. One is characterized as experiential, affective, heuristic-based, automatic, and fast, while the other is characterized as being rational, logical, rule-based, and deliberate. A large body of research has been devoted to the understanding of the biological (Lieberman, Gaunt, Gilbert, & Trope, 2002; Smith & DeCoster, 2000) and evolutionary (Stanovich, 1999) bases of dual-process models and their implications for decision-making, stereotyping, perception/attribution, and persuasion (Evans, 2008).

Dual-process models have important implications for the understanding of how individuals process and respond to justice-related information. If individuals adopt a rational mindset to process justice-related information, they cognitively evaluate their experience against a set of internalized criteria through a deliberate and logical process. This argument suggests that justice evaluation is guided by a cold and calculated process, and that feelings play little part in determining fairness evaluations. In contrast, if individuals process information experientially, their feelings provide a foundation upon which they derive their perceptions of justice (Schwarz & Clore, 1983, 2003). This argument suggests that an experiential mindset renders justice evaluations susceptible to the influence of feelings and heuristics (Johnson & Lord, 2010).

Past research has suggested that both the rational and the experiential mindsets operate in tandem in the determination of fairness judgments. For example, Hollensbe, Khazanchi, and Masterson (2008) found that individuals utilize both justice rules (cognition) as well as their feelings to determine the level of fairness that they experience. The dominance of one mechanism over the other (rational versus experiential) varies from situation to situation and from person to person—a phenomenon supportive of dual-process models of information processing.

Dual-process models underscore the important role that both cognitions and feelings play in shaping fairness perceptions, complementing the feelings-as-information account of regulatory fit. When individuals are given an explanation for an unfavorable event, they implicitly ask themselves “How do I feel about it?” The answer to this question factors into the process through which they determine how fairly they have been treated. If the judgment process is susceptible to the influence of one’s feelings, as dual-process models suggest, it stands to reason that the experience of feeling right may serve as information on the basis of which justice evaluations are made. Therefore, when the framing of an explanation is congruent with individuals’ regulatory focus, the explanation simply sounds right to them. This experience may provide information when individuals attempt to determine the level of fairness related to outcomes, decision-making processes, and interpersonal communication. Essentially, regulatory fit creates the rose-colored glasses effects that favorably influence people’s judgment of their environment, including how fairly they have been treated (Santelli, Struthers, & Eaton, 2009).

Below, we propose that managers can prime the regulatory foci of employees to achieve regulatory fit between subordinates’ motivational states and the framing of managerial explanations for negative events. Regulatory fit should increase the effectiveness of explanations on all relevant justice judgments, including distributive, procedural, and informational justice. We exclude interpersonal justice because regulatory fit should impact perceptions of the message, but is not theoretically related to the interpersonal treatment one receives. By itself, regulatory focus does not cause specific justice judgments, but rather moderates the influence of an explanation on relevant justice judgments. Specifically, because a gain-framed message emphasizes promotion concerns, followers primed with a promotion focus will react most favorably to gain-framed explanations. In contrast, because a loss-avoidance-framed message emphasizes prevention concerns, followers primed with a prevention focus will react most favorably to loss-avoidance-framed explanations (Cesario & Higgins, 2008; Cesario et al., 2004). As such, we make the following prediction:

Hypothesis 1. The fit between managerial priming of followers’ regulatory states (promotion versus prevention) and managerial framing of an explanation (gain versus loss-avoidance) increases the perceived (a) informational, (b) procedural, and (c) distributive fairness of an explained event, such that fairness perceptions are higher in the promotion/gain and prevention/loss-avoidance conditions than in the promotion/loss-avoidance and prevention/gain conditions.

Study 1

The context for Study 1 was a quasi-experimental field study involving university students’ reactions to proposed changes to their final exam testing procedures.

Method

Sample

Participants were 127 senior undergraduate students enrolled in two sections of a capstone business ethics class in a large university. Both sections were taught by the same instructor, and this study was conducted during class.

Procedure

Students in both classes had been told at the start of the semester that their final exam would be in the format of multiple choice questions—a format that is relatively straightforward and for which most students had expressed the strongest preference. In order to ascertain their preferences for multiple choice exams, we conducted a pilot study with a separate sample of 30 students drawn from the same population. Students voiced overwhelming preference for multiple choice exams over short-essay exams (90% multiple choice versus 10% essay).

Midway through the term, the instructor told participants that he was strongly considering a change to the format of the final exam from multiple choice to short-essay questions. Given the strong preference for a multiple choice format, for many students, the change to an essay exam constituted a negative event. Indeed, an audible groan erupted from each class when the exam change was suggested.

Our experiment manipulated regulatory focus priming and explanation characteristics. Prior to the announced potential exam changes, the class underwent an activity designed to implicitly prime participants into a specific regulatory focus state. Following the announced proposal, the instructor provided an explanation for the change in format. The explanation characteristics manipulation

involved the relative emphasis placed on gains versus losses. Students then received a feedback form that contained self-report dependent measures.

Manipulations

We used a 2 (regulatory focus priming: promotion versus prevention) × 2 (gain- versus loss-focused explanation) quasi-experimental design. To manipulate the regulatory focus prime before students heard the announcement of potential exam format changes, an administrative official for the business school visited both classes and announced to participants that the business college was interested in students' academic plans. Students were given a sheet of paper containing instructions to write down their specific academic plans. The regulatory focus manipulation was embedded in the written instructions. Half the students were given promotion-focused instructions that asked them to write down an outcome they strongly desired to achieve and to articulate the strategies they intended to use to achieve the outcome. The other half of the students were given prevention-focused instructions that asked them to write down an outcome they strongly wanted to avoid and to articulate the strategies they intended to use to avoid that particular outcome. The two sets of instructions were randomly distributed among students in both sections of the course. This manipulation has been used in prior regulatory focus research (e.g., Higgins et al., 2003) and is consistent with research demonstrating that leaders can prime their followers into the two types of regulatory focus by drawing their attention to their achievements (promotion) and obligations (prevention) (Kark & Van Dijk, 2007).

Upon completion of the writing task, the administrator left the classroom, and the instructor introduced the proposed format changes to the final exam. The explanation provided by the instructor contained the manipulation of the gain/loss frame of the message. The gain-focused explanation was stated as follows, "with partial credit in essay questions, you can increase your chances of getting some points for an answer, which is not possible on a multiple choice test. In short, it seems essay tests can increase your upside potential." Students in the loss-focused condition heard the following explanation, "with partial credit in essay questions, you can decrease your chances of losing all points for an answer, which is what happens with a multiple choice test. In short, it seems essay tests can decrease your downside potential."

Following the manipulation, the instructor asked participants to provide him with their feedback concerning the potential changes. Students completed a feedback survey which included the dependent measures.

Measures

Informational justice. Informational justice was measured with a four-item scale (Bobocel & Farrell, 1996; Colquitt, 2001): (1) "The explanations regarding the potential change of test format were reasonable." (2) "The reasons for possibly changing the test format were clearly explained by the instructor." (3) "The instructor was candid in his communication of the possibility of changing the test format." (4) "The instructor was truthful in his communication of the reasons for changing the test format" ($\alpha = .70$).

Procedural justice. Procedural justice was measured with two items to reflect the fairness of changing the test format, which is a procedural issue because the changing of test format represents changing the process through which grade outcomes are determined: (1) "I believe it is fair for the instructor to change the test format", and (2) "I believe it is appropriate to change the test format" ($\alpha = .79$).

Distributive justice. Distributive justice was measured with a three-item scale (Colquitt, 2001) which consisted of the following items:

- (1) "I believe the results from an essay exam would be appropriate for the work I have completed";
- (2) "The results from an essay exam would reflect the efforts I have put into the course"; and
- (3) "The results from an essay exam would likely be justified given my performance in this class" ($\alpha = .89$).

Results and discussion

To evaluate the framing manipulation, participants were asked to respond to a question about the purpose of changing the test format. Participants chose between "increase the chance of earning points" and "decrease the chance of losing points." Results of the chi-square were significant ($X^2_{(1, N=114)} = 8.28, p < .05$). So as not to raise suspicion among the participants, questions addressing the regulatory focus manipulation were not included (however, this manipulation has been successfully used in prior research; e.g. Lockwood, Jordan, & Kunda, 2002).

Means, standard deviations, and correlations among the studied variables are reported in Table 1. We hypothesized that regulatory fit (promotion/gain and prevention/loss) would lead to greater fairness perceptions than misfit (promotion/loss and prevention/gain). We used 2 (regulatory priming) × 2 (message framing) ANOVAs to test the hypotheses. Informational justice demonstrated an interaction between regulatory focus and framing ($F_{(1, 123)} = 16.96, p < .05, \eta^2_p = .12$). The nature of this interaction is illustrated in Fig. 1A. Specifically, the difference between promotion/gain ($M = 4.39, SD = .56$) and promotion/loss ($M = 3.88, SD = .45$) was significant ($F_{(1, 67)} = 16.63, p < .05, \eta^2_p = .13$), and the difference between prevention/loss ($M = 4.06, SD = .48$) and prevention/gain ($M = 3.83, SD = .47$) was also significant ($F_{(1, 56)} = 3.23, p < .05, one-tailed, \eta^2_p = .05$).

The interaction between regulatory focus and framing on procedural justice was marginally significant ($F_{(1, 123)} = 3.65, p < .06, \eta^2_p = .03$). The nature of the interaction is also illustrated in Fig. 1B. Specifically, the difference between promotion/gain ($M = 3.64, SD = .83$) and promotion/loss ($M = 3.23, SD = .90$) was significant ($F_{(1, 67)} = 3.71, p < .05, one-tailed, \eta^2_p = .05$). The difference between prevention/loss ($M = 3.42, SD = .76$) and prevention/gain ($M = 3.22, SD = 1.02$) was not significant ($F_{(1, 56)} = .70, p = .41$), although the direction was consistent with our prediction. For distributive justice, the interaction between regulatory focus and framing was not significant ($F_{(1, 123)} = .55, ns$). Taken together, these findings provide support for Hypotheses 1(a and b), but not (c).

Table 1
Inter-correlations between variables (all three studies).

	Mean	SD	1	2	3	4	5
<i>Study 1 (n = 127)</i>							
1. Informational justice	4.06	.54	(.70)				
2. Procedural justice	3.39	.88	.54**	(.79)			
3. Distributive justice	3.46	.86	.42**	.58**	(.89)		
4. Regulatory fit	.53	.50	.35**	.18*	.08	-	
<i>Study 2 (n = 287)</i>							
1. Informational justice	2.90	.85	(.73)				
2. Procedural justice	2.55	.89	.71**	(.89)			
3. Distributive justice	2.46	.89	.61**	.73**	(.86)		
4. Mood	2.21	.78	.43**	.46**	.49**	(.87)	
5. Regulatory fit	.48	.50	.08	.07	.04	.03	
<i>Study 3 (n = 145)</i>							
1. Information justice	2.67	.82	(.80)				
2. Distributive justice	3.11	.75	.35**	(.87)			
3. Could	3.58	.63	-.27**	-.40**	(.80)		
4. Should	3.02	.63	-.32**	-.66**	.49**	(.70)	
5. Regulatory fit	.51	.50	.22**	.08	-.17*	-.16*	

Note. The results reported above for Study 2 do not include the control condition.

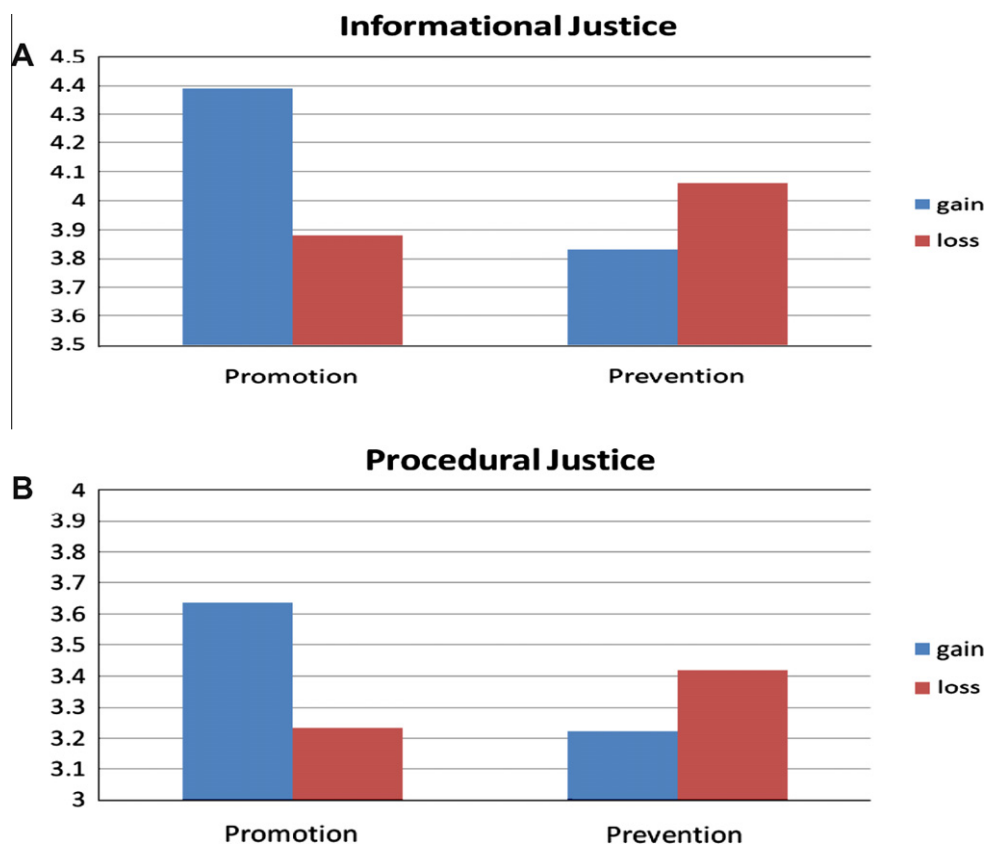


Fig. 1. Mean rating of informational justice (A) and procedural justice (B): Study 1.

In hindsight, these results are appropriate given the context of the study. Specifically, participants received an informational explanation regarding class grading procedures. They did not, however, receive information regarding outcomes pertaining to either the instructor's final decision on the test format or their grades for the final exam. Therefore, the influence of the explanation was limited to specific fairness judgments that were relevant to the context (i.e. informational and procedural justice but not distributive justice).

Study 2

Study 2 was designed to replicate Study 1 using alternative manipulations, and to augment the findings of Study 1 in several ways. First, Study 2 provides outcome information, which was notably missing from Study 1, so that effects on distributive justice could be directly tested. Second, Study 2 was designed to examine some scholarly claims that the experience of feeling right as a result of regulatory fit is distinct from hedonic mood. For example, Higgins (2000) suggested that regulatory fit produces the feeling of appropriateness or rightness rather than a simple ascription of pleasure or pain. Similarly, Koenig et al. (2009) suggested that the feeling right experience is distinct from hedonic mood because it has implications for whether one's current feelings and evaluations are valid. Echoing this argument, Vaughn et al. (2006) suggested that the feeling right experience is context-dependent, as opposed to mood which is amorphous, general, and ubiquitous. As Vaughn et al. pointed out, "the implications of regulatory fit feelings for persuasion depended in part on participants' spontaneous interpretations of their rightness feelings in light of their positive or negative reactions to the message" (p. 609).

Finally, Study 2 adds a control group to the study design. This was important because although past research has shown that explanations mitigate negative reactions to unfavorable events, it is unclear whether regulatory fit leads to more favorable reactions compared to when no explanation is provided, or whether regulatory misfit leads to even more unfavorable reactions (Hong & Lee, 2008; Santelli et al., 2009).

Method

Sample

Participants included 374 undergraduate students enrolled in an upper level organizational behavior class and a lower-level business statistics class in a large state university. Students in both classes were offered extra credits for their participation.

Procedure

During the 2009–2010 school year, the Board of Regents—the governing body at the university where the study was conducted—voted to increase tuition and fees the following year by 20% for in-state undergraduate students (with a slightly smaller percentage increase for out-of-state students). News of the dramatic tuition increase and the ensuing debates about its predicted effects garnered consistent attention in print and broadcast media for the 2 weeks following the announcement and preceding this study. This context provided the backdrop for Study 2.

Students who volunteered to participate were directed to an on-line survey through a link embedded in an email. The study included two parts that were ostensibly independent from each other. Part one manipulated regulatory focus (promotion versus prevention) and part two presented students with one of two

possible explanations for the tuition increase (gain- versus loss-framed). Finally, participants completed the dependent measures and manipulation checks.

Manipulations

We utilized a 2 (regulatory focus priming: promotion versus prevention) \times 2 (gain versus loss-avoidance explanation) between subjects experimental design with an appended control group. Once participants clicked on the link to the survey website, the website randomly assigned them to one of the five experimental conditions.

To manipulate regulatory focus, participants were asked to identify goals they wished to accomplish and the strategies they would use to achieve them (promotion), or else were asked to identify outcomes they wished to avoid and the strategies they would use to avoid those outcomes (prevention). Participants in the control condition completed a filler task in which they described the content of their most recent class session at the college.

To manipulate message frames, participants read one of two possible explanations for the tuition increase, ostensibly written by a university administrator. Students exposed to the gain manipulation read that the tuition increase was designed to allow the university to continue to provide better education, to strengthen its course offerings, to retain faculty, and to strengthen the financial standing of the university. Participants exposed to the loss-avoidance manipulation read that the tuition increase was designed to prevent the further deterioration of the quality of educational programs, to avoid further cuts to classes, to prevent the loss of faculty, and to avoid the further weakening of the financial situation at the university. In the control condition, students simply read that the university and the Board of Regents had made a decision to increase tuition and fees for the upcoming school year. Following the explanation manipulation, participants were asked to provide feedback regarding the tuition increase.

Measures

Informational justice. Informational justice was measured with three items based on the justice literature (Colquitt, 2001; Greenberg, 1994; e.g., “The school administrator was candid in the explanation for the tuition hike;” $\alpha = .73$).

Procedural justice. Procedural justice was measured with a three-item scale adapted from Gilliland et al. (2001; e.g., “The methods the university used to decide on the tuition increase were appropriate;” $\alpha = .89$).

Distributive justice. Distributive justice was measured with a four-item scale (Gilliland et al., 2001; “I feel the university’s decision about the tuition increase was fair;” $\alpha = .86$).

Hedonic mood. Participants were asked to indicate the extent to which they were currently experiencing the following moods: good, happy, dejected, relaxed, positive, cheerful, tense, and content ($\alpha = .87$). This scale was used in a previous study examining the effects of regulatory fit on hedonic mood (Higgins et al., 2003).

Control variables. Because participants were differentially impacted by the tuition increase (for example, some may be immune completely from the increase if their tuition was paid through government/academic scholarship), additional data was collected to determine the extent to which students cared about the tuition increase (“To what extent do you care about the tuition increase?”), as well as the extent to which they perceived the outcome as favorable or unfavorable (“To what extent do you agree with the tuition increase?”; adapted from Murphy, 2004).

Results and discussion

Manipulation check

To evaluate the effectiveness of our regulatory prime, participants were asked to indicate whether each of the following words (they could choose more than one) described their general mindsets: “my dreams” (i.e., promotion focus), “my fears” (i.e., prevention focus), and “my class” (i.e., no salient regulatory focus). Responses consisted of a “yes” or “no”. A greater proportion of participants in the promotion-focused condition indicated that “my dreams” described their mindset than those in the prevention-focused condition and the control condition ($X^2_{(2,N=374)} = 110.45, p < .05$). A greater proportion of participants in the prevention condition indicated that “my fears” best described their mindset than those in the promotion condition and the control condition ($X^2_{(2,N=374)} = 65.56, p < .05$). Finally, a greater proportion of participants in the control condition indicated that “my class” best described their mindset than those in the prevention-focused condition and in the promotion-focused condition ($X^2_{(2,N=374)} = 69.01, p < .05$). These findings supported the effectiveness of our manipulation of regulatory focus priming.

To evaluate the effectiveness of the message framing manipulation, we asked participants to indicate their level of agreement with the following two statements: (1) “The reason for increasing the tuition is to promote future gains for the university”, and (2) “The reason for increasing the tuition is to prevent further losses for the university”. We conducted one-way ANOVA on each of the two items. The comparison across the three groups (gain, loss, and control) on the gain manipulation check item was significant ($F_{(2, 371)} = 8.94, p < .05$). A planned comparison showed that participants in the gain condition were more likely to endorse the item ($M = 3.34, SD = 1.03, F_{(1, 285)} = 17.51, p < .05$) than those in the loss condition ($M = 2.83, SD = 1.02$) or in the control condition ($M = 3.03, SD = 1.02, F_{(1, 240)} = 4.78, p < .05$). The overall F -test on the loss manipulation check item was also significant ($F_{(2, 371)} = 8.87, p < .05$). A subsequent planned comparison showed that participants in the loss condition were more likely to endorse the item ($M = 3.33, SD = 1.01, F_{(1, 285)} = 17.88, p < .05$) than those in the gain condition ($M = 2.82, SD = 1.03$) and were marginally more likely to endorse the item than those in the control condition ($M = 3.08, SD = 1.05, F_{(1, 217)} = 3.17, p = .08$).

Hypothesis testing

Means, standard deviations, and correlations among the studied variables are reported in Table 1. We hypothesized that regulatory fit (promotion/gain and prevention/loss) would lead to greater fairness perceptions than misfit (promotion/loss and prevention/gain). We used 2 (regulatory priming) \times 2 (message framing) ANOVAs (with control variables) to test our hypotheses. The interaction between regulatory prime and message framing on informational justice was significant ($F_{(1, 281)} = 4.84, p < .05, \eta_p^2 = .02$). The nature of this interaction is illustrated in Fig. 2A. Specifically, the difference between prevention/loss ($M = 3.01, SD = .93$) and prevention/gain ($M = 2.83, SD = .78$) was significant ($F_{(1, 148)} = 2.94, p < .05$, one-tailed, $\eta_p^2 = .02$). Although the difference between promotion/gain ($M = 2.98, SD = .86$) and promotion/loss ($M = 2.81, SD = .83$) was not significant ($F_{(1, 131)} = 2.23, p = .14$), the direction of the effect was consistent with our prediction.

With respect to procedural justice, the interaction between regulatory focus and framing was also significant ($F_{(1, 281)} = 4.33, p < .05, \eta_p^2 = .02$). The nature of this interaction is illustrated in Fig. 2B. Specifically, the difference between prevention/loss ($M = 2.64, SD = .95$) and prevention/gain ($M = 2.42, SD = .93$) was significant ($F_{(1, 148)} = 4.11, p < .05, \eta_p^2 = .03$). Although the difference between promotion/gain ($M = 2.64, SD = .79$) and promotion/loss ($M = 2.53, SD = .86$) was not significant ($F_{(1, 131)} = 1.10, p = .30$),

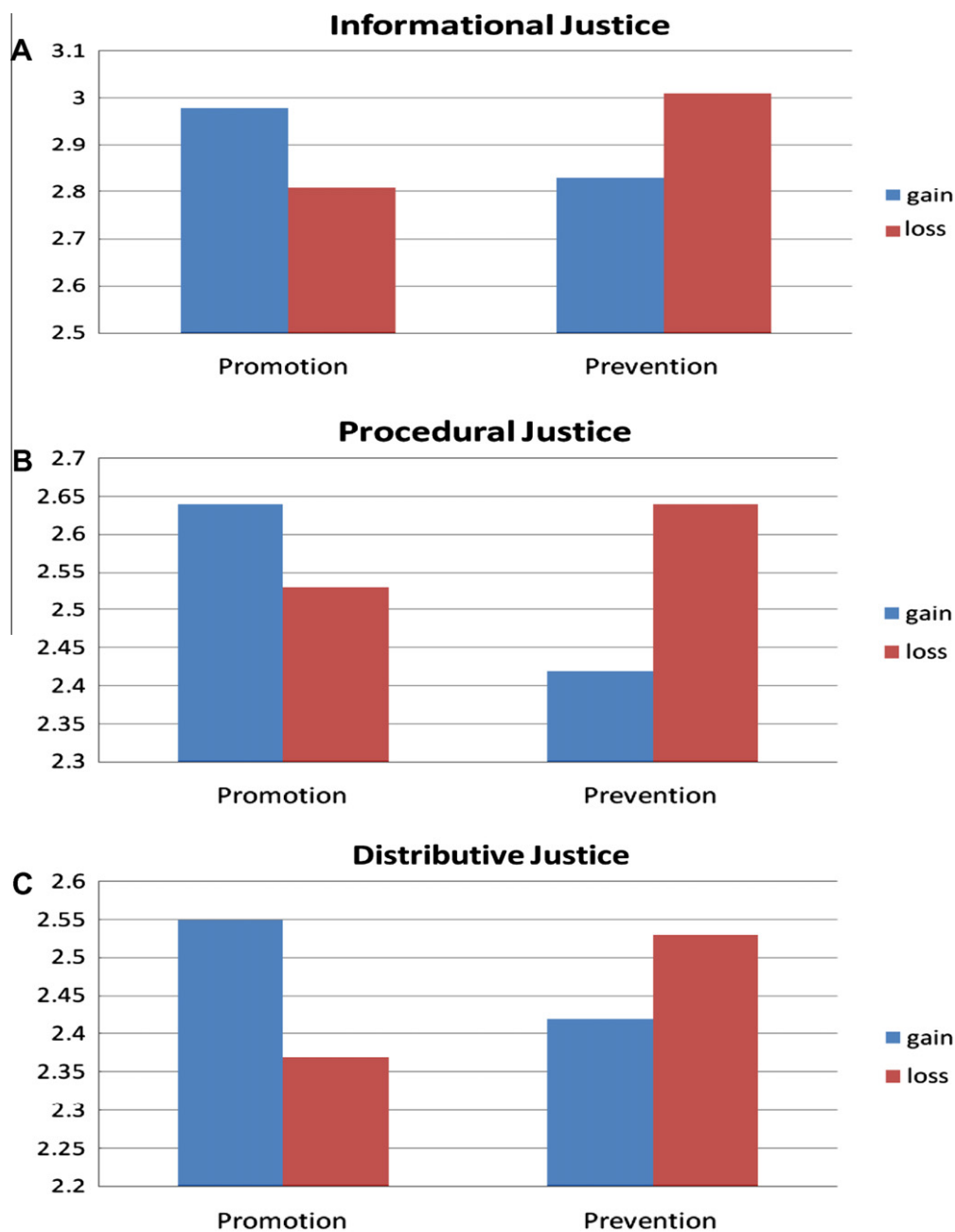


Fig. 2. Mean rating of informational justice (A), procedural justice (B), and distributive justice (C): Study 2.

the direction of the result was again consistent with our predictions.

Finally, the interaction between regulatory focus and framing on distributive justice was significant ($F_{(1, 281)} = 4.23, p < .05, \eta_p^2 = .02$; see Fig. 2C). Specifically, the difference between promotion/gain ($M = 2.55, SD = .87$) and promotion/loss ($M = 2.37, SD = .80$) was significant ($F_{(1, 131)} = 4.21, p < .05, \eta_p^2 = .03$). In contrast, the difference between prevention/loss ($M = 2.53, SD = .97$) and prevention/gain ($M = 2.42, SD = .93$) was not significant ($F_{(1, 148)} = 1.03, p = .31$), although the direction was again consistent with our prediction. Thus, although some simple effects tests were non-significant, the patterns of the interactions provided consistent support for Hypotheses 1(a–c).

Auxiliary analysis

Next, we compared the fit and misfit conditions with the control condition. We conducted a one-way ANOVA on each of the justice dimensions. The comparison across the three groups (fit, misfit, and control) on informational justice was significant: ($F_{(2, 369)} = 5.81, p < .05, \eta_p^2 = .03$). A planned comparison showed that participants in the fit condition perceived a higher level of informational justice ($M = 2.99, SD = .89, F_{(1, 220)} = 10.74, p < .05, \eta_p^2 = .05$) than those in the control condition ($M = 2.65, SD = .77$). Participants in the misfit condition ($M = 2.82, SD = .80, F_{(1, 233)} = 2.80, p < .05, \text{one-tailed}, \eta_p^2 = .01$) also perceived a higher level of informational justice than those in the control condition ($M = 2.65, SD = .77$).

The comparison across the three groups on procedural justice was also significant ($F_{(2, 369)} = 2.36, p < .05$, one-tailed, $\eta_p^2 = .01$). However, planned comparisons failed to demonstrate significant differences between the fit condition ($M = 2.63, SD = .87, F_{(1, 220)} = .33, p = .57$) and the control condition ($M = 2.54, SD = .83$) or between the misfit condition ($M = 2.47, SD = .90, F_{(1, 233)} = .69, p = .21$) and the control condition ($M = 2.54, SD = .83$).

The comparison across the three groups on distributive justice was significant: ($F_{(2, 369)} = 2.77, p < .05$, one-tailed, $\eta_p^2 = .02$). A planned comparison showed that participants in the fit condition perceived a higher level of distributive justice ($M = 2.53, SD = .92, F_{(1, 220)} = 4.11, p < .05, \eta_p^2 = .02$) than those in the control condition ($M = 2.31, SD = .88$). There was no significant difference between the misfit condition ($M = 2.40, SD = .87, F_{(1, 233)} = .36, p = .55$) and the control condition ($M = 2.31, SD = .88$).

Finally, we evaluated the effects of regulatory fit on mood ratings. The interaction between regulatory priming and message framing on mood was not significant ($F_{(1, 281)} = .73, p = .39$). We re-ran all the analyses described above, with mood included as a control variable. The only difference in the results was that the comparison across the three groups (fit, misfit, and control) on procedural justice became non-significant.

Based on the aforementioned results, three points are especially noteworthy. First, Study 2 replicated the findings in Study 1 by showing that the fit between a regulatory focus prime and message framing was associated with higher levels of perceived justice. This replication is important because it examined the hypotheses using a meaningful negative outcome that was fresh in the minds of participants (i.e., the tuition increase was publicly announced 2 weeks prior to data collection). Second, the results of Study 2 are consistent with past research showing that an explanation, by itself, may not be adequate enough to mitigate employees' negative responses (Horvath, Ryan, & Stierwalt, 2000). When a message is framed in a way that is incongruent with a recipient's regulatory focus, the explanation may not resonate with the recipients, decreasing its effectiveness. Lastly, regulatory fit was shown to be independent from the effects of hedonic mood.

Study 3

In Study 2, we found that the effects of regulatory fit on justice perceptions were independent of the effects of hedonic mood. This raises the question: What is the experience of feeling right if it is not a purely affective state? Dual-process models postulate that positive feelings promote reliance on the experiential system that entails heuristics rather than deliberate treatment of information (Smith & DeCoster, 2000). This argument suggests that regulatory fit reduces the need to engage in effortful information processing because regulatory fit creates a more positive experience than misfit (Freitas & Higgins, 2002; Schwarz, 2006). In other words, messages that fit an individual's regulatory focus are consistent with how people naturally think of things, and as such, may become easier to process because they are less likely to be cognitively "challenged" by the recipient. For example, Kruglanski (2006) suggested that regulatory fit increases self-assurance and confidence in one's judgment, while Lee and Aaker (2004) found that regulatory fit increased processing fluency. These arguments suggest that regulatory fit reduces the perceived need for effortful processing, perhaps being used as a heuristic with which to form judgments (Aaker & Lee, 2006). Consistent with this argument, Wang and Lee (2006) found that the positive effects of regulatory fit occurred only when individuals were not motivated to process information. Vaughn and colleagues (2006) argued that regulatory misfit may signal that something is not right and that more thorough evaluation of the information is necessary. Finally, Koenig and colleagues

(2009) found that regulatory fit increased the tendency to base one's judgment on easy-to-process information, whereas regulatory misfit increased the tendency to make a judgment based on the strength of the argument.

The notion that regulatory fit reduces the need to thoroughly process information is consistent with arguments in the justice literature regarding the formulation of fairness judgments—specifically, that an adequate explanation reduces an individual's tendency to engage in deliberate information processing used to ascertain injustice. According to Fairness Theory (Folger & Cropanzano, 2001), individuals who experience unfavorable events engage in counterfactual thinking in order to determine whether they were treated fairly. Individuals consider events or actions against a set of hypothetical possibilities that illuminate the utility and appropriateness of the actual event. Counterfactual thinking thus represents an effortful and conscious process to construct alternative scenarios, in contrast to the realm of automatic experiential systems that are built on repeated and associative experiences (Smith & DeCoster, 2000).

Individuals use three types of counterfactuals to draw conclusions about the fairness of their experiences: Would, could, and should. The *would* counterfactual addresses the possibility of a better situation if things had turned out differently. For example, someone who loses her job may imagine what her life would have been like if she were able to keep her job. The *could* counterfactual addresses the possibility that a different course of action was available to the decision-maker. For example, someone who loses her job may wonder whether her manager could have saved her job by making better business decisions. Finally, the *should* counterfactual addresses the issue of whether a decision-maker has breached ethical codes. For example, someone who loses her job may wonder whether it was ethically inappropriate for her manager to cut jobs. Fairness Theory posits that when people believe that an alternative and more positive situation exists, and that the authority responsible for the current situation could and should have done otherwise, then people are more likely to believe in wrongdoing on the part of the authority, which reduces the perceived fairness of the original act. Thus, from a managerial standpoint, one method to reduce injustice perceptions is to decrease or deactivate counterfactual thoughts.

In a meta-analytic review, Shaw et al. (2003) demonstrated that Folger and Cropanzano's (2001) counterfactual framework provides a useful mechanism to account for the effects of explanations on fairness perceptions. Different elements of an explanation deactivate specific counterfactuals, with subsequent effects on perceived fairness. According to their review, *would* counterfactuals are influenced by the context of the event and the favorability of the outcome, *could* counterfactuals are influenced by excuses, and *should* counterfactuals are influenced by justifications. The difference between an excuse and a justification is that the former acknowledges the fault of the actor while arguing that the action was compelled by extenuating circumstances (Schlenker, 1980), whereas the latter accepts responsibility for the action and argues for its rationality based on ideological grounds (Sitkin & Bies, 1993; cf. Scott & Lyman, 1968).

Finding support for the effects of excuses and justifications on counterfactual thinking, Gilliland and colleagues (2001) have referred to them respectively as "could-" and "should-" reducing explanations. In their study of applicant reactions to employment rejection letters, they found that decision letters containing could- (e.g., the hiring process was halted due to budget problems), and should- (e.g., test instruments used in the selection process were valid) reducing explanations led to higher levels of perceived interactional and distributive justice. These findings support the idea that "could" and "should" counterfactuals have clear linkages to explanations containing excuses and justifications.

Our results suggest that congruence between a regulatory prime and the gain/loss framing of a message can increase the perceived validity of a message in the eyes of the recipient, thereby reducing the likelihood that one will engage in counterfactual thinking. If the effects of regulatory fit on justice perceptions work by reducing these counterfactuals, then they should follow the causal paths suggested by Shaw et al. (2003). In Study 3, therefore, we tested whether regulatory fit between an explanation and a recipient reduces the activation of “could” and “should” counterfactuals through the use of explanations containing excuses and justifications.

Previous research has suggested that in order for an individual to perceive injustice, multiple counterfactuals need to be activated. In Study 3, therefore, we deliberately presented participants with a scenario that was likely to activate “would” counterfactual thinking for all individuals. Participants read a newspaper article describing and explaining the reasoning behind a company layoff. Due to the fact that layoffs are generally perceived as negative in nature, participants were presented with a scenario in which it would be relatively easy for them to imagine an alternative and more favorable situation (i.e., employ a “would” counterfactual). By controlling for the “would” counterfactual, we were able to focus on examining how regulatory fit influenced the remaining two types of counterfactual thought processes (“could” and “should”; Shaw et al., 2003).

The “could” and “should” counterfactuals are especially relevant during layoffs because explanations associated with the termination of employees frequently contain elements of excuses and justifications. Layoffs are required by suboptimal organizational functioning in the face of stringent environmental demands—an external pressure that “forces” managerial actions and provides partial grounds for absolving the manager of responsibility for the ostensibly necessary layoffs. However, organizations also assume that competitiveness is an organizational goal, and therefore implicitly rely on this rationale to provide an ideological foundation for managerial action. Based on this reasoning, we hypothesized the following:

Hypothesis 2. Regulatory fit (i.e. the fit between individuals’ primed regulatory foci and managers’ framing of an explanation) decreases “could” and “should” counterfactual thinking.

Hypothesis 3. “Could” and “should” counterfactuals mediate the relationship between regulatory fit and fairness perceptions.

Method

Sample and design

We utilized a 2 (regulatory focus priming: promotion versus prevention) \times 2 (explanation characteristics: gain versus loss-avoidance) between-subjects design. Participants were 145 business undergraduate students who earned extra credit for participating in this study.

Procedure and manipulations

The regulatory focus manipulation was identical to the one used in Study 1, and was administered by an experimenter. Following the manipulation, the first experimenter collected the participants’ work and exited the lab. Next, a new experimenter told participants they were invited for a second, unrelated study.

In this task, participants were asked to read and respond to a half-page news story about a layoff at Chrysler. The news story, although fictitious, was formatted to look like a photocopy of an authentic newspaper column. The article contained both

informational details (i.e., the explanation content) and outcome-related details (i.e., the result of the layoff), but did not convey any procedural information (e.g., the layoff decision-making process). This format seemed most consistent with the type of media in which the story was presented. The newspaper article was based on an actual article in which the names of individuals and the industry had been altered. Text for the two versions of the article was therefore identical to the actual article with the exception of the added verbiage used to denote either a gain or loss frame. For example, in the gain version, corporate executives were quoted as saying the layoff would “allow the company to promote the gain of market share” from foreign competitors and allow Chrysler to “achieve growth in the marketplace and promote sales among its diverse customer base.” Meanwhile, in the loss-avoidance version, corporate executives were quoted as saying the layoff was “a necessary step to prevent the loss of market share” to foreign competitors and to allow Chrysler to “prevent loss in the marketplace and avoid loss of sales among its diverse customer base.” Participants were randomly given one of the two versions of the article, and were asked to record their reactions in a response survey.

Measures

Informational justice. Informational justice was measured with the same four-item scale used in Study 1 ($\alpha = .80$).

Distributive justice. Distributive justice was also measured with a four-item scale (e.g., “I believe it was fair for DaimlerChrysler to lay off its employees;” $\alpha = .87$; Greenberg, 1994). Because our scenario did not include information regarding procedures used to arrive at the layoff decision, we did not measure procedural justice.

Could and should counterfactuals. We developed measures of counterfactual thinking based on the definitions of “could” and “should” (Folger & Cropanzano, 2001). The “could” counterfactual included two items: (1) “Management could have done something other than the layoffs”, and (2) “In this situation, there was nothing else managers could do except a layoff.” ($\alpha = .80$). The “should” counterfactual included three items: (1) “The managers should not have initiated the layoff”, (2) “Chrysler’s use of layoffs is ethically questionable”, and (3) “Chrysler should have done something different besides laying off employees” ($\alpha = .70$). Although derived independently, our counterfactual measures are similar to those developed by Spencer and Rupp (2009).

Results and discussion

Similar to Study 1, the manipulation of message frame was examined using the following single-item manipulation check, “Did DaimlerChrysler use the layoff to promote sales or prevent loss of sales?” To answer this question, participants chose between “promote sales” and “prevent loss of sales.” Results of the chi-square were significant ($X^2_{(1, N=145)} = 34.93, p < .001$).

Means, standard deviations, and correlations among the studied variables are reported in Table 1. We hypothesized that regulatory fit (promotion/gain and prevention/loss) would lead to greater fairness perceptions than misfit (promotion/loss and prevention/gain). We used 2 (regulatory priming) \times 2 (framing of the message) ANOVAs to test our hypotheses. The interaction between regulatory priming and message framing on informational justice was significant ($F_{(1, 141)} = 7.33, p < .05, \eta_p^2 = .05$). The nature of the interaction is illustrated in Fig. 3A. More specifically, the difference between prevention/loss ($M = 2.88, SD = .87$) and prevention/gain ($M = 2.39, SD = .79$) was significant ($F_{(1, 69)} = 6.29, p < .05, \eta_p^2 = .08$), whereas the difference between promotion/gain ($M = 2.81, SD = .79$) and promotion/loss ($M = 2.58, SD = .75$) was not significant ($F_{(1, 72)} = 1.59, p = .22$). For distributive justice, the interaction between regulatory

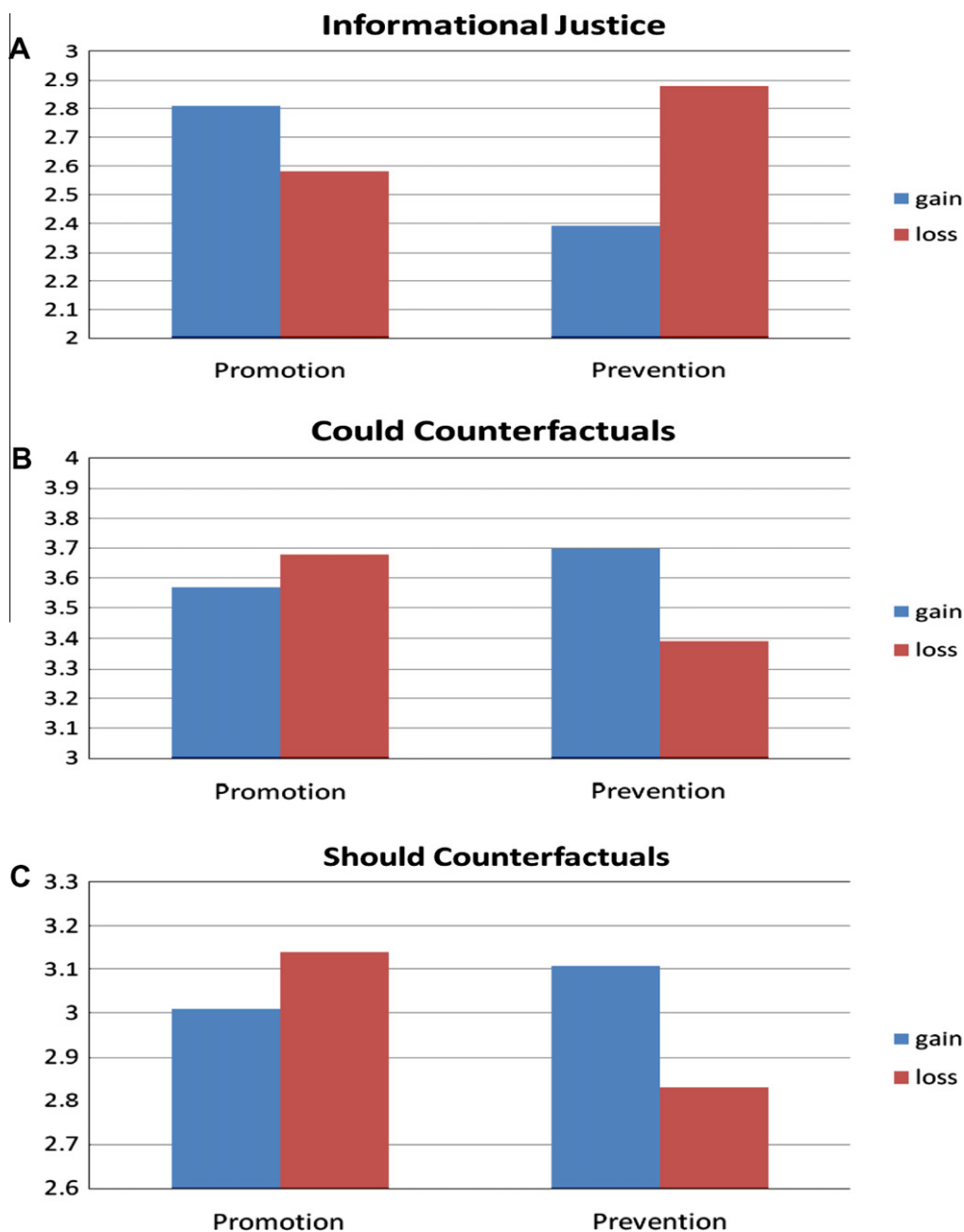


Fig. 3. Mean rating of informational justice (A), could counterfactuals (B), and should counterfactuals (C): Study 3.

focus and framing was not significant ($F_{(1, 141)} = 1.02$, ns). These results provided support for Hypothesis 1(a) but not (c).

Hypothesis 2 stated that a regulatory fit between primed regulatory focus and explanation characteristics would impact counterfactual thinking. The interaction between regulatory focus and framing on the *could* counterfactual was significant ($F_{(1, 141)} = 4.15$, $p < .05$, $\eta_p^2 = .03$). The nature of this interaction is also illustrated in Fig. 3B. Post hoc tests demonstrate the difference between prevention/loss ($M = 3.39$, $SD = .78$) and prevention/gain ($M = 3.70$, $SD = .55$) was significant ($F_{(1, 69)} = 3.74$, $p < .05$, one-tailed, $\eta_p^2 = .05$), although the difference between promotion/gain ($M = 3.56$, $SD = .52$) and promotion/loss ($M = 3.68$, $SD = .63$) was not significant ($F_{(1, 72)} = .73$, $p = .40$).

The interaction between regulatory prime and message framing on the *should* counterfactual was also significant ($F_{(1, 141)} = 3.96$, $p < .05$, $\eta_p^2 = .03$). The nature of this interaction is illustrated in Fig. 3C. Specifically, the difference between prevention/loss

($M = 2.83$, $SD = .61$) and prevention/gain ($M = 3.11$, $SD = .62$) was significant ($F_{(1, 69)} = 3.67$, $p < .05$, one-tailed, $\eta_p^2 = .05$), although the difference between promotion/gain ($M = 3.01$, $SD = .52$) and promotion/loss ($M = 3.14$, $SD = .74$) was not significant ($F_{(1, 72)} = .82$, $p = .37$). These results supported Hypothesis 2, which predicted that fit between recipients' primed regulatory foci and characteristics of the explanation would influence "could" and "should" counterfactuals.

Hypothesis 3 stated that counterfactual thinking would mediate the relationship between regulatory fit and fairness perceptions. Since distributive justice was not significantly related to regulatory fit, the mediating analyses were limited to informational justice. We conducted regression analyses using regulatory fit as the independent variable, the "could" and "should" counterfactuals as mediators, and informational justice as the dependent variable (Baron & Kenny, 1986). Regulatory fit was a significant predictor of informational justice ($\beta = .22$, $p < .01$), satisfying the first

mediational requirement (Baron & Kenny, 1986). Second, regulatory fit was also a significant predictor of the “could” ($\beta = -.17, p < .05$) and “should” ($\beta = -.16, p < .05$) counterfactuals. Third, when controlling for the mediator (the “could” and “should” counterfactuals), the relationship between regulatory fit and informational justice was reduced ($\beta = .16, p < .05$). We also confirmed the mediating model by using the Sobel (1992) test, *could*: $Z = 1.67, p < .05$ (one-tailed); *should*: $Z = 1.74, p < .05$ (one-tailed). Thus, the “could” and “should” counterfactuals partially mediated the relationship between regulatory fit and informational justice, providing partial support for Hypothesis 3 (James, Mulaik, & Brett, 2006).

We did not find significant effects on distributive justice even though we provided a context with a clear negative outcome. One possible reason for the lack of significant effects may be that the distributed outcomes were targeted toward others, rather than at the participants. Although past research has shown that people respond negatively to unfairness that targets both themselves as well as others (Turillo, Folger, Lavelle, Umpress, & Gee, 2002), there is also evidence showing that self-oriented justice tends to exert a larger impact than other-oriented justice (Lind, Kray, & Thompson, 1998).

Meta-analysis

We conducted a bare-bones meta-analysis (i.e. correcting for sampling error only) using procedures outlined by Raju, Burke, Normand, and Langlois (1991), examining the effects of regulatory priming on fairness perceptions across our three studies (see Table 2). Results indicated that congruence between regulatory priming and explanation framing led to a greater level of informational justice ($M_\rho = .39$; 95% confidence interval (CI): .14, .64), procedural justice ($M_\rho = .24$; 95% CI: .14, .34), and distributive justice ($M_\rho = .15$; 95% CI: .15, .16). We also collapsed the three justice dimensions to compare the effects of promotion/gain versus promotion/loss, and prevention/loss versus prevention/gain. Again, participants in the promotion/gain condition perceived a higher level of justice ($M_\rho = .27$; 95% CI: .04, .50) than those in the promotion/loss condition. Similarly, participants in the prevention/loss condition perceived a higher level of justice ($M_\rho = .27$; 95% CI: .11, .42) than those in the prevention/gain condition. These results suggest that although the comparisons between the fit and misfit conditions did not always reach conventional levels of statistical significance, taken together they provide fairly robust support for our hypotheses.

General discussion

Past research has suggested that when people experience fit between their regulatory state and elements of their environment, they tend to feel good about what they observe (Camacho et al.,

2003). In this study, we argue that one implication of this theory is that management can enhance the effectiveness of explanations by cultivating a specific regulatory state among followers that is consonant with the content of the explanation. Our results demonstrate the efficacy of managerial regulatory primes by showing that participants whose primed regulatory focus was congruent with the framing of an explanation responded more positively than those who experienced incongruence. We also found that these effects were partially explained by counterfactual thinking, such that primed regulatory fit between a message and its recipient reduced counterfactual assessments used to determine the fairness of one’s treatment.

Theoretical implications

Our study builds on past research on explanations, which tends to focus on how explanation content and delivery characteristics may enhance their effects on employees’ reactions. We extend these findings by uncovering the complex interplay between features of the explanations and the characteristics of the explanation recipients. Drawing on regulatory fit theory, we argued and found that explanations for test format changes (Study 1), a tuition increase (Study 2), and a layoff (Study 3) were more effective in reducing perceptions of unfairness when participants’ regulatory states were primed to fit with the content of the explanation. Specifically, participants who were primed with a promotion state responded more positively to a gain-framed message than to a loss-framed message, whereas participants who were primed with a prevention state responded more positively to a loss-framed message than to a gain-framed message.

Although justice scholars have suggested that explanation recipients may be partially responsible for the effectiveness of explanations following negative events (Bobocel & Zdaniuk, 2005), to our knowledge this possibility has never been empirically examined. As our results indicate, the joint consideration of explanation characteristics and recipients’ psychological states allows for greater precision in predicting justice evaluations than taking one perspective in isolation. Shaw and Colleagues (2003) summarized the impact of explanations on procedural and distributive justice as modest with considerable room for the presence of moderators. Our research suggests that recipient characteristics may provide an important category of moderator variables. Future research should build on these findings by examining how other recipient characteristics—particularly discrete emotions such as anger, or personality traits such as empathy or justice orientation—may combine with characteristics of the explanation to shape justice evaluations.

This study also contributes to the justice literature by examining how experiential processing may drive individuals’ evaluations of the fairness of negative events. Until recently, justice scholarship

Table 2
Meta-analysis results.

Analysis	k	N	Md	SDd	M ρ	SE M_ρ	95% Conf. int.		SD ρ	80% Cred. int.	
							L	U		L	U
<i>Main effect of fit versus misfit</i>											
Informational justice	3	559	.39	.21	.39	.13	.14	.64	.22	.11	.67
Procedural justice	2	414	.24	.04	.24	.05	.14	.34	.07	.19	.29
Distributive justice	3	559	.15	–	.15	.00	.15	.16	.00	–	–
<i>All justice types</i>											
Promotion/gain versus promotion/loss	3	278	.27	.18	.27	.12	.04	.50	.20	.04	.50
Prevention/loss versus prevention/gain	3	281	.27	.10	.27	.08	.11	.42	.14	.14	.39

Note. k = the number of independent effect sizes included in each analysis; N = sample size. Md = mean uncorrected d value; SDd = standard deviation of uncorrected d value; M ρ = mean corrected d value (corrected for sampling error); SE M_ρ = standard error of M ρ ; 95% Conf. int. = 95% confidence interval for M ρ ; SD ρ = standard deviation of estimated ρ 's; 80% Cred. int. = 80% credibility interval.

has been dominated by a rational approach whereby justice perceptions are purported to be based on the tabulation of leaders' violations of justice rules or the comparison of one's own input/output ratio with the same ratio of a referent other. Complementing the rational approach, several recent studies have shown that emotions may also play a critical role in explaining how individuals respond to justice violations. For example, *Maas and van den Bos (2009)* found that individuals who process information experientially reported the most negative reactions to justice violations when they were also high on affective intensity. *Skarlicki and Rupp (2010)* reported a stronger retributive tendency among third parties who were instructed to process information experientially. Most of these studies manipulated mindset by explicitly instructing study participants to process information either rationally or experientially, an approach that is susceptible to demand effects. As a result of this limitation, justice scholars have called for more research on methods to naturally cue experiential versus rational mindsets (*Skarlicki & Rupp, 2010*), as in our study.

In the present study, we explored one route to induce experiential processing. Drawing on regulatory fit theory, we argued that regulatory fit, as a result of the congruence between regulatory focus priming and the framing of the explanation, may create a feeling right experience. Since experiential systems are associated with the use of feelings as the basis of judgments, it follows that the more an explanation feels right, the more it is likely to be processed experientially. Additionally, we also found that regulatory fit was associated with the reduction of effortful information processing, in the form of a lower level of counterfactual thinking. This finding is significant because it confirms the speculation that experiential processing of justice-related information may lead to reactions that have a more heuristic quality (*van den Bos & Maas, 2009*).

Our study also contributes to research on regulatory fit. The nature of the feeling right experience as a result of regulatory fit has been a topic of protracted and considerable debate (*Avnet & Higgins, 2006a*). Drawing on the dual-process model, we found evidence supporting counterfactual thinking as an important mechanism underlying the feeling right experience. Results of our study showed that individuals who experienced a fit between their regulatory focus and the characteristics of the explanation were less likely to believe that managers could have done something different and that management should have acted differently. As such, they were less likely to perceive injustice. These findings suggest that regulatory fit facilitates a fluent and automatic processing of information and reduces the need to rely on counterfactuals to scrutinize the explanations provided for negative events. In contrast, regulatory misfit renders the explanation inconsistent with the schemas stored in our associative knowledge system (*Smith & DeCoster, 2000*), thus necessitating rational evaluations of the merits of the explanations and the imagination of counterfactual alternatives.

Our study also has implications for relating dual-process models to the theory of regulatory fit. Dual-process models specify both a rational and an experiential information processing system, suggesting that the relative information processing role of either system can be influenced by prior mental and motivational states (*Hofmann, Gschwendner, Friese, Wiers, & Schmitt, 2008; Strack & Deutsch, 2004*). The presence of mental resources and motivation may dictate the choice of mindsets to process information, such that those who have an abundant supply of mental capacity or motivation are more likely to process information rationally, whereas those who have a short supply may opt to do so experientially (*Smith & DeCoster, 2000*).

Similarly, recent research on regulatory fit suggests that it influences attitudes through two mechanisms: The feeling right experience and an increased strength of engagement (*Higgins, 2006*). In

other words, individuals experiencing regulatory fit become more motivated and involved. For example, *Hong and Lee (2008)* found that regulatory fit led to better self-regulation (by squeezing a handgrip longer), and *Forster, Higgins, and Idson (1998)* found that regulatory fit led to greater motivation (in terms of applying arm pressure and persistence). While these two mechanisms can be complementary to each other (feeling right may increase one's motivation to continue in order to maintain the positive experience) and may operate in parallel, it is also important to understand the conditions under which one may take precedence over the other (*Aaker & Lee, 2006*). The choice of channel (feeling right versus engagement) through which regulatory fit works may depend on prior engagement or motivation (*Lee, 2009; Pham & Avnet, 2009*). In other words, when individuals are highly involved and motivated, regulatory fit may influence outcomes through the engagement channel. In contrast, when individuals are less involved/motivated, regulatory fit may influence outcomes through the feeling right channel. Of course, these arguments are speculative and should be examined in empirical research.

Limitations

Despite its contributions, our study has a number of shortcomings. First, across all studies, the observed effect sizes for regulatory fit were relatively small. Although individual significance tests and our meta-analysis demonstrate that these effects are significant, the small effect sizes do draw into question the practical significance of our findings. The small effects could have been due to not experiencing the outcome (Study 1), the severity of the negative event (Study 2), or third-party reactions (Study 3).

Second, in Study 2, we included a control condition containing no explanation. Our results demonstrated that regulatory fit, in general, led to more positive responses than the control condition. However, it is unclear whether the same effects may be observed when an explanation is provided in the control condition. The question remains as to whether participants in the fit condition would have had more favorable reactions, and participants in the misfit condition less favorable reactions, than those who are given a gain or loss explanation without the regulatory focus priming (*Santelli et al., 2009*).

Also in Study 2, we examined a negative outcome that, while real, had not yet been experienced by the participants. Thus, our findings were isolated from additional social processes that may accompany real-time, real-world experiences. For example, employee reactions to a company layoff may be influenced by a socially constructed interpretation of events shared among coworkers. Actual layoff victims' responses to explanations are shaped by a multitude of factors, such as opinion-sharing among peers (*Jones & Skarlicki, 2005*) and the accessibility of their immediate supervisor (*Folger & Skarlicki, 1998*). Future work investigating the incremental value of managerial primed fit over other variables represents an important avenue for future research.

Finally, in a meta-analysis, *Shaw and colleagues (2003)* found that excuses are more effective than justifications in reducing adverse reactions to unfavorable events. In this study, we did not test the differential effects of these two types of explanations, making it less clear whether the effects of regulatory fit may remain invariant across them. Future research can consider the interactive effects of regulatory fit and specific explanation characteristics.

Conclusion

This research presents some initial evidence that managers who wish to soften the blow of negative events can do more than prepare a thoughtful explanation. Our study demonstrates that one way to reduce the negative impact of unfavorable events is to tailor an

explanation based on the motivational state of employees. Importantly, management may find it within their power to prime a specific regulatory focus among their employees through language or symbols that fit their message (e.g., emphasizing an ideal situation to elicit a promotion focus; Brockner & Higgins, 2001). The variety and effectiveness of priming strategies should be a fruitful direction for future research and should also help continue to inform managers about the importance and utility of explanations.

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