

5-19-2007

# Is All Injustice Created Equal? Exploring the Effects of Decision Outcome and Procedural Justice on Reactions to Injustice

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Is All Injustice Created Equal? Exploring the Effects of Decision Outcome  
and Procedural Justice on Reactions to Injustice

by

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A thesis submitted in partial fulfillment  
of the requirements for the degree of  
Master of the Arts  
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College of Arts and Sciences  
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Date of Approval:  
May 19, 2007

Keywords: emotion, retaliation, attribution, loss aversion, regulatory focus

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ABSTRACT

Organizational justice scholars have ignored the influence that the nature of a decision outcome has upon reactions to perceived injustice, yet research on loss aversion demonstrates that people react more strongly to situations that result in a loss than those that result in an anticipated gain failing to materialize (non-gain). Furthermore, research on regulatory focus has found that the nature of a decision outcome can itself elicit different emotions. Based on this, a cognitive appraisal model of the relationship between injustice and emotions is proposed that accounts for the effect of decision outcome. This model predicts that emotional reactions to injustice will differ according to the nature of the received decision outcome as well as the fairness of the procedure used to reach that outcome. Specifically, it is hypothesized that a loss decision outcome will elicit a prevention focus and lead to greater agitation-related emotions, whereas a non-gain decision outcome will elicit a promotion focus and result in greater dejection-related emotions. In addition, it is predicted that, in the presence of an unfair procedure, outward-focused, foci-related emotions will be reported and that perceptions of procedural injustice will be related to increased retaliation especially following a loss. To test these predictions, participants were asked to provide their reactions to vignettes describing a

loss or non-gain reached via a fair or an unfair procedure. Although all hypotheses were not supported, it was found that decision outcome produced a significant main effect on emotions, such that participants reported higher levels of negative emotions after a loss and higher ratings of positive emotions after a non-gain. In addition, it was found that procedural injustice was related to higher levels of outward-focused, negative emotions and increased retaliation.



## Introduction

If asked to describe an event that resulted in strong feelings of anger, an individual is likely to provide an event that he or she perceived as being unfair (Mikula, Scherer, & Athenstaedt, 1998). Yet, the experience of distinct emotions, such as anger, in reaction to injustice has received relatively little empirical attention (Weiss, Suckow, & Cropanzano, 1999) and few studies of justice have examined emotions as an outcome variable (Barclay, Skarlicki, & Pugh, 2005). This scarcity of research on the relationship between injustice and emotion is even more surprising given that many justice theories explicitly or implicitly include emotion (Mikula, et al., 1998). For example, when elaborating equity theory, Adams (1965) stated that perceptions of injustice could, in many cases, be used to explain feelings of dissatisfaction and that perceptions of inequity could result in unpleasant emotions such as anger and guilt. A more recent example is fairness theory (Folger & Cropanzano, 1998, 2001) that by virtue of the counterfactual thinking process involves emotion (negative emotions are the most common catalyst of counterfactual thinking; Roese, 1997).

In order to provide a theoretical framework for the discussion of the relationship between emotions and justice, the adaptation of a two-stage cognitive appraisal model was proposed (Cropanzano, Weiss, Suckow, & Grandey, 2000; Weiss, et al., 1999). Stage one of this model is the primary appraisal that determines the relevance of a situation to an individual, which in the context of organizational justice, is analogous to the

assessment of outcome favorability. Stage two, or the secondary appraisal, is an individual's evaluation of the variables associated with the event, such as perceptions of procedural justice. According to this model, the valence of an emotional reaction is determined by the primary appraisal of outcome favorability and more specific emotions, such as anger or sadness, are the result of the secondary appraisal assessing procedural fairness. For example, an event with an unfavorable outcome that was achieved by a decision making process that favored another person is predicted to result in feelings of anger whereas an unfavorable outcome reached via a procedure that favored the self would result in sadness (Cropanzano, et al., 2000). However, excluded in this model is the impact that the nature of a decision outcome (loss or non-gain) could itself have upon affective reactions to a decision.

Organizational justice scholars have ignored the possible influence that the nature of a decision outcome can have upon affective and behavioral reactions to injustice, yet a large body of research exists to indicate that this omission is not warranted. For example, research on loss aversion, or the tendency to assign greater subjective value to losses than gains (Kahneman & Tversky, 1979), has found that individuals will rate a cut in wages (i.e., a loss) as more unfair than the elimination of an anticipated bonus of equivalent size (i.e., a non-gain; Kahneman, Knetsch, & Thaler, 1986; Liberman, Idson, & Higgins, 2005). Of greater relevance to the topic of emotions is the finding by Liberman and colleagues (2005) that participants who read a vignette describing a loss reported significantly stronger, negative affective reactions than those who read a vignette describing a non-gain. A viable framework for illuminating this finding and the possible

relationship between the nature of a decision outcome and emotions can be found in the literature pertaining to regulatory focus (Higgins, 1998).

### Regulatory Focus

Self-regulation refers to attempts by an individual to align their self-concept and behaviors with an objective or standard; however, what has been previously overlooked in discussions of this topic is the motivational consequences that the desired end state itself may have upon how an individual attempts to reduce the discrepancy between their current and desired end-state. To this end, Higgins (1997, 1998) proposed that there are two hedonic self-regulatory systems through which individuals approach pleasure and avoid pain: one in which the desired end-state is approached, referred to as a promotion focus, and the other in which a match between the actual self and a feared state is avoided, referred to as a prevention focus. Consideration of these different foci is important because each is associated with different needs, goals, and emotional experiences. Furthermore, momentary situations that communicate information regarding outcomes are proposed to induce a promotion or prevention focus within an individual (Higgins, 1997, 1998).

According to regulatory focus theory, a situation in which the presence or absence of a positive outcome is salient is proposed to elicit a promotion focus (Higgins, 1997, 1998). Furthermore, it is proposed that an individual operating with a promotion focus is motivated by a need for growth and development and that this need for growth and development is fulfilled through the use of strategies which reduce the discrepancy the individual perceives between their current and ideal state. This translates into a desire to

attain maximal goals, such as achieving hopes and fulfilling aspirations, which serve to align the individual's current state of being with their desired, ideal state. An important consequence of this motivation is that individuals operating with a promotion focus are theorized to experience an emotional gamut that ranges from cheerfulness to dejection (Higgins, 1997, 1998). Cheerfulness-related emotions, such as happiness, are theorized to be experienced following a situation where the presence of a positive outcome is highlighted (i.e., a gain). On the other hand, dejection-related emotions, for example disappointment, are experienced following an event where the absence of a positive outcome is stressed (i.e., a non-gain).

Unlike a promotion focus, a prevention focus is predicted to arise in situations in which the presence or absence of a negative outcome is salient. According to Higgins (1997, 1998), an individual operating with a prevention focus is motivated by security needs and a desire to minimize the discrepancy between their current state and an end-state that they believe they ought to achieve or avoid. This motivation manifests as a desire to maintain minimal standards such as meeting obligations, duties, and responsibilities. This concern with maintenance leads individuals with a prevention focus to experience an emotional continuum that runs from quiescence to agitation (Higgins, 1997, 1998). Quiescence-related, positive emotions, for instance calm, are felt following a situation where the absence of a negative outcome is salient (i.e., a non-loss) whereas agitation-related, negative emotions, like tension, are felt after an event where the presence of a negative outcome is accentuated (i.e., a loss).

Like loss aversion, regulatory focus predicts that affective reactions will vary as a function of the nature of the decision outcome received by the individual. However,

unlike loss aversion which predicts differences in the magnitude of the reaction, regulatory focus predicts that each decision outcome will produce a distinct emotional reaction; this relates back to the motivation evoked by the different decision outcomes as a function of focus. For example, an individual operating with a promotion focus is motivated to achieve success and thus, when successful, experiences more cheerfulness-related, positive emotions, like happiness, than an individual operating with a prevention focus who is motivated to avoid failure and therefore experiences quiescence-related, positive emotions such as calm. In contrast, an individual who strives to avoid failure will experience more agitation-related, negative emotions such as anger following a failure than someone who is motivated to achieve success and would thus experience more dejection-related, negative emotions like disappointment. In short, regulatory focus proposes that the relationship between the framing of an outcome and, in turn, the motivation elicited by the situation account for the different affective reactions resulting from different decision outcomes (Brockner & Higgins, 2001).

According to regulatory focus, a promotion focus and prevention focus should result in different emotional experiences. To test this prediction, Idson, Liberman, and Higgins (2000) conducted three studies. The first study was comprised of two parts. In part 1, participants were presented with vignettes describing different outcomes of equivalent magnitude and asked to rate how they would feel if in that situation. They found that participants anticipated feeling better about a gain than a non-loss and anticipated feeling worse about a loss than a non-gain. For part 2 of the first study, participants were also presented with vignettes except this time the scenarios were written in the third person. Once again, it was found that participants reported a preference for a

gain over a non-loss and a non-gain rather a loss. For study 2, participants were asked to imagine performing an anagram task and results indicated that participants anticipated feeling more positively about a success framed as a gain than a non-loss and more negatively about a failure framed as a loss than a non-gain. Finally, in study 3, the influence of regulatory focus as an individual difference variable upon the relationship between outcome and emotion was explored. Participants were first tested to determine their chronic regulatory focus and in a later session were asked to perform an anagram task. The findings of this study suggest that individual differences in regulatory focus contribute to affective reactions.

In addition, Higgins, Shah, and Friedman (1997) explored the relationship between regulatory focus and more specific affective reactions in four studies. Three of these studies had participants complete a measure of chronic regulatory focus and an emotional frequency questionnaire. The results of these three studies supported the hypotheses that goal achievement resulted in cheerfulness-related emotions for those with a promotion focus and quiescence-related emotions for individuals with a prevention focus and that failure to attain a goal increased dejection-related emotions in those with a promotion focus and agitation-related emotions in those with a prevention focus. Study 4 tested the relationship between regulatory focus as induced through framing and emotional reactions. Similar to the results of the first three studies, it was found that a strong promotion focus was related to cheerfulness-related and dejection-related emotions and a strong prevention focus was related to quiescence-related and agitation-related emotions.

## Elaborating the Relationship between Organizational Justice and Emotions

The pattern of results found by research on loss aversion (Kahneman, et al., 1986; Liberman, 2005) and regulatory focus (Higgins, et al., 1997; Idson, et al., 2000) provides compelling evidence regarding the influence that the nature of a decision outcome can have upon reactions to an event. Furthermore, these findings make it clear that the effects produced by different decision outcomes are especially relevant to the study of organizational justice given that a situation may induce a different regulatory foci (Higgins, 1997; Idson, 2000). In light of the potential effects that situationally-induced regulatory focus may exert upon reactions to a fairness event, a cognitive appraisal model is proposed that accommodates the effects that the nature of an outcome may have upon reactions to a decision.

The proposed model retains the two-stage structure of previous appraisal models (Cropanzano, 2000; Weiss, 1999) but, unlike previous models, will base its predictions of affective reactions upon regulatory focus (Higgins, 1997, 1998). Furthermore, research by Krehbiel and Cropanzano (2000) demonstrated that procedural justice in conjunction with outcome favorability had an effect upon discrete emotions and suggested that the influence of procedural justice within the context of regulatory focus be explored. Therefore, this model will incorporate the impact that the fairness of the procedure used to arrive at the decision may have upon the experience of emotions (see figure 1). It should be noted that unlike previous models of justice and emotions, this model focuses on unfavorable decision outcomes. The reason for excluding favorable outcomes is that research shows that such situations do not appear to result in counterfactual thinking (Colquitt & Chertkoff, 2002) or attributional searches (Wong & Weiner, 1981). This

suggests that reactions to favorable and unfavorable outcomes may function differently at a cognitive level and thus, should be treated as separate phenomenon.

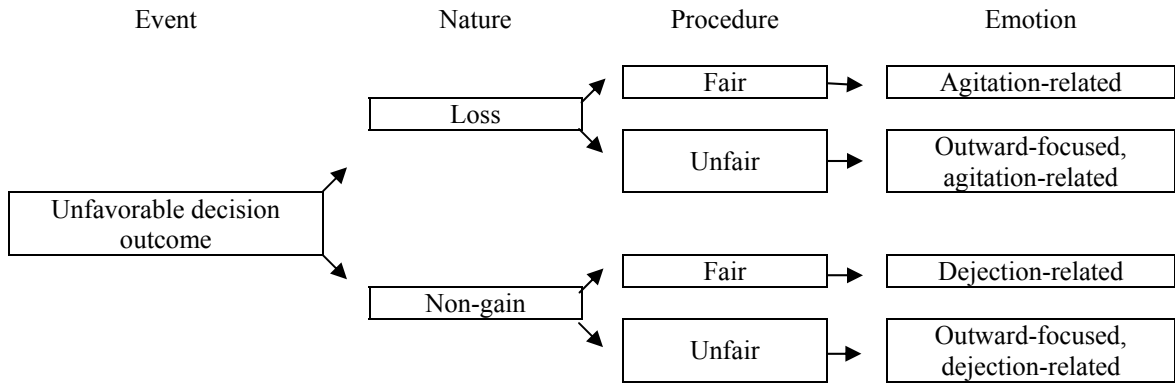


Figure 1. Theoretical relationship between injustice and emotion.

### Primary Appraisal

According to Weiss et al. (1999), only general emotions are the result of the primary appraisal and, in his model of emotions and attribution, Weiner (1985) also proposed that following an outcome, broad, outcome dependent emotions would be felt. The proposed model makes a similar prediction (i.e., general emotions are experienced following the primary appraisal) but proposes that these general emotions will vary according to the nature of the decision outcome. According to literature on regulatory focus, a situation can, through its framing, predispose an individual to assume a promotion or prevention focus (Higgins, 1997, 1998). In addition, past research has shown that different foci can result in different emotional experiences (Higgins, et al., 1997, Idson, et al., 2000). Therefore, it is predicted that, following a decision, individuals will experience broad emotions but that these broad emotions will differ according to the nature of the received decision outcome. Specifically, it is hypothesized that a decision



outcome that results in the elimination of an anticipated gain (i.e., a non-gain) will elicit a promotion focus and result in dejection-related emotions such as sadness, dejection, and discouragement. On the other hand, following a loss it is predicted that a prevention focus will be activated and greater levels of agitation-related emotions such as nervousness, tension, and worry reported.

*Hypothesis 1:* Following a non-gain, individuals will report more dejection-related emotions (sadness, dejection, and discouragement) than individuals who experience a loss.

*Hypothesis 2:* Following a loss, individuals will report more agitation-related emotions (nervousness, tension, and worry) than individuals who experience a non-gain.

### *Secondary Appraisal*

Similar to previous models, the secondary appraisal of the proposed model relates to the assessment of the variables surrounding the outcome or, for our purposes, procedural justice. Divergence from the Weiss et al. (1999) model occurs in relation to the effect of the secondary appraisal upon emotions. In the model proposed by Weiss (1999), the secondary appraisal results in discrete emotions (guilt, pride, sadness, or anger), however this fails to integrate one of the most important processes that individuals engage in following a negative event: attributional searches.

Research by Wong and Weiner (1981) has shown that individuals conduct attributional searches, especially following a negative event, and attributions of accountability play a pivotal role in many justice theories. Therefore, in the proposed

model, the secondary appraisal serves the purpose of determining whether or not the affective reaction will be directed at the decision maker; a proposition that is similar to the attributional theory of emotion proposed by Weiner (1985). Weiner discussed the importance of causality in the emotion process and proposed that distinct emotions, such as anger, are the result of causal attribution. Furthermore, he differentiated between what he called outcome dependent-attribution independent emotions and attribution dependent emotions.

According to Weiner (1985), outcome dependent-attribution independent are general emotions that are determined solely by the attainment or non-attainment of a desired goal (e.g., sadness) where as attribution dependent emotions are more specific emotions related not only to the outcome but also the casual ascription the individual makes regarding responsibility for the received outcome (e.g., anger). Research by Barclay, Skarlicki, and Pugh (2005) on the relationship between procedural justice and outward-focus emotions lends support to the notion that the experience of emotions is related to procedural justice. Barclay et al. (2005) found that, when an unfavorable outcome resulted from an unfair procedure, external attributions of responsibility were made and that two outward-focused, negative emotions, namely anger and hostility, were reported.

Based on literature exploring the role of attribution in the emotions process, it is proposed that following an unfavorable outcome, an individual will experience negative emotions based on the foci elicited by the situation (Higgins et al., 1997) and that perceptions of procedural injustice will result in a shift from outcome dependent emotions that lack a causal ascription to foci-related emotions that possess an attribution

of responsibility. For example, following an unfavorable outcome that resulted in a loss, an individual is predicted to assume a prevention focus and experience outcome dependent, agitation-related emotions such as tension, nervousness, and worry as a result of the primary appraisal. During the secondary appraisal, if the individual were to conclude that the loss was the result of an unfair procedure, it is anticipated that attribution dependent, agitation-related emotions such as anger, frustration, and disgust would be felt.

Furthermore, it is proposed that these emotions would be directed at the decision-maker; the reason being that outward-focused, negative emotions, like anger, are associated with attributions of blame for a situation (Barclay et al., 2005; Weiner, 1985). In contrast, if the same situation existed but the process that produced the outcome was perceived as fair, it is anticipated that individuals would not experience outward-focused, agitation-related emotions such as anger, frustration, and disgust but would instead experience general, agitation-related emotions nervousness, tension, and worry. In regards to a non-gain, it is hypothesized that the same pattern of relationships would hold but that, in lieu of agitation-related emotions, the individual would instead experience dejection-related emotions such as sadness, dejection, and discouragement and outward-focused, dejection-related emotions such as dissatisfaction, disappointment, and shame directed at the decision maker.

*Hypothesis 3:* Following an unfair non-gain, individuals will report more outward-focused, dejection-related emotions (dissatisfaction, disappointment, and shame) directed at the decision maker than individuals who experience a fair non-gain.

*Hypothesis 4:* Following an unfair loss, individuals will report more outward-focused, agitation-related emotions (anger, frustration, and disgust) directed at the decision maker than individuals who experience a fair loss.

*Hypothesis 5:* Following an unfair non-gain, individuals will report more outward-focused, dejection-related emotions (dissatisfaction, disappointment, and shame) directed at the decision maker than individuals who experience an unfair loss.

*Hypothesis 6:* Following an unfair loss, individuals will report more outward-focused, agitation-related emotions (anger, frustration, and disgust) directed at the decision maker than individuals who experience an unfair non-gain.

### *Retaliation*

In addition to emotions, it is anticipated that there will be behavioral differences attributable to the nature of the decision outcome. Loss aversion proposes that individuals place greater subjective value on and react more strongly to losses than objectively identical non-gains (Kahneman & Tversky, 1979). In addition, research by Fox, Spector, and Miles (2001) has found that high levels of negative emotions are related to increased counterproductive work behaviors (CWB) and research by Barclay et al. (2005) found that the experience of outward-focused, negative emotions was related to an increased desire to engage in retaliatory behaviors. Furthermore, attributions of blame (Aquino, Tripp, & Bies, 2001) and the presence of injustice (Greenberg, 1990; Skarlicki & Folger, 1997) have been found to relate to increased retaliation. Taken together, this body of literature suggests that retaliation should vary according to the nature of the received

decision outcome. That is, individuals who experience a loss should react more strongly to an unfavorable decision outcome than individuals who experience a non-gain; therefore, it is predicted that greater levels of retaliation will be reported following a loss than a non-gain.

*Hypothesis 7:* Individuals who experience a loss will report higher levels of retaliation than individuals who experience a non-gain.

## Method

### *Participants*

Participants for this study were undergraduate students at the University of South Florida who received extra credit in exchange for their participation. In total, 266 individuals participated in the study, the sample was predominately female (84%) and employed in some capacity (68%). In terms of ethnicity, the sample was primary Caucasian (67%) followed by Hispanic (14%) and the mean age was 20.7.

### *Procedure*

For this study, participants were asked to read a vignette and answer questions regarding their reaction to the described scenario. Although vignette methodologies introduce a unique set of problems related to the interpretation of results and generalizability, past discussion on the topic of role playing in organizational research has argued that vignettes are an acceptable way of measuring cognitive processes (Greenberg & Eskew, 1993). In addition, vignette procedures are used in numerous studies of loss aversion, regulatory focus, and organizational justice (e.g., Barling, 1993;

Idson, et al., 2000; Kahneman, 1986; Liberman, 2005). Therefore, based on its past usage and acceptance in the literature, the use of a vignette methodology was deemed appropriate for this study.

### *Vignette Development*

The vignettes for this study were designed to reflect different decision outcomes (loss versus non-gain) as well as differences in procedural fairness (fair versus unfair). The initial set of vignettes was based on those used by Kahneman (1986) with the addition of actual salary values and a fairness manipulation. Examination of the pilot test results indicated that the fairness manipulation did not produce a significant difference in perceptions of justice,  $t(109) = -.16, p > .05$ . Interestingly, this pilot study also found no effects for differing the magnitude of the situation's impact (e.g., 5% versus 9% pay cut) but did find that, unlike the shift from first- to third-person conducted by Idson (2000), identifying the individual in the vignette by name rather than simply referring to employees in general produced significantly different effects with the latter producing greater reactions across the board. Because the initial vignettes failed to produce the desired effects, a second set was developed. Once again, the decision outcome manipulation for the vignettes was the one used by Kahneman (1986); however, the procedural fairness manipulation used by Barling (1993) was added. Pilot testing of this second set of vignettes demonstrated their effectiveness and they were, therefore, used in the study.

Table 1  
*Vignettes by condition*

Outcome	Procedural fairness	
	Fair	Unfair
Loss	<p>Company X employs several people in various part-time positions with an average pay of around \$16,490. Company X has just unexpectedly lost two large manufacturing contracts and is currently arranging short-term strategies to deal with this situation. After negotiations between management and the employee union, management and union representatives met with all the employees and announced that there would be pay cuts of 9% across the board for the next year (reducing the average salary to about \$15,000). After this announcement, employees met with their supervisors for an hour and had an open and honest discussion about the pay cut, during which the supervisor listened to their concerns.</p>	<p>Company X employs several people in various part-time positions with an average pay of around \$16,490. Company X has just unexpectedly lost two large manufacturing contracts and is currently arranging short-term strategies to deal with this situation. After discussion among management (which unlike previous meetings excluded representatives from the employee union), the company announced via email that there would be pay cuts of 9% for all part-time employees (reducing the average salary to about \$15,000). After this announcement, employees who asked their supervisor about the pay cut were told that management's decision is final and that they are unwilling to answer any questions at this time.</p>
Non-gain	<p>Company X employs several people in various part-time positions with an average pay of around \$15,000 and, for the past few years, an annual pay increase of 9% (about \$1,350). Company X has just unexpectedly lost two large manufacturing contracts and is currently arranging short-term strategies to deal with this situation. After negotiations between management and the employee union, management and union representatives met with all the employees and announced that there would be no pay increase this year. After this announcement, employees met with their supervisors for an hour and had an open and honest discussion about the lost pay increase, during which the supervisor listened to their concerns.</p>	<p>Company X employs several people in various part-time positions with an average pay of around \$15,000 and, for the past few years, an annual pay increase of 9% (about \$1,350). Company X has just unexpectedly lost two large manufacturing contracts and is currently arranging short-term strategies to deal with this situation. After discussion among company X's senior management, the company announced via email that there would be no pay increase this year for part-time employees. After this announcement, employees who asked their supervisor about the lost pay increase were told that management's decision is final and that they are unwilling to answer any questions at this time.</p>

*Measures*

Participants first completed a questionnaire assessing their chronic regulatory focus then presented with a vignette and asked to complete a short battery of measures assessing their reactions to the vignette (see appendix for complete study measures).

There were four vignettes total, reflecting the different combinations of decision

outcome: loss or non-gain, and procedural fairness: fair or unfair (see table 1). Each participant was randomly assigned to one of the four vignettes and was only exposed to that one vignette.

*Emotions.* Emotions were measured using an inventory developed for this study. Participants were asked to indicate which emotions the employees at the company would feel following the event described in the vignette. These emotions included many that have been used in past research on regulatory focus (e.g., Roney, Higgins, & Shah, 1995) and that are frequently reported in research exploring the relationship between emotions and justice (e.g., Mikula, et al., 1998). This included three agitation-related emotions (nervous, tense, and worried,  $\alpha = .85$ ), three outward-focused, agitation-related emotions (angry at company, frustrated with company, and disgusted at company,  $\alpha = .78$ ), three dejection-related emotions (sad, dejected, and discouraged,  $\alpha = .66$ ), and three outward-focused, dejection-related emotions (dissatisfied with company, disappointed in company, and ashamed of company,  $\alpha = .73$ ). In addition, positive emotions and inward-focused, positive and negative emotions were included for exploratory purposes. All emotion items were answered using a 7-point Likert scale with 1 = *Strongly Disagree* to 7 = *Strongly Agree*. For the purpose of hypothesis testing, the different emotions were summed by foci (agitation-related or dejection-related) and the presence or absence of an external attribution of blame (outcome-dependent or outward-focused). This resulted in four emotion groups: outcome-dependent, agitation-related; outward-focused, agitation-related; outcome-dependent, dejection-related; and outward-focused, dejection-related.

*Retaliation.* Retaliatory behaviors were measured using the Counterproductive Work Behaviors (CWB) directed at the organization subscale of the CWB Checklist



developed by Spector, Fox, Penney, Bruursema, Goh, and Kessler (2006). The scale was modified such that respondents indicated the extent to which the individuals in the vignettes would engage in the described behaviors after the event described in the vignette instead of reporting their own behaviors. This sub-scale consists of 21 CWBs which are specially directed at the organization (e.g., “Daydream rather than do their work” and “Take a longer break than they are allowed to take”) and was by Spector et al. (2006) to possess a reliability of .84 and a reliability of .95 for this study. Items were answered using a 5-point frequency scale with 1 = *Never* to 5 = *Every day*.

*Chronic Regulatory Focus.* Regulatory focus was measured using an adapted version of the measure developed by Lockwood, Jordan, and Kunda, (2002) to assess regulatory focus within the academic setting. The measure consists of two, nine-item subscales: one assessing chronic promotion focus (e.g., “I am anxious that I will fall short of my responsibilities and obligations”) and the other assessing chronic prevention focus (e.g., “I typically focus on the success I hope to achieve in the future”). Lockwood, et al. (2002) found the two subscales to be reliable (promotion  $\alpha = .81$ , prevention  $\alpha = .75$ ) and to possess a correlation of .17. Items were answered using a 9-point Likert scale with 1 = *Not at all true of me* to 9 = *Very true of me* and a separate score was calculated for each focus. The reliability of these scales for this effort was .87 for promotion and .77 for prevention.

*Justice.* Justice perceptions were measured using a scale developed by Barling (1993). This scale consists of three items (“The action taken by the company was appropriate given the unusual circumstances the company is facing”, “The decision making process leading to the decision was appropriate”, and “The company showed

concern for its employees”) and items were answered using a 7-point Likert scale with 1 = *Strongly Disagree* to 7 = *Strongly Agree*. The reliability for this scale in the present study was .83.

## Results

*Manipulation Checks.* In order to ensure that participants understood the nature of the decision outcome that was presented to them, an item was included which asked participants to indicate whether they read about a pay cut or lost bonus pay. It was found that a majority of participants correctly identified the decision outcome that they read about (70% in the non-gain condition and 90% in the loss condition). Individuals who failed to correctly identify the decision outcome to which they were assigned were excluded from analyses (39 in non-gain condition and 13 in loss condition). This discrepancy between the misidentification rates of the decision outcome conditions is likely due to the lack of correspondence between the verbiage used in the vignette and the manipulation check question. Specifically, in reference to the loss condition, the expression “pay cut” was used in both the vignette and the manipulation check question. In contrast, for the non-gain condition the expression “lost pay increase” was used in the vignette but the respective response option in the manipulation check question was phrased as “a pay raise was not received”. This inconsistency in terminology is likely to account for the disparate number of participants who incorrectly identified the non-gain condition as a loss.

In addition, the effectiveness of the procedural fairness manipulation was tested. First, the data were screened for extreme responses in regards to the justice scale, i.e.,

scores that were 2.5 standard deviations above or below the grand mean of the sample. No extreme responses were found and, therefore, no participants were excluded. Next, a t-test was conducted comparing ratings of procedural justice for the fair and unfair procedure conditions. It was found that the procedural fairness manipulation was successful,  $t(214) = 5.29$ ,  $d = .72$ ,  $p < .001$ , with individuals in the unfair condition ( $M = 3.81$ ,  $SD = 1.68$ ) reporting lower perceptions of procedural justice than those in the fair condition ( $M = 4.88$ ,  $SD = 1.27$ ).

*Emotions Measure.* An exploratory factor analysis of the negative emotions measure developed for this study was conducted. In keeping with regulatory focus theory (Higgins, 1997, 1998), it had been anticipated that the negative emotions would group according the focus with which it is related (promotion vs. prevention) and by their attributional component (attribution independent vs. outward-focused vs. inward-focused) thus resulting in a six-factor solution. Using principle axis factoring with an oblique rotation (promax) it was found that a six-factor solution yielded a factor structure which was uninterpretable. Furthermore, an examination of the scree plot suggests that the existence of three or four factor (see figure 2) although only three of the six factors extracted exhibited an eigenvalue greater than 1. In addition, it was found that past the third factor the contribution of the factors in terms of variance accounted for quickly diminished (factor one 35%, two 20%, three 8%, four 5%, five 5%, and six 4%). Finally, a parallel analysis was conducted via a program developed by O'Connor (2000) in order to assist with the decision of how many factor should be retained. For the procedure, 1000 data sets were generated based on the based on the current data set. The results of this analysis indicated that only four of the six factors exhibited eigenvalues that

exceeded the value that would be expected by chance (see figure 3). Based on the available evidence, it was decided to explore both the three- and four-factor solutions.

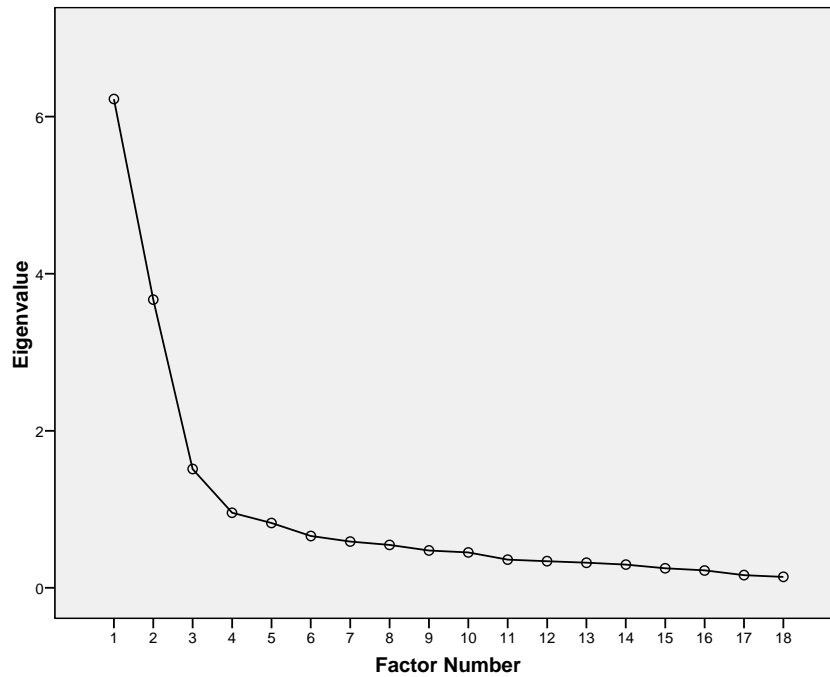


Figure 2. Scree plot of EFA for negative emotions measure.

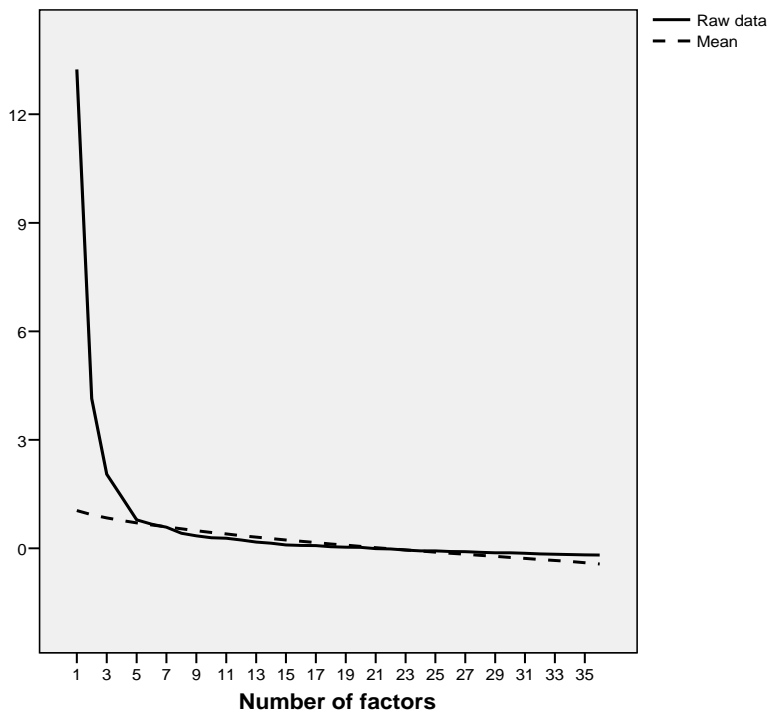


Figure 3. Results of parallel analysis for negative emotions measure.

A four-factor solution was extracted using the same procedure previously described. Once again, it was found that the fourth factor exhibited an eigenvalue below 1 and that it accounted for less variance than the other factors. Regarding the factor structure itself, the result was difficult to interpret with high cross loadings (angry at the company cross loaded on factor 1 and 4, ashamed at self and angry at self cross loaded on factor 2 and 4) and ashamed at company which was the only item to primarily load on the fourth factor. The results of this factor analysis extracted a three-factor structure that accounted for 63% of the variance (factor 1 35%, 2 for 20%, and 3 for 8%) and which corresponded to the items' causal ascription. Specifically, it was found that outward-focused, negative emotions loaded on factor 1, inward-focused, negative emotions on factor 2, and attribution independent, outcome dependent, negative emotions loaded primarily on factor 3 (see table 2). The exceptions to these trends were the items discouraged, which loaded on factor one and was expected to load onto factor three, and dejected, which exhibited no factor loadings greater than .24 on any of the factors.

In light of these findings as well as theoretical considerations, it was decided that the most appropriate representation of the data is the three-factor solution for three primary reasons: 1) the small contribution of the fourth factor in terms of variance accounted, 2) the failure of the fourth factor to achieve an eigenvalue greater than 1, and 3) the three-factor solution corresponds to what would have been anticipated based on the attribution theory of emotion which categories emotions according to their causal component (outcome dependent-attribution independent vs. attribution dependent emotions, Weiner, 1985). However, in order to address the study hypotheses as proposed, it was decided to conduct two sets of analyses: one in which the emotions measure was

scored according to what is proposed by regulatory focus and attribution theory of emotion (6-factor solution) and another set of analyses in which the emotions measure is scored according to the three-factor solution which corresponds to only the emotions' causal component (it should be noted that for these analyses two items: discouraged and dejected, were dropped for the previously stated reasons).

Table 2  
*Pattern Matrix for Negative Emotions Measure*

Item	Factor		
	1	2	3
Disgusted at company	<b>0.93</b>	0.04	-0.13
Dissatisfied with the company	<b>0.84</b>	-0.14	0.06
Disappointed in the company	<b>0.82</b>	-0.04	-0.05
Angry at the company	<b>0.61</b>	0.06	0.11
Frustrated with the company	<b>0.56</b>	-0.12	0.25
Ashamed of the company	<b>0.55</b>	0.14	-0.03
Discouraged	<b>0.45</b>	0.09	0.32
Dejected	<b>0.26</b>	0.16	0.22
Disgusted at self	-0.02	<b>0.80</b>	0.06
Disappointed in self	-0.03	<b>0.79</b>	0.06
Frustrated with self	-0.07	<b>0.77</b>	0.19
Ashamed of self	0.11	<b>0.75</b>	-0.25
Dissatisfied with self	0.00	<b>0.73</b>	0.21
Angry at self	0.08	<b>0.64</b>	-0.30
Tense	0.00	-0.05	<b>0.90</b>
Worried	0.05	-0.05	<b>0.84</b>
Nervous	-0.01	0.05	<b>0.68</b>
Sadness	0.06	0.02	<b>0.64</b>

*Hypothesis Testing.* Descriptive statistics and correlations for the study variables can be found in table 3. Research by Idson, et al. (2000) has found that an individual's chronic regulatory focus can affect their emotional reactions to a situation; therefore, the influence of this variable upon emotions was explored. In our sample, it did not appear that chronic regulatory focus had an effect upon reported emotions. As can be seen in

Table 3  
*Descriptive Statistics and Correlations for Study Variables*

	fair non-gain (n=51)		unfair non-gain (n=43)		fair loss (n = 57)		unfair loss (n = 65)		1	2	3	4	5	6	7	8	9	10
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>										
1. Decision outcome condition	-	-	-	-	-	-	-	-	-									
2. Fairness condition	-	-	-	-	-	-	-	-	.07	-								
3. Justice perceptions	7.66	1.66	5.85	1.71	6.57	1.93	4.61	2.08	-.3**	-.45**	.83							
3. Prevention focus	5.76	1.16	5.51	1.65	5.54	1.21	5.71	1.27	-.01	0	.03	.77						
4. Promotion focus	7.63	.95	7.61	.92	7.28	1.07	7.54	1.04	-.1	.06	.04	0.13	.87					
5. CWB	2.19	.68	2.74	.96	2.55	.71	2.63	0.83	.09	.18**	-.25**	.25**	0	.95				
6. Dejection-related emotions	4.46	1.22	4.84	1.12	5.01	1.26	5.21	1.09	.2**	.13	-.31**	.2**	.15*	.26**	.66			
7. Agitation-related emotions	5.18	1.28	5.05	1.18	5.75	1.17	5.53	1.24	.21**	-.06	-.2**	.18**	.14*	.17*	.66**	.85		
8. Outward-focused, dejection-related emotions	4.64	1.19	5.32	1.15	5.18	1.3	5.46	1.21	.15*	.19**	-.41**	.15*	.15*	.32**	.62**	.49**	.73	
9. Outward-focused, agitation-related emotions	4.82	1.19	5.65	1.17	5.52	1.1	5.87	1.12	.21**	.25**	-.47**	.19**	.17*	.35**	.57**	.56**	.83**	.78

*Note.* Values along the diagonal represent scale reliabilities. \*  $p < .05$ . \*\*  $p < .01$ .

table 3, chronic prevention focus and chronic promotion focus did not systematically relate to the regulatory focus emotions which were themselves highly correlated.

Hypothesis 1, 2, and 7 were tested using a 2 (decision outcome) x 2 (procedural fairness) analysis of variance (ANOVA). It was found that decision outcome did produce a significant main effect,  $F(1, 212) = 8.08, \eta^2 = .037, p < .01$ , for dejection-related emotions (sad, dejected, and discouraged). However, this effect was not in the anticipated direction; instead, it was found that individuals in the loss condition reported greater levels of dejection-related emotions ( $M = 5.11, SD = 1.17$ ) than participants who read about a non-gain ( $M = 4.65, SD = 1.19$ ). For agitation-related emotions (nervousness, tension, and worry), analysis revealed a main effect for decision outcome,  $F(1, 212) = 9.79, \eta^2 = .044, p < .01$ , with individuals who read about a loss reporting more agitation-related emotions ( $M = 5.63, SD = 1.2$ ) than those in the non-gain condition ( $M = 5.12, SD = 1.23$ ) thus providing support for hypothesis 2. Retaliation was tested by comparing the loss and non-gain groups in terms of reported CWB. Contrary to what was hypothesized, no main effect was found for the decision outcome manipulation upon CWB,  $F(1, 210) = 1.31, \eta^2 = .006, p > .05$ . However, a significant interaction was present,  $F(1, 210) = 4.4, \eta^2 = .02, p < .05$  (see figure 4) with fairness in the non-gain condition exerting a greater influence on CWB than in the loss condition in which, regardless of fairness, retaliation was high.



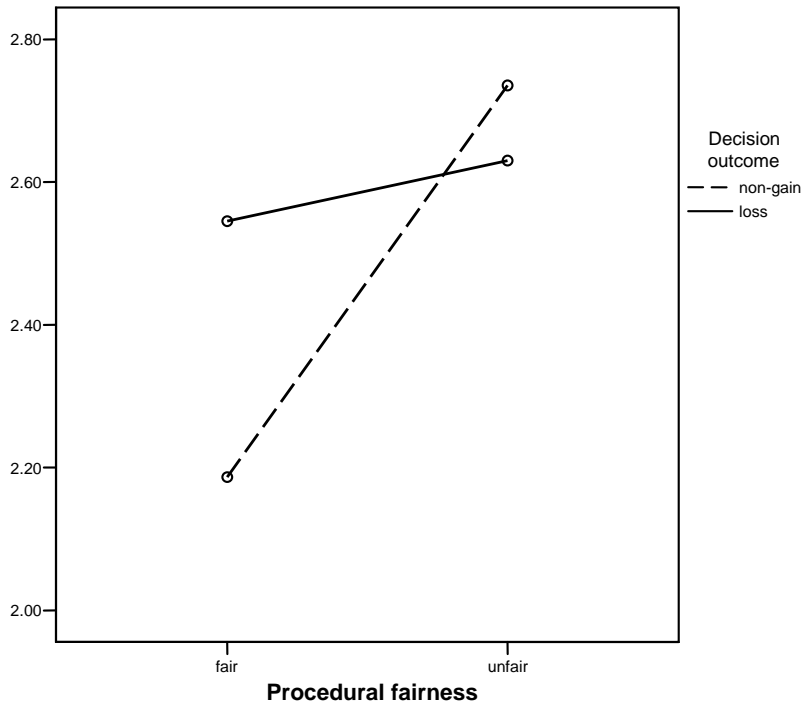


Figure 4. Interaction between decision outcome type condition and procedural fairness condition for retaliation.

The analysis of hypotheses 3, 4, 5 and 6 were carried out using a series of planned comparisons. Hypothesis 3 was supported,  $t(212) = -2.68, p < .01$ , with individuals who read about an unfair non-gain reporting more outward-focused, dejection-related emotions ( $M = 5.65, SD = 1.17$ ) than individuals in the fair non-gain condition ( $M = 4.82, SD = 1.19$ ). No support was found for hypothesis 4 with individuals in the unfair and fair loss conditions reporting similar levels of outward-focused, agitation-related emotions,  $t(212) = -1.7, p > .05$ . In addition, no support was found for hypothesis 5 with individuals in the unfair non-gain condition reporting similar ratings of outward-focused, dejection-related emotions as those in the unfair loss condition,  $t(212) = -.6, p > .05$ . Finally, no support was found for hypothesis 6 with individuals in the unfair loss and unfair non-gain

conditions reporting similar ratings of outward-focused, agitation-related emotions,  $t(212) = -.98, p > .05$ .

*Supplemental and Exploratory Analyses.* In addition to the hypothesis tests, additional analyses were conducted. First, analyses were conducted using emotion scores computed according to the groupings indicated by the factor analysis of the emotions scale. Second, a set of analyses were conducted to explore the potential effects of decision outcome upon inward-focused, negative emotions as well as the different groupings of positive emotions.

Like previous analyses, supplemental analyses were conducted using a 2 x 2 ANOVA. A main effect for decision outcome was found,  $F(1, 212) = 8.77, \eta^2 = .04, p < .01$ , with individuals in the loss condition ( $M = 5.52, SD = 1.16$ ) reporting more outcome-dependent, negative emotions (tense, worried, nervous, and sad) than individuals in the non-gain condition ( $M = 5.04, SD = 1.2$ ). In addition, a main effect was found,  $F(1, 212) = 6.73, \eta^2 = .031, p < .01$ , for outward-focused, negative emotions (angry at company, frustrated with company, disgusted at company, dissatisfied with company, disappointed in company, and ashamed of company) with those in the loss condition ( $M = 5.52, SD = 1.13$ ) reporting higher levels of these emotions than participants in the non-gain condition ( $M = 5.08, SD = 1.18$ ).

Table 4  
ANOVA Table for Negative Emotions and CWB

	Source	<i>F</i>	$\eta^2$
Dejection-related, negative emotions	Decision outcome	11.15**	.037
	Procedural Fairness	4.53	.015
	Interaction	.47	.002
Agitation-related, negative emotions	Decision outcome	14.6**	.044
	Procedural Fairness	1.6	.005
	Interaction	.01	0
Outward-focused, dejection-related, negative emotions	Decision outcome	4.15*	.019
	Procedural Fairness	8.13**	.037
	Interaction	1.4	.007
Outward-focused, agitation-related, negative emotions	Decision outcome	8.45**	.039
	Procedural Fairness	14.23**	.063
	Interaction	2.36	.011
Outcome-dependent, negative emotions	Decision outcome	8.77**	.04
	Procedural Fairness	.52	.002
	Interaction	.03	0
Outward-focused, negative emotions	Decision outcome	6.73*	.031
	Procedural Fairness	11.95**	.053
	Interaction	2.02	.009
Counterproductive Work Behaviors	Decision outcome	1.31	.006
	Procedural Fairness	8.21**	.038
	Interaction	4.4*	.02

Note. \*  $p < .05$ , \*\*  $p < .01$ .

In addition, analyses were conducted exploring the potential effects of decision outcome upon inward-focused, negative emotions and positive emotions. A main effect was found for both inward-focused, dejection-related emotions,  $F(1, 212) = 14.14$ ,  $\eta^2 = .063$ ,  $p < .01$ , and inward-focused, agitation-related emotions,  $F(1, 212) = 3.92$ ,  $\eta^2 = .018$ ,  $p < .05$ , with participants in the loss condition reporting higher levels of those of emotions. This was also the case when the inward-focused emotions were collapsed according to the groupings suggested by the factor analysis,  $F(1, 212) = 9.07$ ,  $\eta^2 = .041$ ,  $p < .01$ .

Table 5  
ANOVA Table for Inward-focused, Negative Emotions

	Source	<i>F</i>	$\eta^2$
Inward-focused, dejection-related, negative emotions	Decision outcome	14.14**	.063
	Procedural Fairness	1.31	.006
	Interaction	.363	.002
Inward-focused, agitation-related, negative emotions	Decision outcome	3.92*	.018
	Procedural Fairness	2.65	.012
	Interaction	.816	.004
Inward-focused, negative emotions	Decision outcome	9.07**	.041
	Procedural Fairness	2.12	.01
	Interaction	.62	.003

Note. \*  $p < .05$ , \*\*  $p < .01$ .

In regards to positive emotions, a significant main effect for decision outcome was found for all of the positive emotion groups except cheerfulness-related emotions. In all cases, it was found that individuals in the non-gain condition reported higher levels of positive emotions than participants in the loss condition. In addition to these tests, a factor analysis was conducted. As was the case for the negative emotions, the positive emotions also failed to load as anticipated instead forming three factors: factor 1 - outcome dependent, positive emotions (calm, cheerful, content, joyful, relaxed, and serene), factor 2 - outward-focused, positive emotions (at ease with company, at peace with the company, comfortable with the company, and satisfied with the company), and factor 3 - inward-focused, positive emotions (at ease with self, at peace with self, comfortable with self, happy with self, pleased with self, and satisfied with self). Tests for main effects were conducted using these sets of emotions and, once again, significant main effects were found for decision outcome (see table 6).

Table 6  
*Main Effect of Decision Outcome upon Positive Emotions*

	<i>Loss</i>		<i>Non-gain</i>		<i>F</i> (1, 212)	$\eta^2$
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Quiescence-related	2.25	1.03	2.71	1.12	9.17**	.041
Cheerfulness-related	2.01	1.11	2.25	1.02	2.43	.011
Outward-focused, quiescence-related	1.92	1.09	2.52	1.16	13.77**	.061
Outward-focused, cheerfulness-related	1.98	1.06	2.32	1.05	4.91*	.023
Inward-focused, quiescence-related	2.81	1.16	3.48	1.25	15.42**	.068
Inward-focused cheerfulness-related	2.96	1.18	3.51	1.29	9.96**	.045
Outcome-dependent, positive	2.16	1.03	2.51	.98	5.84*	.027
Outward-focused, positive	1.93	1.05	2.47	1.1	12.12**	.054
Inward-focused, positive	2.88	1.1	3.49	1.15	14.82**	.065

*Note.* \*  $p < .05$ , \*\*  $p < .01$ .

An additional analysis was conducted to explore the relationship between justice, emotions, and retaliation. Past research has found that the presence of injustice is related to increased retaliation (e.g., Greenberg, 1990); furthermore, research has found that negative emotions are related to increased levels of CWB (Fox, et al. 2001), therefore, it may be possible that perceptions of injustice triggers outward-focused, negative emotions which, in turn, led to a heightened desire for retaliation. To test for this possible mediation, a series of hierarchical linear regressions were conducted using the procedure outlined by Baron and Kenny (1986). The findings of this analysis suggest that complete mediation exists with the effects of fairness upon CWB becoming non-significant with the addition of outward-focused, negative emotions (see table 7) although this reduction was not significant (Sobel test .136,  $p = .89$ ).

Table 7  
*Regression Table for Test of Mediation*

	<i>R</i> <sup>2</sup>	<i>β</i>
Step 1: CWB on justice perceptions	.059	
Justice perceptions		-.251**
Step 2: Outward-focused, negative emotions on justice perceptions	.207	
Justice perceptions		-.459**
Step 3: CWB on justice perceptions and outward-focused, negative emotions	.124	
Justice perceptions		-.115
Outward-focused, negative emotions		.296**

*Note.* \*  $p < .05$ . \*\*  $p < .01$ .

## Discussion

Research on organizational justice has overlooked the effects that the nature of a decision outcome can have upon reactions to perceived injustice; however, research on loss aversion (Kahneman, Knetsch, & Thaler, 1986; Liberman, Idson, & Higgins, 2005) and regulatory focus (Higgins, Shah, & Friedman, 1997; Idson, Liberman, & Higgins, 2000) has found that the nature of a decision outcome can not only skew perceptions of fairness but also bring forth different affective reactions. To address this issue, a cognitive appraisal model of the relationship between injustice and emotion was proposed which derived its predictions of affective reactions from these theories and past research.

Based on regulatory focus theory (Higgins, 1997, 1998), it was predicted that emotional reactions to injustice would differ according to the nature of the received decision outcome with a loss eliciting a prevention focus and therefore greater agitation-related emotions and a non-gain eliciting a promotion focus and, in turn, greater dejection-related emotions. In addition, based on the attributional theory of emotion (Weiner, 1985) and research on the causal ascription component of emotions (Barclay, et. al., 2005; Wong & Weiner, 1981), it was proposed that procedural injustice would lead to more foci-related, outward-focused, negative emotions directed at the decision maker.

## *Emotions*

Results seemed to indicate that participants' discrete, emotional reactions did not vary according to decision outcome; therefore, providing no support for the hypotheses derived from regulatory focus theory. Furthermore, it was found that the factor structure of the emotions measure did not meet expectation based on regulatory focus but was what would have been anticipated according to Weiner's attributional theory of emotion (1985). That is, it was found that the emotion measure's factor structure reflected the emotion's attribution component with outcome-dependent, attribution-independent emotions and attribution-dependent emotions (inward- and outward-focused) each forming their own factors. This would seem to lend support to the notion that causal ascriptions play a role in defining emotions but it does not, however, support our original propositions based upon regulator focus. Despite this, the results of this effort still clearly illustrate the effect that the nature of a decision outcome can have upon emotional reactions.

Although emotions did not vary in the anticipated fashion, differences still existed across the decision outcome conditions. It was found that participants who read about a loss reported significantly more outcome dependent, negative emotions than those who read about a non-gain. In regards to outward-focused, negative emotions, an interaction was found such that individuals in the loss condition reported high levels of outward-focused, negative emotions regardless of the fairness manipulation. This was not the case for the non-gain conditions in which outward-focused, negative emotions were much higher in the presence of injustice but reduced in the presence of fairness. Inward-focused, negative emotions were also found to vary according to decision outcome with a

loss eliciting more of these emotions than a non-gain. Decision outcome also produced an effect upon positive emotions. Specifically, individuals who read about a loss reported significantly lower ratings of all positive emotions than participants in the non-gain condition.

This set of findings seems to suggest that the nature of a decision outcome can produce an effect upon emotions. Especially when one considers that decision outcome produced a significant main effect upon all of the negative emotion groups as well as all but one of the positive emotion groups. In addition, decision outcome had a greater effect upon outcome-dependent and inward-focused emotions than procedural justice which, in some instances, produced no effect.

### *Retaliation*

In addition, this study also investigated the impact of procedural justice upon emotions. It was found that procedural justice had a significant main effect upon outward-focused emotions. Specifically, individuals in the unfair conditions reported higher levels of outward-focused emotions directed at the organization than participants in the fair conditions. A finding that parallels the results of recent work on the role of causal ascription and justice upon emotions (Barclay, et al., 2005) which found that anger and hostility were associated with perceptions of procedural injustice.

Although there was no main effect for decision outcome upon CWB, there was a significant interaction present between decision outcome and fairness. It was found that the desire for retaliation in the loss conditions was very high regardless of procedural fairness. This was not the case for the non-gain condition, in which, CWB varied



according to fairness condition. Specifically, it was found that in the unfair non-gain condition participants reported significantly higher levels of CWB than individuals in the fair non-gain condition. This seems to indicate that, regardless of the fairness of the situation, a loss will engender a desire for retaliation; on the other hand, it appears that reactions to the non-gain, in terms of CWB directed at the organization, is a function of procedural fairness. In addition, some evidence was found that suggested outward-focused, negative emotions may mediate the relationship between justice perceptions and CWB.

### *Limitations*

This study produced many interesting results, it did, however, suffer from a number of limitations; foremost being potential problems stemming from the emotions measure developed for the study. As previously mentioned, the factor structure of the emotions measure was not what was expected. The failure of the emotions measure to exhibit the anticipated factor structure calls into question this study's findings regarding the prediction of specific, affective reactions to injustice using the regulatory focus framework. That is, the lack of support for the prediction of emotions based upon regulatory focus may be due to the measure's failure to accurately measure focus-related emotions. This failure would also explain why a systematic relationship was not found between chronic regulatory focus and emotions, which was a departure from past research (Idson, et al., 2000). Therefore, given the awkward performance of the emotions measure used in this study, it may be premature to conclude that regulatory focus does not exert any influence over emotions and is an issue that should be revisited.

Beyond problems stemming from the emotions measured used in this study, this effort suffered from some limitations owing to its use of a vignette methodology. Although vignettes are often used in research (e.g., Barling, 1993; Idson, et al., 2000; Kahneman, 1986; Liberman, 2005) and are an acceptable way of measuring a phenomenon such as justice (Greenberg & Eskew, 1993); the procedure does bring with it a unique set of complications. For example, based on this study it cannot be determined whether participants' responses were driven by their expectations regarding how they would act in a similar situation or if responses are motivated by their expectations regarding how people in general would respond to such a situation. Furthermore, even if individuals are reporting how they believe they would react to the situation, we cannot be certain that that these predictions would be accurate. Point in case, it is possible that the poor performance of the emotions measure may be directly attributable to this previous point that is participants completed a self-report measure of regulatory focus and then asked to fill out an emotions measure in which they adopted the point of view of an individual at the company in the vignette therefore responses on the emotions were measure were potentially not related to the participant's own regulatory focus but their beliefs regarding how people respond to situations such as those outlined in the vignettes.

### *Future Research*

Future research should continue to examine the effects of regulatory focus and decision outcome upon justice perceptions and affective reactions. One obvious need for research in this area is the development of a regulatory-focus emotions measure that also takes into consideration the casual component of each emotion. This research should

explore a larger number of emotions than were studied in this effort and attempt to empirically determine what emotions are related to what focus and whether or not they possess a causal component as opposed to the approach taken in the present study which relied exclusively on past research and theory for categorization of emotions. Finally, a concern related to the development of a future emotions measure is the question of whether emotions should be kept as discrete as has been done in past research (e.g., Cropanzano, 2000; Weiss, 1999) as opposed to categorized according to a taxonomy such as regulatory focus. Although focusing on one emotion as a dependent variable poses problems (e.g., one item dependent variable) it may be that this approach may better represent affective reactions.

Regarding the effects of decision outcome, one possible avenue of investigation could be a meta-analysis in which situations utilized in past studies of organizational justice are categorized into losses and non-gains and looking for differences across these two groups. Such an analysis would provide compelling evidence of the unaccounted for effect that the nature of a decision outcome may be exercising upon existing research. In addition, researchers should attempt to conduct studies of justice and decision outcome which utilize a laboratory setting or a naturalistic experiment in lieu of a vignette procedure. Furthermore, the demonstration of the effects of decision outcome within an organizational sample would illustrate the generalizability of these findings.

### *Conclusions*

To the author's knowledge, this is the only study to explore the effects that the nature of a decision outcome (i.e., loss versus non-gain) may have upon subsequent

reactions to it within the context of organizational justice. Although many of the hypotheses derived from regulatory focus were not supported, the study did find support for the proposition that decision outcome matters. Consistent with work in the area of loss aversion, this study found that decision outcome did exercise influence over affective reactions to a decision with losses resulting in more outcome dependent, negative emotions than non-gains. Furthermore, it was found that procedural injustice was related to an increase in outward-focused, negative emotions directed at the decision maker and a heightened desire for retaliation against the organization following a loss regardless of fairness.

Taken together these findings have numerous implications for researchers in the areas of organizational justice, emotions, and retaliation. First, the study illustrates that decision outcome, in some instances, produced a greater effect upon emotional reactions than justice perceptions. This suggests that researchers should be aware of the decision outcome which was the catalyst of the reactions that he or she is gauging in order to account for the effects of loss aversion. Second, in line with work by Weiner (1985) and more recent work by Barclay (2005) this study reinforces the importance of the causal component of emotions and demonstrates its relationship with procedural fairness. Lastly, this study illustrates that decision outcome does exert influence over retaliation in response to a decision outcome. For example, based on the findings of this study, researchers whom want to determine the effects of justice upon retaliation should be aware that following a loss individuals may engage in such behaviors regardless of fairness.

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## Appendices



## Appendix A: Pattern Matrix for Positive Emotions Measure

*Pattern Matrix for Positive Emotions Measure*

Item	Factor		
	1	2	3
Satisfied with self	<b>.93</b>	.03	-.13
Pleased with self	<b>.83</b>	.10	-.13
Happy with self	<b>.79</b>	.21	-.15
Comfortable with self	<b>.68</b>	-.18	.26
At peace with self	<b>.64</b>	-.10	.27
At ease with self	<b>.54</b>	-.11	.33
Cheerful	-.05	<b>.97</b>	.05
Joyful	-.01	<b>.88</b>	-.10
Content	.05	<b>.58</b>	.28
Serene	.21	<b>.53</b>	.06
Pleased with company	-.08	<b>.48</b>	.39
Relaxed	.32	<b>.47</b>	.04
Happy with company	-.06	<b>.38</b>	.24
At ease with company	.05	-.07	<b>.87</b>
At peace with comp	-.02	.05	<b>.87</b>
Comfortable with company	.02	.18	<b>.64</b>
Satisfied with company	-.10	.37	<b>.59</b>
Calm	.15	.26	<b>.45</b>

## Appendix B: Study measures

### *Chronic regulatory focus scale*

<b>Please answer the following questions about yourself.</b>	<i>Not at all true of me</i>								<i>Very true of me</i>
1. In general, I am focused on preventing negative events in my life.	1	2	3	4	5	6	7	8	9
2. I am anxious that I will fall short of my responsibilities and obligations.	1	2	3	4	5	6	7	8	9
3. I frequently imagine how I will achieve my hopes and aspirations.	1	2	3	4	5	6	7	8	9
4. I often think about the person I am afraid I might become in the future.	1	2	3	4	5	6	7	8	9
5. I often think about the person I would ideally like to be in the future.	1	2	3	4	5	6	7	8	9
6. I typically focus on the success I hope to achieve in the future.	1	2	3	4	5	6	7	8	9
7. I often worry that I will fail to accomplish my life goals.	1	2	3	4	5	6	7	8	9
8. I often think about how I will achieve success in life.	1	2	3	4	5	6	7	8	9
9. I often imagine myself experiencing bad things that I fear might happen to me.	1	2	3	4	5	6	7	8	9
10. I frequently think about how I can prevent failures in my life.	1	2	3	4	5	6	7	8	9
11. I am more oriented toward preventing losses than I am toward achieving gains.	1	2	3	4	5	6	7	8	9
12. My major goal in life right now is to achieve my ambitions.	1	2	3	4	5	6	7	8	9
13. My major goal in life right now is to avoid becoming a failure.	1	2	3	4	5	6	7	8	9
14. I see myself as someone who is primarily striving to reach my “ideal self” – to fulfill my hopes, wishes, and aspirations.	1	2	3	4	5	6	7	8	9
15. I see myself as someone who is primarily striving to become the self I “ought” to be – to fulfill my duties, responsibilities, and obligations.	1	2	3	4	5	6	7	8	9
16. In general, I am focused on achieving positive outcomes in my life.	1	2	3	4	5	6	7	8	9
17. I often imagine myself experiencing good things that I hope will happen to me.	1	2	3	4	5	6	7	8	9
18. Overall, I am more oriented toward achieving success than preventing failure.	1	2	3	4	5	6	7	8	9

### *Manipulation check: nature of decision outcome*

I read about a situation where:

*A pay cut occurred*

*A pay raise was not received*

*Manipulation check: procedural fairness condition*

	<i>Strongly Disagree</i>						<i>Strongly Agree</i>
1. The action taken by the company was appropriate given the unusual circumstances the company is facing.	1	2	3	4	5	6	7
2. The decision making process leading to the decision was appropriate.	1	2	3	4	5	6	7
3. The company showed concern for its employees.	1	2	3	4	5	6	7

*Emotions*

**Based on what you read, to what degree would the employees at the affected facility feel the following emotions?**

	<i>Strongly Disagree</i>						<i>Strongly Agree</i>
1. Angry at the company	1	2	3	4	5	6	7
2. Angry at self	1	2	3	4	5	6	7
3. Ashamed of self	1	2	3	4	5	6	7
4. Ashamed of the company	1	2	3	4	5	6	7
5. At ease with self	1	2	3	4	5	6	7
6. At ease with the company	1	2	3	4	5	6	7
7. At peace with self	1	2	3	4	5	6	7
8. At peace with the company	1	2	3	4	5	6	7
9. Calm	1	2	3	4	5	6	7
10. Cheerful	1	2	3	4	5	6	7
11. Comfortable with company	1	2	3	4	5	6	7
12. Comfortable with self	1	2	3	4	5	6	7
13. Content	1	2	3	4	5	6	7
14. Dejected	1	2	3	4	5	6	7
15. Disappointed in self	1	2	3	4	5	6	7
16. Disappointed in the company	1	2	3	4	5	6	7
17. Discouraged	1	2	3	4	5	6	7
18. Disgusted at company	1	2	3	4	5	6	7
19. Disgusted at self	1	2	3	4	5	6	7
20. Dissatisfied with self	1	2	3	4	5	6	7
21. Dissatisfied with the company	1	2	3	4	5	6	7
22. Frustrated with self	1	2	3	4	5	6	7

23. Frustrated with the company	1	2	3	4	5	6	7
24. Happy with self	1	2	3	4	5	6	7
25. Happy with the company	1	2	3	4	5	6	7
26. Joyful	1	2	3	4	5	6	7
27. Nervous	1	2	3	4	5	6	7
28. Pleased with self	1	2	3	4	5	6	7
29. Pleased with the company	1	2	3	4	5	6	7
30. Relaxed	1	2	3	4	5	6	7
31. Sadness	1	2	3	4	5	6	7
32. Satisfied with self	1	2	3	4	5	6	7
33. Satisfied with the company	1	2	3	4	5	6	7
34. Serene	1	2	3	4	5	6	7
35. Tense	1	2	3	4	5	6	7
36. Worried	1	2	3	4	5	6	7

*CWB-O*

**Based on what you read, how often do you imagine the employees at the affected facility would engage in the following behaviors?**

	<i>Never</i>	<i>Once or Twice</i>	<i>Once or Twice per month</i>	<i>Once or twice per week</i>	<i>Every day</i>
1. Purposely waste their employer's materials/supplies	1	2	3	4	5
2. Daydream rather than do their work	1	2	3	4	5
3. Complain about insignificant things at work	1	2	3	4	5
4. Tell people outside the job what a lousy place they work for	1	2	3	4	5
5. Purposely do their work incorrectly	1	2	3	4	5
6. Come to work late without permission	1	2	3	4	5
7. Stay home from work and say they are sick when they are not	1	2	3	4	5
8. Purposely damage a piece of equipment or property	1	2	3	4	5
9. Purposely dirty or litter their place of work	1	2	3	4	5
10. Steal something belonging to their employer	1	2	3	4	5
11. Purposely work slowly when things need to get done	1	2	3	4	5
12. Refuse to take on an assignment when asked	1	2	3	4	5
13. Purposely come late to an appointment or meeting	1	2	3	4	5
14. Fail to report a problem so it would get worse	1	2	3	4	5
15. Take a longer break than they are allowed to take	1	2	3	4	5
16. Purposely fail to follow instructions	1	2	3	4	5
17. Leave work earlier than they are allowed to	1	2	3	4	5

18. Take supplies or tools home without permission	1	2	3	4	5
19. Try to look busy while doing nothing	1	2	3	4	5
20. Put in to be paid for more hours than they worked	1	2	3	4	5
21. Take money from their employer without permission	1	2	3	4	5