

2
2007

This is to certify that the
dissertation entitled

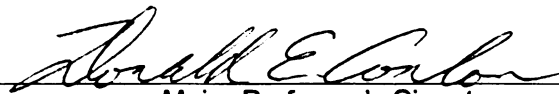
AFFECTIVE IMPACTS ON JUSTICE PERCEPTIONS

presented by

Christopher J. Meyer

has been accepted towards fulfillment
of the requirements for the

Ph.D. degree in Management



Major Professor's Signature

5/12/06

Date

MSU is an Affirmative Action/Equal Opportunity Institution

LIBRARY
Michigan State
University

PLACE IN RETURN BOX to remove this checkout from your record.
TO AVOID FINES return on or before date due.
MAY BE RECALLED with earlier due date if requested.

DATE DUE	DATE DUE	DATE DUE

AFFECTIVE IMPACTS ON JUSTICE PERCEPTIONS

By

Christopher J. Meyer

A DISSERTATION

**Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of**

DOCTOR OF PHILOSOPHY

Department of Management

2006

ABSTRACT

AFFECTIVE IMPACTS ON JUSTICE PERCEPTIONS

By

Christopher J. Meyer

Past research in the area of organizational justice has painted a picture of a cognitive process whereby individuals apply static rules to determine fairness. While this has been an informative paradigm to pursue, recent work in the areas of retaliation, revenge and sabotage has broadened the view of the justice judgments. Coupled with work in the area of affect and the impact of affective states on cognitive processes, these expansions of the previously cognitive and static justice determination are in need of greater depth. Applying mood congruence theory, I construct a theory of affective impact on the justice perception. The interaction of affective state and justice is then used to make predictions for two categories of outcomes – those that are restorative in nature, and those that are retaliatory.

Findings indicate that the relationship between justice perceptions and affective states may be much more complex than previously thought. Data from the study were collected from undergraduate students who volunteered to participate in the study in exchange for course credit. The participants first were subjected to a manipulation of affective state. While the manipulation was successful, it was weak. Following this manipulation, the participants completed an online bidding task similar to a Priceline.com experience. Embedded within the task were manipulations of both structural and social justice. Following the bidding task the participants were given the opportunity to pursue behaviors that were retaliatory or restorative in nature.

Data indicate that affective state is not predictive of justice perceptions. Data do indicate a relationship between social justice violations and retaliation intentions. The data do not support this relationship with the actual behaviors as hypothesized. Finally, the prediction that there will be an interaction between the type of justice violation and the affective state was not supported by the data.

il faut d'abord durer.

For Stacey – who endured it all.

For Elyse – who endured too much.

For Harris – who endured more than his share.

ACKNOWLEDGEMENTS

There are a number of individuals without whom I would not have made it through this process. First I would like to thank my committee. John Wagner, Ingrid Fulmer, and Remus Ilies, thank you all for sharing your boundless knowledge. And Don Conlon, thank you for your ear, your guidance, and your direction. To all the members of my committee, thank you for the friendship with which you guided me. I would also like to acknowledge the students that shared the experience - Stephen Humphrey and Federico Aime, my brothers in this endeavor - Kelly Delaney-Klinger, a better office mate and friend does not exist. I am better for knowing you three. Thank you to those of you that came before me and never hesitated to help me, Cindy Devers, Christopher Porter, and Henry Moon. For those of you that came after me and let me impact you even in the least bit, Mike Mannor, Alex Barelka, Scott DeRue. Thanks also to Mike Johnson for all the help on the work that we have done together in the classroom and the lab. I would also like to acknowledge the students from the I/O Psych program that impacted me positively through our interaction in the classroom, the lab, and the Peanut Barrel; Brad West, Dustin Jundt, Jaclyn Nowakowski, and Aleks Ellis. Thank you to the faculty in both the Management and I/O departments that cared to advance my knowledge and my career; Linn Van Dyne, Fred Morgeson, Dan Ilgen, Yuri Mishina, Gerry McNamara, John Hollenbeck and Kevin Ford. Thanks also to a wonderful staff, Sue and Anne. I would also like to thank my family for their support, particularly my parents. Most importantly, I would like to thank Stacey. Thank you for the love and compassion and understanding throughout four hard years.

TABLE OF CONTENTS

LIST OF TABLES.....	viii
LIST OF FIGURES.....	ix
CHAPTER 1 – INTRODUCTION.....	1
Organizational Justice.....	3
Distributive Justice.....	3
Procedural Justice.....	5
Interactional Justice.....	5
Interpersonal and Informational Justice.....	6
Self-interest Model and Relational Model of Justice.....	8
Fairness Theory.....	9
Fairness Heuristic Theory.....	10
Reactions to Injustice.....	11
Affect.....	14
Affectivity.....	15
Mood.....	17
Emotion.....	19
Mood Congruence.....	22
CHAPTER 2 – HYPOTHESES.....	25
The Mood Congruence Mechanism.....	25
The Strength of Negative Affect.....	27
Outcomes – Retaliation and Retribution.....	28
Interactive Effects.....	30
CHAPTER 3 – METHOD.....	37
Power Analysis.....	37
Sample and Procedure.....	38
Independent Variables.....	39
Affective State	39
Organizational Justice – Social Justice.....	40
Organizational Justice – Structural Justice.....	42
Dependent Variables.....	43
Restoration and Retaliation	43
CHAPTER 4 – RESULTS.....	46
Controls.....	46
Independent Variables.....	48
Correlations.....	49
Manipulation Checks.....	51
Hypothesis Tests.....	52
Post Hoc Analyses.....	57

CHAPTER 5 – DISCUSSION.....	59
General Discussion.....	59
Limitations of the Current Study.....	66
Contribution.....	69
Contributions to Practice.....	70
Future Directions for Research.....	71
Conclusions.....	72
APPENDIX.....	74
MEASURES.....	92
REFERENCES.....	95

LIST OF TABLES

TABLE 1 – Correlations.....	75
TABLE 2 – Means and Standard Deviations.....	76
TABLE 3 – Cell Means for the Variables in the MANOVA.....	77
TABLE 4 – The Effect of Affect on Perceptions of Social and Structural Justice.....	78
TABLE 5 – The Effect of Affect on Perceptions of Distributive and Procedural Justice.....	79
TABLE 6 – The Effect of Affect on Perceptions of Interpersonal and Informational Justice.....	80
TABLE 7 – Beta Weight Comparison.....	81
TABLE 8 – Cell Count for Retaliation and Restoration Behavior.....	82
TABLE 9 – Cell Count for Retaliation and Restoration Behavior by Affective Condition.....	83
TABLE 10 – The Effect of Affect and Justice Conditions on Intention to Retaliate or Restore.....	84

LIST OF FIGURES

FIGURE 1 – Web page depicting the bidding screen.....	86
FIGURE 2 – Web page depicting the structural justice manipulation.....	87
FIGURE 3 – Graphical display of affective manipulation check result	88
FIGURE 4 – Web page for the retaliation versus restoration options.....	89
FIGURE 5 – Web page depicting the restoration behavior.....	90
FIGURE 6 – Web page depicting the retaliation behavior.....	91

CHAPTER 1 - INTRODUCTION

“So far we have had nothing to say about the emotional behavior of men, and thus have left out much that makes them human” (Homans, 1961).

Homans, in his discussion of human interactions, focused on the perception that something was either fair or unfair and how this judgment impacted human behavior. He recognized that emotional states have an impact on human cognition (Homans, 1961). Inconsistent with this declaration by Homans, research in organizational justice has taken a cognitive direction (c.f. Adams, 1965; Colquitt, Conlon, Wesson, Porter, & Ng, 2001; Folger & Cropanzano, 2001). This dissertation will take the cognitive view of justice and expand it by exploring the role of affective states in the process leading to the formation of justice perceptions.

Perceptions of fairness or unfairness are part of many interactions throughout the day. These perceptions of fairness are part of our everyday life from the time we are children. For example, any interaction with a child is colored by that child's perception of fairness. Anyone who has ever played a board game with a child knows that the child has a sense of fairness that is facilitated by being pleased with the outcome (i.e. winning the game). If things don't go the way the child would like, s/he becomes angry, possibly throws a temper tantrum, and claims unfairness. Many people are familiar with a child's typical cry of “That's not fair.” This view of fairness and unfairness also follows us into an organizational setting. Consider a salesperson that is compensated on a quota system. The outcome for this salesperson is determined by a number of factors. The effort of the sales person, the territory or accounts that are assigned by the manager, the support given by the company to the sales process, the training provided by the company, and many

other variables determine the final outcomes. It is possible that the salesperson doesn't make his/her quota and therefore doesn't get the outcome (pay) that s/he wanted. This can lead to emotions directed at the organization or a person, and perceptions of fairness or unfairness directed at the organization or an individual. If the manager assigns accounts that are imbalanced with other salespeople's accounts or if the company doesn't provide the necessary training it can cause the salesperson to be angry or disappointed and have feelings of unfairness. These feelings and attitudes may spark some withdrawal behavior or deviance in the organization. Finally, consider a faculty member at a research university. As tenure increases for this faculty member it is more likely that newer individuals will be hired in at increasing salary and benefits. This can cause an emotional reaction (anger, disappointment), an attitudinal reaction (unfairness), and a behavioral reaction (testing the academic job market).

Combining research on affect, justice and reactions to injustice (e.g. retaliation and restoration), I construct a theory of the impact of affective state on perceptions of justice and the ensuing retaliation or restoration. I will review the justice literature, examining the categorization of justice into social or structural elements. Next I will review the relevant literature on affective states, focusing on mood congruence theory. And finally, I will review the literature that examines the outcomes of retaliation and restoration.

Following the literature review, I will develop several hypotheses with regard to the relationship between affective states and perceptions of justice, perceptions of justice and restoration and retaliation, and finally the interaction between affective state and justice perceptions. I will then describe the method that will be used to test these

hypotheses. This is followed by a section detailing the results of the tests of the hypothesized relationships and a discussion of these results.

Organizational Justice.

Organizational justice or fairness is a concept that has been around for many years (Adams, 1965; Aristotle, trans. 1934, pub. 350 B.C.; Homans, 1961). The question of fairness is one that has been important to many, not just organizational scholars for many years. Ultimately a philosophical question (Colquitt et al., 2001), the study of justice is marked by a question of which philosophy should prevail. Organizational scholars have adopted the past research as the prevailing philosophical system upon which we base the question of “what is fair?” Over the years the question of what is fair has focused on two separate aspects of fairness; first is the outcome that is ultimately received fair, and second, are the procedures that are employed to derive the outcome fair. More than this basic categorization of fairness, past research has developed fine-grained distinction of fairness.

Distributive Justice. Early ideas of justice began with the examination of the fairness of outcomes. While initial theories of distributive justice were based on the comparison of an individual’s outcome with others that s/he considered to be in a referent group, later theories soon extended these ideas to include inputs (Homans, 1961). Rather than merely comparing the outcome with the outcome received by a referent, the focal individual also includes the inputs provided by the individual compared with the inputs that they provided. That is, the focal individual compares the ratio of the inputs to the outcomes of himself and the referent, if the ratio is equal, the distribution is just. If, however the ratio is skewed one way or the other the focal individual will perceive an

injustice. Adams (1965) formalized this idea of distributive justice into equity theory. Equity theory is characterized by the comparison of the ratio of inputs to outcomes, the perception of inequity when those ratios don't match, equity distress will follow when the ratios do not match – regardless of whether one is at an advantage or disadvantage, greater distress will lead to greater attempts to restore equity or withdraw from the situation. Most current research in distributive justice follows Adams (1965) initial idea of equity theory. Adams's contention was that individuals would undertake a social comparison of "what I got, versus what they got."

Equity is not the only focus that research has taken when it comes to distributive justice. Leventhal (1976) identified equality and need as possible decision rules for distributions. Equality would split the outcome equally among the actors regardless of the inputs. The equality rule takes the input portion out of the equation and rather gives an equal distribution to everyone involved. When distributions are based on need, individuals are given a share of the outcome based on how much they need rather than how much they have contributed to the process. Studies have also looked at the context – whether an organizational setting or a family setting – and the motives – whether self-interest or altruism – as triggers of distribution rules in organizations (Conlon, Porter, & McLean-Parks, 2004; Deutsch, 1975). This distinction is important to make in justice research, as the definition of distributive justice can change the intention and behavior of the individual that perceives it.

In this paper I am adopting a view of distributive justice consistent with that proposed by Colquitt (2001). An outcome is perceived as distributively fair if the "allocation of the outcome is consistent with the goals of the particular situation"

(Colquitt, 2001, pg. 389). Taking the equity rule into account, as most incarnations of distributive justice do, (Adams, 1965; Leventhal, 1976), distributive justice is then receiving outcomes that are commensurate with and distributed in accordance with one's contributions to the system. The focus of the outcome has been the subject of many individual studies and has been included in two recent meta-analyses (Cohen-Charash & Spector, 2001; Colquitt et al., 2001).

Procedural Justice. Ideas of fair process (Leventhal, 1980; Thibaut & Walker, 1975) followed after the description of distributive justice, and justice became a two dimensional construct. Procedural justice is concerned with the process used to come to the outcome. Fair process has developed to include consistent procedures, procedures free of bias, the ability to correct the procedure, representation of all interested parties, voice, accuracy, and ethicality of the procedure (Leventhal, 1980; Thibaut & Walker, 1975). Procedural justice is assessed by comparing the process that one receives to the procedural rules mentioned above (Colquitt, 2001). If the process conforms to the procedural rules above then it is considered procedurally just. Initial views of procedural justice included many of the factors involved in the interaction between people. Subsequently these criteria were separated and have since developed the ideas of interactional justice.

Interactional Justice. Bies added the idea that interactions with others are a separate form of justice which he labeled interactional justice and differentiated from procedural justice (Bies & Moag, 1986). Interactional justice is concerned with the interpersonal treatment of individuals by authority figures. This interpersonal treatment includes the manner in which the focal individual was treated – was it with dignity and

respect? Was it polite? Were complete and accurate explanations given (Bies & Moag, 1986)? Interactional justice showed independent effects on outcomes and has been included as an important explanatory variable in a number of studies (Colquitt et al., 2001).

Interpersonal and Informational Justice. Interactional justice was further examined and it was determined that there were two separate dimensions. The two dimensions, informational justice – dealing with what is communicated – and interpersonal justice – dealing with how it is communicated, have been shown to have independent effects (Colquitt, 2001). For this reason it is proper to examine these two dimensions separately.

Interpersonal justice is concerned with an individual in authority treating individuals with dignity and respect, while informational justice has to do with candid and thorough communication (Colquitt, 2001; Greenberg, 1996). Not only do these two dimensions predict organizational outcomes differentially, but they are also philosophically different; therefore it has been argued that the construct of organizational justice should consider all four forms of justice to be complete (Colquitt, 2001; Conlon, Meyer, & Nowakowski, forthcoming). An example of the differential predictive ability of these dimensions can be found in work on wrongful dismissal claims (Lind, Greenberg, Scott, & Welchans, 2000). The authors in this study found that interpersonal fairness was an important predictor of whether suits would be filed for wrongful termination, while informational fairness was not predictive. Individuals were more likely to file a claim against the organization if they had been treated in a manner that was perceived as unjust interpersonally, specifically, if they were not treated with dignity

and respect. These two dimensions of justice are similar in that they both are determined by interaction with others. They are significantly different in that informational justice is determined by the speed and clarity of the delivery of information, whereas interpersonal justice is determined by the way the focal individual interprets his treatment by others.

Different justice perceptions can be classified based on the focal determinant (Greenberg, 1993), that is, justice can be classified based on whether the focus of the interaction is systemic or structural as opposed to being social or interpersonal.

Greenberg (1993, 1996), following prior work in this area (Lind & Tyler, 1988), divides justice into structural or social forms of justice. Structural justice has to do with justice that is related to organizational level phenomenon. This would include distributive outcomes and the procedures in place to distribute those outcomes – the dimensions of distributive and procedural justice. Social justice refers to what is typically labeled as interactional justice – informational and interpersonal justice from the four dimensional view of justice. Structural justice includes all aspects of the relationship that flow from the system involved (Cohen-Charash & Spector, 2001; Colquitt, 2001; Greenberg, 1993). Distributive justice is dependent on the system of the organization as are the procedures that are in place to determine the distribution. Structural justice violations are those that would be classified under previously tested relationships based on equity theory (Adams, 1965). These violations are viewed as unfair outcomes that flow from the processes that are contained within the organization. There is no single offending party. For this reason any attempt to “fix” the unfairness will be directed at restoring equity and the object of this action will be the organization.

Social justice includes the aspects of justice that flow from the interaction with others, including interpersonal and informational justice dimensions (Colquitt, 2001; Greenberg, 1993). Social justice is concerned with the interaction and the fairness of that interaction (Bies & Moag, 1986; Colquitt, 2001). Aspects of the interaction that are important to this social dimension are therefore, the dignity and respect aspects as well as the thoroughness and timeliness of the information provided. The object of this attribution is an individual, the authority figure or organizational agent that was involved in the interaction. Therefore, any attempt to “fix” the unfairness in a social justice violation will be targeted at the individual who caused the violation.

It is clear that individuals respond to the different forms of justice in different ways (Cohen-Charash & Spector, 2001; Colquitt, 2001). There are also several theories that supply mechanisms for these justice perceptions to be formed. I will now examine the mechanisms for forming justice perceptions.

Self-interest Model and Relational Model of Justice. Early justice literature proposes two explanations for variations in procedural justice, the self-interest model and the relational model (Lind & Tyler, 1988). Many of the early justice theories were built on the assumption that individuals will try to maximize personal gain (Leventhal, 1980; Thibaut & Walker, 1975). The self-interest model suggests that individuals are concerned with the fairness of procedures because they want to maximize their own personal gain, while the relational model suggests that individuals are interested in the fairness of procedures to help determine their standing in a group. This is similar to the split in justice as a system level and relational construct. As the self-interest model of justice is concerned with an individual’s outcomes and the procedures used to obtain

these outcomes, it would support the structural justice idea. The relational model would support a social justice view. The relational model of justice looks at an individual's standing in a group. This is a concept that is focused on interpersonal relationships rather than outcomes. With the above evidence I will consider the dimensions of distributive and procedural justice as structural aspects and the dimensions of interpersonal and informational justice as social aspects.

Fairness Theory. Fairness theory asserts that in an unjust or unfair situation some level of accountability or blame must be assigned. There are three elements to fairness theory (Folger & Cropanzano, 2001). First, there must be some unfairness or injurious situation. Second, this unfairness must be attributable to an individual's discretionary behavior. And finally, this unfairness must violate an accepted moral tenet or an accepted view of fairness. These three distinct aspects must be in place for there to be accountability (Schlenker, 1997). Fairness theory employs counterfactual thinking as the comparison to determine whether there has been an unfair situation that could lead to accountability. In order to determine whether there is an injurious situation, an individual will compare what did happen, and what would happen if some aspect of the situation had been different. This is what is known as the Would counterfactual. The Could counterfactual is comparing what an individual actually did and what the individual could have done in the situation. Finally, in the instance of comparing what actually happened to the moral standard, the individual determines what Should happen (Folger & Cropanzano, 2001). These different ways of conceptualizing a situation are called counterfactuals because they are, in reality, counter to the facts. That is, when an individual invokes the Would, Could or Should, they are looking at the situation counter

to the facts of the situation. In a situation that is perceived to be unfair an individual would examine what would have happened differently had s/he followed a different course of action, what could have happened differently, and what should have happened differently.

Fairness theory can be integrated with the other models of organizational justice. Fairness theory asserts that the question of fairness or justice is important to individuals because social relations are important (Folger & Cropanzano, 2001). While the outcome of the social exchange can easily be examined and compared to ascertain its fairness, the procedure is somewhat more difficult in that the benefit (or detriment) is socioemotional in nature. Justice is therefore, important in that it is symbolic of either a material or socioemotional benefit conveyed on the individual. Regardless of the outcome, fairness theory is concerned with the accountability, not the dimension that has been affronted (Folger & Cropanzano, 2001).

Fairness Heuristic Theory. Fairness heuristic theory contends that individuals make decisions about fairness as a proxy for trust in deciding whether to cooperate in social situations, and that individuals use a number of cognitive shortcuts in making the decision to cooperate or not (Lind, 2001; Lind, Kulik, Ambrose, & Park, 1993). Fairness heuristic theory links the social interaction to the justice judgment. This theory builds on previous work that views the relational aspects of the justice process – the belief that one's relationship with the group was sound – as the most important aspects in the justice equation (Lind & Tyler, 1988; Tyler & Lind, 1992). Fairness heuristic theory is built on the idea that many of our daily decisions encompass a fundamental social dilemma – will an individual serve the group with the potential for greater reward than individually

possible, or will the group exploit the individual, so therefore the individual should avoid contributing to the group and rather should pursue his own interests (Lind, 2001). Lind argues that individuals solve the dilemma by employing a fairness heuristic. Fair treatment will lead individuals to respond with cooperation and work toward the good of the group. Fair treatment allows for the mental shortcut, to assume trust and forgo personal desires for the good of the group. Based on the perception of fair treatment, individuals will employ a mental short-cut and work for the good of the group (Lind, 2001). This being said, fairness heuristic theory provides the switch to move from an individual focus to a group focus – perceptions of fair treatment – which Lind refers to as the “pivotal cognitions” (Lind, 2001).

Unlike fairness theory, fairness heuristic theory is concerned with the different manifestations of justice perceptions. Each of the dimensions of organizational justice are used to make an overall judgment of fairness, which is then used as a heuristic in the decision process of whether to pursue individual or group concerns (Lind, 2001). In order for fairness judgments to be useful as a heuristic device, they need to be formed rather quickly and they should be relatively stable. Lind argues for strong primacy effects for fairness judgments. People consistently use fairness as a heuristic for enabling their relationships as well as for decision making in organizations (Lind, 2001).

Reactions to injustice.

A great deal of research has focused on the outcomes of organizational justice. When outcomes and processes are perceived to be fair, the consequences of justice are positive; examples include organizational commitment, job satisfaction, and citizenship behavior (c.f. Colquitt, 2001). Recent work has focused on the outcome after a perceived

injustice. Most of these outcomes are not positive [examples include aggression, workplace deviance (Conlon et al., forthcoming), sabotage (Ambrose, Seabright, & Schminke, 2002), and organizational retaliatory behavior (Skarlicki & Folger, 1997)] and are meant to harm either an individual or the organization.

Greenberg (1993; 1996) furthers our understanding of the reactions to injustice by identifying two types of responses, restoration and retaliation, which are concepts that are further developed by Ambrose and her colleagues (2002). Restoration refers to an attempt to increase the outcome received to make up for an inequitable situation. Retaliation refers to an attempt to punish the offending party, regardless of whether the act remedies the injustice. There is a problem with differentiating between the two motives in that the outcome – the behavior that is undertaken – can sometimes be very similar. The behavior is often a deviant act. While the behavior can be similar, the motives are much more complex and somewhat distinct. Greenberg (1996) found that if individuals were treated in a structurally unjust manner they attempted to restore equity only if their deviant act actually would restore equity. However, if individuals were treated in a socially unjust manner they retaliated, even if the retaliation provided no value to them. This is important to organizations that are attempting to impact the potential for deviance. If the injustice comes from a social interaction, there is essentially no way to curb the deviant activity, short of not violating social justice. However, if the injustice stems from the system it would be possible to ensure that the deviance would not restore equity or better, to provide a more productive way to restore equity.

Affect and injustice. Affective state has been relatively ignored in the justice literature (Weiss, Suckow, & Cropanzano, 1999). Homans focused early scholars on the

importance of affective state in his earliest work, “So far we have had nothing to say about the emotional behavior of men, and thus have left out much that makes them human” (1961); however, much of the work that is done in the justice arena includes only the cognitive aspects of justice. In his classic description of the distributive justice rule taken from Aristotle (trans. 1934), Homans included anger as a key component driving behavior in response to injustice. Homans’s original description of distributive justice was that of a process of perceived unfairness, which leads to anger, which drives a behavior. Not long after Homans’s articulation of distributive justice Adam’s (1965) introduced the concept of equity as the determinant of perceptions of justice. In the time since Adams, scholars have abandoned the idea of affect in the justice judgment, choosing to focus on the cognitive aspects of the judgment. Recent work in affect and emotion has brought the issue to light again (Brief & Weiss, 2002; Elfenbein & Ambady, 2002).

Many of the recent theories of deviance and justice have proposed that the operation of emotion is a byproduct of the interaction (Allred, 1999; Hegtvedt & Killian, 1999), or proposed emotion as a mediating variable between justice and behavior (Martinko, Gundlach, & Douglas, in press; Weiss, Suckow et al., 1999). Building on the above arguments, I will argue for the importance of understanding affective impacts on justice judgments. I will argue for the primacy of emotion and include emotion as a mediator of the relationship between justice violations and organizational justice perceptions. Including emotion as a mediator, I will make differential predictions for two outcomes, retaliation and restoration, as they operate through the two classifications of organizational justice (Ambrose et al., 2002; Greenberg, 1996).

Affect.

Affect is a general term used to refer to the overall category of “feeling.” This general idea of affect can be broken down into the more fine-grained distinctions of emotions, moods, and affectivity. I will briefly review research in the general topic area of affect before examining the specific distinctions of affectivity (trait-like affect), mood, and emotion.

Affect has been an important consideration for scholars through the years. Even during the cognitive revolution in psychology affective states have been recognized as a dominant factor in human decision making (Cacioppo & Gardner, 1999). For some time it was thought that affect was an overriding factor that would disrupt the cognitive process, that rational decision making was derailed by the influence of affect (Cacioppo & Gardner, 1999; Weiss & Cropanzano, 1996). Recently it has been put forward that these affective states have an effect on all cognitive and behavioral responses to stimuli and that many decisions that are made, while they may be cognitive in nature, are influenced by affective antecedents (Cacioppo & Gardner, 1999; Scher & Heise, 1993).

In order to better understand the affective components of decision-making we need a better understanding of the broad concepts involved. Affectivity is a relatively stable individual difference reflecting the tendency to experience corresponding moods and emotions (Watson, 2000). That is, those that are high in negative affectivity are more likely to experience negative moods and emotions. Mood is a pervasive and generalized state with no direct target. Mood is an affective reaction that is disconnected from its causal object (George & Zhou, 2002; Weiss & Cropanzano, 1996). Conversely, emotions are directly connected to the object of cause and the reaction is focused at the cause

(Elfenbein & Ambady, 2002). This differs from mood in that emotion does have a connection to the target.

Affectivity. Affect at work has historically been equated with job satisfaction (Brief & Weiss, 2002). Original work by Hersey (1932) showed a statistical relationship between the daily affect levels of workers and the behaviors that they undertook at both work and home. Workers that had more positive affect were more satisfied at work and had happier home lives. Hersey's work narrowed the study of affect to the view of job satisfaction or dissatisfaction. At a meso level of analysis, Roethlisberger and Dickson (1939) noted that the environment of the organization and the social interaction between the individual and groups within the organization were important factors in the development of affective outcomes. With that as the background for research into the affective nature of work, the study of affect was absent from the organizational literature, but for a few studies, for many years. In the 1990s the study of affective phenomena became important once again as affect was seen as a major component of the decision making process in organizations. In fact Judge and Hulin (1993) commented that, "Individuals appear predisposed to respond to the job and other environmental characteristics in an affect based manner...". The study of affectivity then is the study of these predispositions. Affectivity is a trait-like disposition (Weiss, Nicholas, & Daus, 1999) which is fairly stable over time. Affectivity is the general outlook that a person brings to bear on all situations that are encountered in daily life. Affectivity has generally been divided into positive and negative sub-dimensions (Erez & Isen, 2002).

Negative affectivity has been linked to health complaints, stress (Watson & Pennebaker, 1989), job satisfaction (Judge & Hulin, 1993), and decreased creativity

(James, Brodersen, & Eisenberg, 2004). On the other hand, positive affectivity has been linked in the literature to the components of motivation (Erez & Isen, 2002), job satisfaction (Weiss, Nicholas et al., 1999), and attachment to groups and the choices that flow from these attachments (Lawler, 1992).

Watson and Pennebaker (1989) found a correlation between negative affectivity and health complaints – but not actual health problems – but no relationship between positive affectivity and health complaints. That is, positive affectivity did not have the opposite effect of being negatively related to health complaints. This evidence that negative affectivity has an effect on both psychological and physical outcomes in the individual is important, but becomes much more interesting when coupled with the evidence that positive affectivity does not have the opposite effect, rather that positive affectivity has no effect. Judge and Hulin (1993) hypothesized that affectivity effected job satisfaction through the mediating mechanism of subjective well-being. The authors used the Neutral Objects Satisfaction Questionnaire (Weitz, 1952) which has not received much validation in the literature. Despite the questionable nature of the measurement instrument, the authors found that affective disposition was a significant predictor of subjective well-being and that subjective well-being was a significant predictor of job satisfaction. That is, if one scores high in negative affectivity, s/he will be less pleased with his/her life, and have lower satisfaction in the workplace (Judge & Hulin, 1993). James and colleagues (2004) build a theoretical framework, based on work in creativity, that proposes a structure such that the stable trait affective disposition will affect the emotion that is experienced by the individual. Building on work by Frijda (1993), the authors argue that the general pleasantness or unpleasantness that an individual

experiences is important in the way an individual will experience emotion and the performance outcome that flows from this experience.

Erez and Isen (2002) examined the link between trait affect and the components of expectancy motivation – valence, instrumentality, and expectancy (Vroom, 1964). The authors showed that positive affectivity moderated the relationship between level of reward and valence by cuing positive material in the brain and increasing the valence of a moderately attractive reward. Positive affectivity also moderated the relationship between level of performance and reward, such that, the reward will be more salient at a moderate level of performance than at a low level of performance. Finally, in a similar moderating relationship, positive affectivity leads individuals to more clearly see the link between levels of effort and performance (Erez & Isen, 2002). In a similar VIE study, positive affectivity and VIE beliefs were significant predictors of job satisfaction (Weiss, Nicholas et al., 1999).

Affectivity is generally measured using the Positive And Negative Affect Schedule (PANAS) self report measure (Watson, Clark, & Tellegen, 1988). The short form of the PANAS includes 20 items, ten items assess the level of positive affectivity and ten items assess the level of negative affectivity.

Mood. Moods comprise cycles in feelings (Brief & Weiss, 2002). Moods are transitory states. Studies that do examine mood at work are typically focused on the impact that mood can have on a variety of outcomes at work (Weiss, Nicholas et al., 1999). Mood has been connected to organizational outcomes such as; creativity (George & Zhou, 2002), cooperation (Hertel, Neuhof, Theuer, & Kerr, 2000), and the intensity of emotions and influence on task performance (Neumann, Seibt, & Strack, 2001). Mood is

generally considered to have a longer duration than emotions, but is not a stable trait as is affectivity.

Most commonly studied in the lab setting, mood is either measured prior to the study or manipulated as part of the study. Mood is generally measured in the same way as affectivity, using the PANAS (Watson et al., 1988). The difference in using the PANAS to measure mood rather than affectivity is in the instructions given at the beginning of the instrument. Subjects are asked to rate “to what extent do you feel this way in general” to get a determination of stable affectivity. To examine mood states the directions are changed to read “to what extent have you felt this way in the past week.” George and Zhou (2002) in a study that connects positive mood with creativity, used the PANAS to measure positive and negative mood and found alpha levels of .91 and .79 for positive and negative mood. The authors used the “past week” instructions to be consistent with literature on mood (Watson, 2000; Watson et al., 1988) and to be sure that they were measuring the transitory state, rather than the stable trait. The authors found that the mood of the individual was related to creativity, but moderated by the recognized reward and clarity of feelings for creativity, such that individuals in negative moods were higher in creativity when the reward and the feelings were salient (George & Zhou, 2002). Those in a positive mood were lower in creativity when the saliency of the reward and the clarity of feelings were high.

A second group of studies manipulates mood as a part of the experimental design (Hertel et al., 2000; Neumann et al., 2001). This manipulation can be done either with a video (Hertel et al., 2000) or with a recorded voice (Neumann et al., 2001).

Manipulations that use film have both visual and auditory components. The video is

either an amusing or a sad video, with a soundtrack to match. The recorded voice is either a positive voice or a negative voice, that is, the voice read the same script in both instances but in a tone to reflect either positive or negative mood. Both manipulations were successful in eliciting the desired mood. Hertel and colleagues (2000) found that there were no main effects of mood on cooperative behavior, but rather, that mood affected how the decision was made whether to cooperate or not. Positive moods elicited feelings of security and a tendency to imitate the behavior of others – if others cooperate, the subject in the positive mood would reciprocate. Those that were in a negative mood had a lower feeling of security and would therefore increase cooperative effort in the face of lower effort by other participants. This increased cooperation was to make up for the decreased effort of others. Conversely, if the others were cooperative, the subject in the negative mood was less likely to cooperate and was more willing to free ride on the efforts of others. In a study that manipulated mood with a recorded voice, Neumann and colleagues (2001) found that the manipulated mood affected subsequent emotions. The authors found the mood that was elicited with the recorded voice affected subsequent emotions that were elicited as part of the study, but not emotions that were previously attached to a different target. This is consistent with previous work that found that emotions that were attributed to a source did not affect judgments about other objects (Keltner, Ellsworth, & Edwards, 1993).

Emotion. Emotions are short-lived, momentary reactions to stimuli (Morgan & Heise, 1988; Zajonc, 1980). Emotions can influence the cognitions or judgments made by individuals. This affective judgment is then used as a foundation for many of the

decisions that are made by the individual (McAllister, 1995). This affective judgment is difficult to revoke once it is formed and colors the decisions that follow (Zajonc, 1980).

Recently organizational scholars have turned to emotions as explanatory variables in many different instances (Brief & Weiss, 2002). This new focus on affective causality has brought affect and emotion into prominence as a driving factor in decisions. Even decisions that appear completely cognitive in nature, are generally elicited by emotion (Scher & Heise, 1993). The importance of the emotional (or “hot”) dimensions of decisions should not be overlooked. Emotions are an incentive to act in a way that is contrary to short term self interest (Hegtvedt & Killian, 1999). Emotions can be important in the decision making process as well as in other aspects of everyday life. As the opening quote from Homans (1961) states, emotions are much of what makes us human. These emotional reactions are hard-wired, immediate responses (i.e. biological c.f. Weiss & Cropanzano, 1996) that follow directly behind the events that illicit them. In addition to their biological nature, emotions are also focused on a target and fairly short-lived and intense (Brief & Weiss, 2002). Emotions are in response to stimuli that focus the emotion on the target object and prime the intensity of the emotion.

One view of emotions in organizational research splits the phenomena into two dimensions (Russell, 1978). Generally, the dimensions are defined to include a good-bad (or pleasant-unpleasant, happy-sad) aspect and an arousal element (high-low arousal) to define the different emotions (Morgan & Heise, 1988; Russell, 1978). The good-bad dimension is fairly straightforward. This dimension is concerned with the general valence of the emotion, which is either positive or negative (Kemper, 1987; Russell, 1978). Similarly, arousal is a straight-forward dimension – how much the individual is

activated, or likely to pursue a course of action based on the emotion (Russell, 1978).

These two dimensions combine to form the circumplex model of emotion.

Measurement issues are important in the study of emotions. Organizational researchers have used several different measures in the study of emotion, scales that look at specific discrete emotions (Kuppens, Van Mechelen, Smits, & De Boeck, 2003), questionnaires that focus on specific emotions – the BARQ, Behavioral Anger Response Questionnaire (Linden et al., 2003). Much of the recent work that is focused on emotion involves manipulating emotion in the experimental design by having subjects recall and write about an emotional event (Bless & Fiedler, 1995; Gasper, 2004), or merely recalling recent events (Lee & Schafer, 2002). Alternatively, the discrete emotion is included in the study merely as an outcome (Hegtvedt & Killian, 1999; Lowenstein, Weber, Hsee, & Welch, 2001; Weiss, Suckow et al., 1999).

Many recent studies have also included survey measures of emotion. Lerner and Keltner (2001) used a survey measure and determined that fearful individuals were risk averse in their choices whereas angry individuals were more risk seeking. That is, the authors found that regardless of the framing of the decision, fearful individuals avoided uncertainty and angry individuals “embraced” the risk (pg. 149). Heise (1989), used mathematical modeling to connect the display of emotions to the assessment of one’s character. Using computer modeling of decisions based on a large database of possible outcomes, Heise showed that the individual that displays the proper emotion (e.g. shame over a deviant act) will have an effect on the appraisal given by others. In a similar study – that is, one focused on the attribution that can be connected to emotion – Tesser and colleagues (1989) examined the misattribution that individuals can place on others based

on the felt emotion. The authors found that with highly emotionally aroused individuals, the misattribution was much more pronounced than with those not highly emotionally aroused.

Recently, the measurement of emotion has moved toward that of affect and mood. An extended version of the PANAS is available to assess more specific emotional states, rather than the more broad affective states. The Positive and Negative Affect Scale – Extended Version (PANAS-X) is an instrument with 60 adjectives which subjects rate the level of agreement with their descriptive nature of the subject's general outlook. Each of the adjectives is targeted at a sub-dimension of either positive or negative affect. The positive/negative aspects of emotion have been found to be reliably measured and account for most of the variance in affective terms (Watson & Tellegen, 1985). The affective factors, as mentioned above, are overarching and general categories. The PANAS-X is used with a momentary instruction (Watson & Clark, 1994), that is, the instructions ask the subject to respond how they feel "at the present moment." The use of survey items to determine emotional levels appears to work well. This is a difference from more physiologically focused studies of emotion that use frontal alpha electroencephalograph asymmetry to measure the usage different lobes of the brain to measure emotion (Wacker, Heldmann, & Stemmler, 2003). Similarly, studies have used other physiological responses in the measurement of emotion including; heart rate, systolic and diastolic blood pressure (Pauls & Stemmler, 2003) and measures of spontaneous skin conductance responses (Bradley, Codispoti, Cuthbert, & Lang, 2001).

Mood Congruence.

It has been suggested that mood is an important driver of cognitive processes, from decisions as mundane as the reaction to television commercials (Kamins, Marks, & Skinner, 1991) to something as ominous as the decision to pursue a course of revenge in the workplace (Tripp & Bies, 1997). Mood congruence theory suggests that the valence of an individual's mood and cognitions are similar (Blaney, 1986; Bower, 1981). That is, individuals who are in a positive mood are more likely to have positive cognitions and individuals who are in a negative mood are more likely to have negative cognitions. This mood congruent effect is one that has been found in a number of experiments that generalize to a wide population (Mayer, Gaschke, Braverman, & Evans, 1992). For example, this effect has been found in experiments that induce mood (Forgas & Bower, 1987), in quasi-experimental studies – as one study examined the effect in moviegoers that had seen either a happy or sad movie (Forgas & Moylan, 1987), and for the general population in a non-self-relevant judgment when coupled with a natural mood (Mayer et al., 1992). According to mood congruence theory, individuals attend to information and events that better match their mood (Bower, 1981), rather than information and events that contrast with the current mood. Although mood congruent recall has been shown to be a stable and consistent effect, two studies that examined the recall of advertising after the Super Bowl found that high intensity of mood obscured this effect (Newell, Henderson, & Wu, 2001; Pavelchak, Antil, & Munch, 1988).

Most of the research on mood congruence suggests that individuals recall information that is congruent with their mood, which drives the congruent cognitions (Blaney, 1986; Bower, 1981). While research generally supports the idea that people will think in a way that is congruent with mood, some research has shown that certain

individuals actually activate incongruent thoughts (Smith & Petty, 1995). Smith and Petty found that two specific individual differences – self-esteem and negative mood regulation – impacted whether an individual acted in a way that was congruent with his/her prevailing mood. Self-esteem is the general feeling of one's self-worth (Brockner, 1988), negative mood regulation is the ability to control negative moods (Smith & Petty, 1995). Smith and Petty found similar effects for both individual differences. Those with high self-esteem or with a greater ability to regulate negative mood, were more likely to display incongruent thinking to the prevailing mood in the case of a negative mood induction. That is, those individuals with a feeling of more self-worth or a feeling that they had control over negative moods were more likely to think in a manner that was positive after a negative mood induction. Individuals with high self-esteem were more likely to induce incongruent thinking in the negative mood induction condition, but were just as likely as low self-esteem individuals to think in a mood congruent way in the neutral condition.

CHAPTER 2 – HYPOTHESES

The Mood Congruence Mechanism.

Building on theories of affective influence on cognitive states, I use mood congruence as the mechanism for affective impact on the cognitive assessment of organizational justice. Mood congruence theory states that the individuals cognitions will be congruent with the affective state carried into the situation (Blaney, 1986; Bower, 1981). Mood congruence operates through the memories recalled during a particular decision. If the affective state is a negative one, negative memories will be recalled, and those will impact the cognitions of the individual (Bower, 1981). People in good moods are more optimistic in their judgments and choices whereas people in bad moods show more pessimism when engaged in the same tasks (Isen, Shalke, Clark, & Karp, 1978; Wright & Bower, 1992). Mood congruency effects have been shown to impact problem perception (Thayer, 1987), thoughts, and memory retrieval (Blaney, 1986; Rusting & DeHart, 2000).

During positive affective states positively valenced information becomes activated and thus, individuals retrieve positively valenced material more easily from memory and are more likely to have positively valenced cognitions. During negative affective states, individuals make association with negatively valenced memories and cognitions.

Mood congruence theory can be applied to the impact of affective states on the cognitive perception of justice. Consistent with the general effects for mood on memory and perception (Weiss & Cropanzano, 1996), affective state will have an effect on the perceptions of justice. Those who are in a positive mood will have more positive

perceptions of justice. Those who are in a negative mood will have more negative perceptions of justice (Byrne, Rupp, & Eurich, 2003).

The affective state that an individual is experiencing will impact both behavioral and attitudinal responses (Weiss & Cropanzano, 1996). Affective conditions, specifically naturally occurring emotions in a classroom setting (Byrne et al., 2003), have been shown to have an effect on justice perceptions. Byrne and her colleagues found that discrete emotions (happy, proud, angry, resentful) had an impact on judgments of fairness of a grade received on a test in a classroom setting. The affective state colored the cognitive appraisal of fairness (Scher & Heise, 1993). Research on moods and cognitive appraisals has shown that positive moods result in more favorable judgments and negative moods result in more unfavorable judgments (Byrne et al., 2003; Mayer et al., 1992).

These effects will be consistent with the categorization proposed above. That is, structural injustices will be related to distributive and procedural justice perceptions and social injustices will be related to interpersonal and informational justice perceptions.

H1: Those in a negative affective state will perceive lower levels of distributive and procedural justice following a structural injustice than will those in a positive affective state.

H2: Those in a negative affective state will perceive lower levels of interpersonal and informational justice following a social injustice than will those in a positive affective state.

The Strength of Negative Affect.

Weiss and Cropanzano (1996), as well as past research (Hersey, 1932), support the idea that negative emotional states have a more pronounced effect on outcomes than do positive emotional states. For example, Hersey (1932) measured daily mood levels and daily production levels in factory workers and found that negative moods had a much stronger negative effect on production compared to positive effects from positive moods. In an examination of conflict in organizations, anger was found to be the strongest predictor, compared to other emotions, including frustration and betrayal, of both the cognitions of revenge and the final behavior of revenge that was carried out (Allred, 1999). Over two-thirds of the subjects that provided responses to the survey reported feeling anger following an event that had a “negative effect” (pg. 31). Similarly, Bies & Tripp (Bies & Tripp, 1996; Tripp & Bies, 1997) found that negative emotional states dominated in reports from participants about responsibility for actions at work. Negative feelings have adaptive value and spur people to a course of action. Positive feelings do not have these same biologically obvious reasons to exist (Fredrickson, 2003). Therefore, negative feelings are more salient and should be more likely to cause individuals to act in response to them than positive feelings.

Taken together, the conceptual argument and the empirical evidence suggests that negative emotional states will be more salient and the effect will be stronger than the effect for positive emotions. While positive emotional states can facilitate a more broad thought-action repertoire (Fredrickson, 2003), negative emotional states will cause focused thinking and actions that will be stronger than the more broad positive emotional states (Allred, 1999; Taylor, 1991; Weiss & Cropanzano, 1996). A negative emotion or

affective state will have more impact than a positive one (Allred, 1999).

H3: Across participants, negative affective states will have a stronger effect on perceptions of justice than will positive affective states.

Outcomes – Retaliation and Retribution.

Injustice in organizations invariably leads to a number of negative outcomes, about which various volumes have been written (e.g. Cropanzano, 2001; Greenberg & Cropanzano, 2001). The outcomes that have been examined include an extraordinary range of possible outcomes spanning from tardiness to homicide. In an attempt to classify these deviant acts, Bennett and Robinson (2000; 2003; Robinson & Bennett, 1995) call for collapsing into larger categories, rather than continuing to pursue many more specific outcomes. Their suggestion is to classify acts based on the focal target – an organizational deviance or interpersonal deviance – and the severity – severe or minor. This classification is adopted by Ambrose and colleagues (2002) in their examination of sabotage. However the difference between restoration and sabotage is that sabotage is always harmful in an organization while restoration could be positive for the organization and the members of the organization, as well as for the individual who pursues that course of action (Allred, 1999; Ambrose et al., 2002; Bennett, 1998; Robinson & Bennett, 1997).

Similar to this previous work, I adopt a view that reactions to injustice will vary in their target – organization and individual. This distinction between organizational and interpersonal deviance is similar to the distinction between the restorative and the

retaliatory motives and the distinction between social and structural justice. Restoration and retaliation are the motives for organizationally or interpersonally deviant acts. As previously stated, restoration is an outcome that is pursued to restore equity in a situation. This is a positive economic outcome for the individual in the transaction in that the restoration of equity returns them to the status that they desire. This has an impact on both the attitude and behavior of the individual. Retaliation is pursued to harm an offending individual. There is no economic benefit to the individual who follows a retaliatory path; rather, there is an intended detriment to the offending individual.

Greenberg (1996) found that if individuals were treated in a structurally unjust manner they attempted to restore equity only if their deviant act actually would restore equity. That is, if the injustice stems from the organization or the system – a structural injustice – the individual attempts to behave in a way that influences distributive or procedural justice, in the Greenberg study the behavior was to attempt to influence distributive justice, to restore equity. Building on this view of restoration, two particular studies have addressed the restorative motive. First, Greenberg (2002) examined the restorative motive by underpaying clerks in a customer service setting and allowing them to either restore equity or retaliate. Individuals that felt they could restore equity by stealing change from the organization pursued this activity, while individuals who thought the stealing would affect individual managers, therefore being retaliatory, did not steal. That is, in the study, Greenberg gave the participants one of two frames, either a structural injustice frame or a social injustice frame. This distinction was supported by Ambrose and colleagues in their examination of sabotage in the workplace (Ambrose et al., 2002). Individuals who felt that sabotage would restore equity targeted the sabotage

at the organization. However, if individuals were treated in a socially unjust manner – thereby violating interpersonal or informational injustice – they retaliated, even if the retaliation provided no value to them. This retaliation was directed at individuals within the organization.

Therefore, retaliation will be pursued in the event of a social injustice and restoration will be pursued in the event of a structural injustice (Ambrose et al., 2002; Greenberg, 1996).

H4: Those that experience a structural injustice will pursue more restoration than retaliation.

H5: Those that experience a social injustice will pursue more retaliation than restoration.

Interactive effects.

Much of the past research in the area of justice focuses on the cognitive or economic viewpoint that is largely espoused in the literature. Bies (2001; Bies & Tripp, 2001), argues for a view of justice that includes, not just the cognitive aspects of justice, but also the behavioral intentions of revenge, and the passion – the affective states that lead to the responses to injustice in the workplace. The sense of injustice is a “hot and passionate” experience (Bies, 2001). Tripp and Bies (1997) focus on the process of revenge as both a functional and dysfunctional process in an organizational setting. In a review of three experiments focused on revenge, they report that in a study of MBA students (Bies & Tripp, 1996), when a negative emotion was coupled with revenge

cognitions, there was a tendency to make “overly personalistic attributions” (Tripp & Bies, 1997, pg 149) about the behavior. That is, in the instances where revenge actions were pursued coupled with bitter, angry, or mad emotions, the participants made personal attributions about the situation and blamed individual authority figures for the offense. Tripp and Bies also found that revenge was seen as good when the perpetrator was attempting to restore justice and was seen as bad when the perpetrator was retaliating for being wronged. Revenge for restorative purposes, to restore equity, was seen as a good pursuit of revenge, whereas, revenge for the purpose of retaliation was seen as a bad pursuit of revenge.

Recent work in the area of sabotage (Ambrose et al., 2002) and revenge (Tripp & Bies, 1997) is very instructive to differentiating the outcomes of a justice perception that includes an affective component. Ambrose and colleagues (2002) examine the impact that perceptions of justice have on the retaliation and restoration motives in sabotage. Examining accounts of sabotage, Ambrose and colleagues (2002) found that there was a clear link between distributive injustice and sabotage that was aimed at restoring equity with the organization. There was also a link between interactional injustice and attempts to retaliate against the individual who acted unjustly. The authors also found a “hot” component to the acts of sabotage that were based on interactional injustice. If the motive were retaliation, the saboteur would pursue the act, regardless of whether it would provide him/her with a benefit, and even in some cases where there could be damage to the saboteur. This is similar to research in ultimatum bargaining which shows that individuals will follow a self-destructive path to retaliate (or punish) another party that

has wronged them (Pillutla & Murnighan, 1995), particularly when they are angry (Pillutla & Murnighan, 1996).

A positive affective state leads to more creative thinking (James et al., 2004) and the consideration of more options (Fredrickson, 2003). This increase in problem solving ability could lead directly to some attempts to restore equity in the interaction. That is, when an individual is in a positive affective state, they may be more inclined to pursue more divergent solutions to problems. Rather than following the singular preferences that are predicted by previous work (Ambrose et al., 2002; Greenberg, 1996), the restorative outcome for structural injustice and the retaliatory outcome for social injustice, those in a positive mood will pursue more divergent thinking and a broader range of outcomes. Positive mood has been found to lead to a broadening of perception and the enhancement of idea generation (Fredrickson & Joiner, 2002), as well as more divergent thinking (James et al., 2004). It has also been proposed that complexity of the affective state will increase creativity (Sundarajan, 2000). That is, when the background mood does not match the emotion that is present, creativity will be higher. This is similar to the mismatch between the positive affective state and the social injustice. The positive affective state would suggest a mood congruent response of restoration, but the social injustice calls for a retaliation response, this would lead to more creativity in finding solutions. In a study of negative and positive creativity, Clark and James (1999) found that following an organizational injustice, individuals were likely to be creative directed toward the negative goal of undermining the organizational goals, or a retaliatory response.

As restoration leads to a positive outcome – restoring equity within a situation – it is a congruent response for someone in a positive affective state. Therefore, the individuals in a positive affective state will maintain the main effect of the previous research and in the case of a structural injustice will pursue restoration. However, I predict that the positive affective state will also have a strong enough effect on social injustice, that in the event of an interaction between a positive affective state and social injustice, the positive affective state will drive restoration attempts. Individuals will be broad-minded in the situation and will pursue restoration as well as retaliation, in instances that would only predict retaliation under previous theories.

Conversely, the negative affective state will drive retaliation both directly and operating through the two categories of justice. Negative affective states are related to revenge (Tripp & Bies, 1997), spiteful decision making (Pillutla & Murnighan, 1996), and blaming judgments (Lerner & Keltner, 2000). Tripp and Bies found that some revenge was focused at an offending party. This revenge was linked with very “hot” emotional states, such as anger, and was said to explode out of the interaction with the offending individual (Tripp & Bies, 1997). Revenge in this case was aimed at an individual and was meant to harm the individual, regardless of the cost. A similar outcome was found in a decision making study, in which anger was a precursor to making a spiteful decision, which would harm both parties, rather than a decision which would benefit both parties (Pillutla & Murnighan, 1996). Taken together, these studies inform how affective states, anger in particular, impact decision-making. A negative affective state is going to have an impact on retaliation. Lerner and Keltner (2000) report that negative affective states also lead to blaming. An individual who is in a negative

affective state will often assign blame to an individual for negative outcomes. So even in a structural injustice situation, the offended individual will assign blame for the injustice, and therefore, the structural injustice will lead to more retaliatory behavior for individuals in a negative affective state, due to the blame. Therefore, affective state will impact cognition – whether an occurrence is perceived as just or unjust – and the interaction will impact the outcome of retaliation or restoration. Negative affective states are indicative of a more narrow focus (Fredrickson, 2003), less creativity (James et al., 2004), and spiteful decisions that may be harmful to both parties (Pillutla & Murnighan, 1996). An examination of the interaction of anger and unfairness in the rejection of ultimatum offers shows that individuals, when faced with an ultimatum offer, may react with anger and perceptions of unfairness and in return reject the offer – regardless of whether it was a beneficial offer (Pillutla & Murnighan, 1996). This would lead individuals to pursue a retaliatory path, irregardless of the type of injustice.

The interaction between social injustice and negative affective state will predict retaliation as in previous research. In the event of a structural injustice and a negative affective state, the negative affective state will operate to assign blame and will drive revenge thoughts, and retaliatory behavior.

Examining the restoration motive, one can make the inference that individuals who have a positive affective state will more likely be involved in attempts to restore justice, rather than attempts to harm the offending party. Those in a positive affective state are likely to be focused on creative solutions to problems (James et al., 2004). This would lead individuals to be more likely to persist in finding an alternative solution to an unfair situation.

For example, if someone is in a positive affective state and a structural injustice occurs (doesn't receive an expected bonus), that individual will be more likely to engage in restorative behaviors – trying to get the bonus, slowing work, etc. – and less likely to retaliate against the organization – sabotage, badmouthing, etc. – than someone who is in a negative affective state. The individual in the negative affective state, when faced with a structural injustice, will engage in more retaliation and in less restoration, than those in a positive affective state. In the situation of a social injustice (manager treats the employee in a manner that violates dignity and respect), the employee that is in a positive affective state will be more likely to try and repair the relationship – i.e. follow a restorative path – while the employee that is in a negative affective state is more likely to respond with badmouthing the boss to others or another response designed to hurt the boss – the retaliatory path.

Based on the above arguments, therefore;

H6: Affective state and injustice will interact such that, following any injustice, those in the positive affective state condition will engage in a) more restoration and b) less retaliation than those in the negative affective state condition.

This study was designed then to examine the interaction of justice perceptions and affective reactions using the mechanism of mood congruence. These two distinct concepts are hypothesized to interact to impact two different classes of outcomes – restoration and retaliation. These two outcomes are important to organizations in that restoration is pursued with the motivation to improve outcomes, processes, or interactions

with the organization. Organizations can benefit from this type of interaction with an individual as this improvement can directly impact the profitability of the organization. The second type of outcome is retaliation. The motivation is only to harm the organization at which the activity is directed. Organizations do not benefit from this particular interaction.

By better understanding how justice perceptions and affective reactions impact these two different outcomes, organizations can better manage interactions with individuals. By managing the perceptions of fairness and the affective reactions organizations can improve the outcomes, processes, and interactions that drive their business.

CHAPTER 3 – METHOD

Power analysis. There are four components to the statistical power of any analysis (Cohen, Cohen, West, & Aiken, 2003); including, 1) the power of the test, or the probability of rejecting the null hypothesis, 2) the α of the test – as α increases, the power of the test increases, 3) the sample size – as n increases, power increases, and 4) the magnitude of the effect in the population. These four aspects are highly intertwined, so much so that by setting three the fourth is determined.

According to Keppel (1991), the formula for determining the appropriate number of participants necessary is:

$$\phi_A^2 = n^1 \frac{\omega_A^2}{1 - \omega_A^2}$$

Where n^1 refers to the necessary number of subjects, estimated in the equation in a trial and error process until the proper amount is determined. The fractional portion of the equation is a representation of the population variance. In this case – absent empirical data on this subject – I used Cohen's estimate of a medium and a large effect size of .06 and .15 (Keppel, 1991, pg. 72). Performing the calculation provides the value:

$$\begin{array}{ll} \phi_A = \sqrt{.06n^1} & \phi_A = \sqrt{.15n^1} \\ \phi_A = \sqrt{(.06)(28)} & \text{or} \quad \phi_A = \sqrt{(.15)(12)} \\ \phi_A = 1.296 & \phi_A = 1.34 \end{array}$$

Using the Pearson-Hartley chart (Keppel, 1991, pg. 515) which corresponds to an $\alpha=.05$ ($df=7,216$ and $df=7,88$, respectively for the large and medium effect sizes), I found that for a sample size of 28 (for a large effect) or 12 (for a medium effect) participants per cell the power was equal to .80, an appropriate level for behavioral research. This is a wide range in which to work. For that reason I approximated an effect size that was between

the medium and large effect sizes, based on work in the area of affect (c.f. Richins, 1997, R-squared values range from .28 to .68 for emotions predicting consumption decisions) and used .10 as the likely effect size. The calculation using that effect size indicated a power level of .80 with 17 subjects per cell. That gives a final value for the necessary number of participants as $n=(17)8$, or 136 participants in the experiment.

Sample and Procedure. Participants were upper-level undergraduate students enrolled in business classes at Michigan State University. They received course credit for their participation. A 2 x 2 x 2 factorial design varied affective state (negative v. positive), structural justice (just v. unjust) and social justice (just v. unjust).

Participants were seated at a computer terminal for the entirety of the simulation and all instructions and surveys were administered through a web-based interface. Participants were told that they were participating in two separate experiments to satisfy the research requirement of the class in which they were enrolled. The first experiment was presented as a short pilot study of a measure of affective state, and the second an online bidding task. For the first task participants were asked to write about an event that happened to them in the recent past – within the past week – and then complete the PANAS. This was presented as a separate study to avoid any of the participants linking the affective manipulation with the justice questions.

Participants were then told that they would be completing an online bidding task, similar to Priceline.com, for TravelDeals.com – a fictitious company created for the experiment and based on prior research in an online bidding context (Humphrey, Ellis, Conlon, & Tinsley, 2004). They were told that they needed to reserve a hotel room in Chicago for a pleasure trip over a two-day period. The participants were told that they

would have 500 dollars to spend over the two days. They were told to bid competitively on the hotel room so that they have cash left over for entertainment and expenses. They were also given information that a typical four-star hotel in the area of Chicago that they were targeting generally costs between \$189 and \$249 per night. Prior to the actual bidding task, the website provided information to the participants to manipulate the perception of social justice.

Following the information on the task, they received specific instructions for completing the bidding. They then entered their bid into the system (see Figure 1). At this point the structural justice manipulation was implemented (see Figure 2). Following the bidding task the perceptions of justice were measured.

Independent Variables.

Affective State. Affective state was manipulated by having all the participants write about an affective event that happened to them within the past week. This method has been used in previous research to successfully induce an affective state (Bless & Fiedler, 1995; Gasper, 2004; Lee & Schafer, 2002) and recalled affective state has recently been found to be nearly as strong as an affective state during the experience (Kahneman, Krueger, Schadke, Schwarz, & Stone, 2004). Specifically, the participants were instructed to “Think of a situation that caused you to have a very negative reaction (angry, sad, etc/happy or positive) in the past week. With this situation in mind, write a description of the situation and write about how you felt at the time that you were going through the situation. That is, first, describe what caused the feelings, and follow that with a description of the feelings that you felt. Please write about this situation for the next ten minutes.” Affective state was then measured using the PANAS with the

instructions that read “how do you feel right now” to capture an affective state.

Participants were asked to respond to the 20 adjectives on a 1 to 5 Likert-type scale with 1 being I “very slightly or not at all” have felt this state and 5 being I have felt this state “very much.” Manipulation checks were performed to be sure that the appropriate affective state was induced, corresponding to the desired manipulated state.

The online bidding task was then presented to the participants. They were provided with information about the desired location in Chicago and some indicative pricing for this area. At this point the organizational justice manipulations were presented.

Organizational Justice - Social Justice. Social justice was manipulated with a screen of information from the fictional, “VP of Customer Service” for the TravelDeals.com system. Prior to the task being initiated, one of two screens was presented to the participant, based on the condition. The first condition contained no social injustice and reads,

A message from our Vice-President

Thank you for using our service for your travel needs. We at TravelDeals.com are aware that there are a number of options that you may have to accommodate your travel plans, we are glad to have your business.

Our system employs the most sophisticated AI (Artificial Intelligence) on the back-end of our search process to increase the possibility of success for our customers. We truly value your opinion and feel that you are an important part of our customer base.

We sincerely hope that you will be successful using our system to procure a hotel room in the Chicago area.

Thank you again for using TravelDeals.com.

Sincerely, Peter Mears, VP Customer Service.

Those in the condition that received social injustice were provided the information that follows,

A message from our Vice-President

We at TravelDeals.com are aware that there are a number of options that you may have to accommodate your travel plans, we are happy to have your business.

The focus of our system is on business travel. You initially indicated for your occupation that you are merely a student. While we will look for a room for you, your priority with us is low.

We will do our best to accommodate your travel to Chicago, IL, in the event that we cannot find a suitable room for you, we suggest that you travel by car to Chicago and return the same day. Your personal information suggests that you should be able to drive to Chicago, as it is only 220 miles and will take no longer than 3 hours and 15 minutes.

TravelDeals.com, The best in the business!

Sincerely, Peter Mears, VP Customer Service.

Pilot testing was conducted to determine whether the manipulation was effective in making the subject perceive the social injustice. The pilot test consisted of presenting the scenario for the participants, followed by providing them with either the just or unjust message, above. The sample used in the pilot study was a similar sample to that which was used in the actual study. The participants in the pilot study were students enrolled in an upper level business course. Subjects participated in the study voluntarily. In return, the subjects were given extra credit in the class.

The pilot test showed that the participants' perceptions were affected differently in each of the scenarios. As measured by the scales for interpersonal and informational justice, those that were in the negative social justice condition responded with perceptions of social justice that were much lower than those in the positive social justice condition (means = 2.25 and 3.71, respectively). This difference in perception was

significant ($F=50.11$, df 1,30, $p<.01$). The analysis holds for the actual participant data. Those that were in the negative social justice condition responded with perceptions of social justice that were much lower than those in the positive social justice condition (means = 2.40 and 3.26, respectively). This difference in perception was significant ($F=45.15$, df 1,149, $p<.01$).

Following the social justice manipulation, participants were presented with a web page on which they entered their bid for a room in Chicago. The webpage (see Figure 1) again presented information about the pricing for typical rooms in the specific area of Chicago that was of interest for the participants. At this point the structural justice manipulation was presented.

Organizational Justice - Structural Justice. Structural justice was manipulated by simulated crashes in the travel booking system. In the just condition, participants went through the task with no crashes of the system. Upon reaching the end of the bidding process, these individuals were given a message that they had not been successful in their attempt to procure a hotel room.

In the unjust condition participants also placed a bid for a hotel room. After that they received an error message detailing the system failure (see Figure 2). They were then returned to the beginning of the task to begin the bidding process again. In this second attempt the website appeared to crash a second time just as the participants completed the bidding screen for the second time, returning the same message as the previous crash. Participants once again returned to the beginning of the bidding task and upon reaching the end of the bidding process, after entering their third bid, these individuals were also given a message that they had not been successful in their attempt

to procure a hotel room. The bids ranged from \$25 to \$350 across the three time periods. The mean bid for time one was 132.81 with a standard deviation of 44.82.

All participants failed to get a room using the system, regardless of whether they were in the just or unjust condition.

Justice was measured with the four-factor scale validated by Colquitt (2001) to capture a richer dimensionality of the construct. Once collected, the four factors were collapsed into the distinct categories of social or structural justice.

Dependent Variables.

Restoration and Retaliation. Retaliation and restoration were captured in two distinct ways. First, at the conclusion of each bidding session, participants were given a choice of concluding the study and exiting the experiment, contacting an official from the fictitious company (TravelDeals), or posting information with a third party complaint service (see Figure 4). These three choices were provided upon concluding the bidding task by allowing each of the participants to follow any or all of these options in the form of three web links. The first link provided an opportunity to post comments to the TravelDeals.com technical support website (see Figure 5). The second link was to a third-party complaint website that would post the complaint to a fictitious Internet advisory board (see Figure 6). The last link was to conclude the study.

By following the link to the official from the fictitious company, the participants were following a restorative path, attempting to restore equity after the injustice. The link stated that the process allowed individuals to provide feedback to TravelDeals.com to improve the service provided to customers or to provide comments about the service that they received. This allows for the individual to restore equity, in that oftentimes

individuals view the ability to have voice as a restorative behavior (Allred, 1999). The customer service website framed the feedback as a constructive means to improve the process for future visitors to the website. This was an opportunity for the participants in the study to positively impact the situation.

Following the link to the third party complaint site allowed for retaliation, as there is no benefit to the individual. The complaint website provided the opportunity to record negative comments about the company or the experience which was to be posted on a public website for others to read. This option provided only the opportunity to hurt TravelDeals.com. This particular option was framed as the opportunity to prevent others from having a bad experience or to provide comments in a forum that was free from the company's domain.

Please see Figures 4, 5, and 6 for the screens that elicited responses for retaliation and restoration.

Participants had the option of following the restorative path, the retaliatory path, both paths, or neither path. In the event that the participants chose to conclude the study, neither retaliation nor restoration behaviors were recorded. Table 8 contains a breakdown of the number of participants that followed each of these potential paths, broken down by condition.

Regardless of whether participants followed restorative or retaliatory behaviors, they were asked to record their intentions at the conclusion of the study. This survey captured the intent of the participants in the study in regard to the dependent variables of restoration and retaliation. Participants were asked to respond to scales based on work from Bennett and Robinson's (2000) measure of workplace deviance as part of the

restorative or retaliatory response. Sample items from Bennett and Robinson's scale include; Have you said something hurtful to someone at work, Have you publicly embarrassed some one at work, Have you taken property from work without permission, Have you neglected to follow your bosses instructions. The scales were modified to register customer deviance, rather than workplace deviance. By collecting these two distinct forms of these outcomes I can compare the behavioral outcome (following the link and providing information) and the behavioral intention (the survey items).

CHAPTER 4 – RESULTS

Controls. Three different variables were used as controls in the study. The first control variable is gender. There is the possibility that gender differences could have explanatory value in this study. Gender has been shown to have an effect in both the way one negotiates and even the willingness to negotiate (Babcock & Laschever, 2003). Recent studies have shown that men are more willing to promote their own interests than women. Babcock and Laschever (2003) suggest that this difference could lead to significant differences in the outcomes that are pursued by men and women. In this study it could lead to men more aggressively pursuing the outcome of the hotel room. For this reason, gender was included as a control. The gender that was reported by the participants was nearly evenly split, with 80 participants indicating they were female and 70 participants indicating they were male.

Two other variables which were included as controls are related to the self efficacy of the participants. Bandura (1997) provides several ways in which individuals build self-efficacy. The first is through experience with the particular task. Experience, coupled with success, will build the self-efficacy of individuals in a task. Another way that individuals increase self-efficacy is through familiarity with the task. These two variables are obviously related and were assessed with two questions administered prior to the completion of the task. The first question assessed the familiarity that each participant had with purchasing hotel rooms over the internet. If individuals have more or less familiarity with making purchases over the internet they could be more or less efficacious. This variable was measured with a single item and a Likert-type scale from 1 to 5 that asked how often the participant had made a travel purchase (flight, hotel, rental

car) over the internet with 1 being “never” and 5 being “more than 3 times.” The mean was 3.34 with a standard deviation of 1.70. This mean equates to making purchases between two and three times. A similar single item question assessed the comfort that individuals felt toward purchasing items over the internet. This could have an effect on the efficacy that the participant will take into the transaction. This variable was also measured with a single item and a Likert-type scale from 1 to 5 that asked how comfortable the participant was making a travel purchase (flight, hotel, rental car) over the internet with 1 being “very uncomfortable” and 5 being “very comfortable.” The mean of this item was 3.65 with a standard deviation of 1.24. This mean equates to a feeling between neutral and comfortable. These two items give some indication of the self-efficacy of the participants. I controlled for self-efficacy with these two variables as an individual’s self-efficacy has been shown to impact both motivation (Quinones, 1995) and performance (Stajkovic & Luthans, 1998).

The final variable that was considered as a control was the first bid that was entered into the system. There is an accepted relationship between outcome favorability and perceptions of justice (Cohen-Charash & Spector, 2001; Colquitt et al., 2001). This relationship was shown to hold in a similar context in a study by Humphrey and colleagues (Humphrey et al., 2004). As all participants arrived at a negative outcome in this study, the amount of the first bid could have an impact on the dependent variables. For those individuals that put in a large first bid, the outcomes could be exacerbated as opposed to those individuals who entered a lower first bid. For that reason the first bid entered into the system was used as a control.

Independent Variables. The justice scales used in this dissertation have been previously validated (Colquitt et al., 2001). In this study the specific alpha levels for the particular scales were: Distributive justice $\alpha = .86$, 5 items; Procedural justice $\alpha = .72$, 6 items; Interpersonal justice $\alpha = .91$, 4 items; Informational justice $\alpha = .82$, 5 items.

The measure of procedural justice, if all 7 items of the Colquitt (2001) scale are used, does not make the typically accepted value of $\alpha = .70$. Item total statistics show that the alpha level increases to .72 if one item is dropped – item 6 which states that the individual had the opportunity to appeal the decision. Since there was really no opportunity to appeal the decision in the study, I felt the item was not germane to the scale and could be dropped with no negative repercussions. While this is a trade-off, the positive impact of a more valid scale outweighs the negative impact of dropping an item that seems to be indeterminate in this study.

The final test of reliability for the justice items was done for the collapsed scales of structural and social justice. The scale for structural justice ($\alpha = .81$) is the combination of the five item scale for distributive justice and the six item scale for procedural justice. The scale for social justice ($\alpha = .90$) is the remainder of the justice items that comprise the interpersonal and informational justice scales, totaling nine items.

The PANAS is also a widely accepted scale used in numerous studies since its conception in 1988 (Watson et al., 1988). In the study conducted here the PANAS had good reliability for both dimensions of the scale, negative affect $\alpha = .88$, and positive affect $\alpha = .92$. Each dimension of the PANAS contains ten items.

Finally, the scales developed for this study that are intended to measure the retaliatory or restorative intentions of participants were based on work in the

organizational deviance literature (Ambrose et al., 2002; Robinson & Bennett, 1995). Items developed are meant to examine deviance directed at an organization, or individual within an organization, by an outsider. In essence this is an application of organizational deviance by a customer, an organizational outsider. The scales look at two separate motivations, taken from the deviance literature (Ambrose et al., 2002), the first being retaliation and the second being restoration.

The scale designed to measure retaliatory intentions had an alpha level of .88, 7 items. The scale that was designed to measure the restorative intentions of the participants had an alpha level of .74 with 6 items. Both of the scales met an acceptable level of reliability and all of the items were retained.

Correlations. The correlations for the included variables are shown in Table 1 and the related means and standard deviations are shown in Table 2. The controls had several relationships that were revealed in the correlations. Gender was related to both measured positive affect before the task and retaliation intentions after the task such that males were more likely to have a positive affective state as well as the intention to retaliate. Not surprisingly, internet use to purchase travel in the past is significantly correlated with comfort using the internet to purchase hotel rooms. As both of these items are dimensions of an individual's efficacy in this particular situation it would be surprising if there was no correlation between the two. Previous internet use was also positively related to restoration intentions and negatively related to retaliatory behavior. Comfort using the internet for purchases is negatively correlated with distributive justice perceptions.

Continuing the examinations of the correlations, I find that the first bid is negatively correlated with measured positive affect and is positively correlated with the affective manipulation. This is a perplexing, but not unexplainable outcome. These correlations indicate to me that while the manipulation has some impact on the state affect, it is also possible that there is a significant hold over of trait affect that is driving the relationship. That is, while manipulated positive state had a positive correlation with bid – i.e. those that were manipulated to a positive mood had higher bids – the greater the positive mood, the lower the bid, as indicated by the second correlation.

The justice measures are all correlated, as I would expect. Procedural justice is also negatively correlated with the affective manipulation such that those in the negative affect condition perceived higher procedural justice than those in the positive affect condition. The measured perceptions of interpersonal justice and social justice are negatively correlated with retaliation intentions. The measure of structural justice is negatively correlated with the affective condition, that is, those that are in the negative affect condition perceive more structural justice.

The measures of positive affect and negative affect are negatively correlated ($-.25$, $p < .01$). The measured positive affect is positively correlated with the affective manipulation and the measured negative affect is negatively correlated with the affective manipulation. All of these correlations are as expected.

The intention to retaliate is correlated with the intention to restore. Intention to retaliate is positively correlated with the behavior to retaliate and the intention to restore is positively related to the behavior to restore, although this relationship is only marginally significant, but in the expected direction. The final correlation of interest is

the negative correlation between retaliation and restoration behaviors. It seems that participants were likely to pursue one or the other, but not both.

Manipulation checks. To check the manipulation of affective state within the experiment, I used ANOVA techniques (see Figure 3). I compared the means of the actual affective state as reported by the PANAS measure (Watson et al., 1988) within the manipulated condition. Those participants that were induced to have a Positive Affective (PA) state scored significantly higher in the measure of PA with a mean of 3.33 as compared to a mean of 3.07 for in the Negative Affect (NA) condition [$F(1,148)=5.79$, $p<.05$]. Similarly, those participants that were induced to have a Negative Affect state scored significantly higher in the measure of NA with a mean of 2.08 compared to 1.62 for those in the PA condition [$F(1,149)=15.89$, $p<.01$]. This data is presented in Figure 3.

I also checked the justice manipulations using ANOVA techniques. I compared the reported means in response to the justice measures (Colquitt, 2001) of those in the unjust conditions with the means of those in the just conditions to determine whether the manipulations had an effect on the perceptions that were reported. Those participants in the structurally just condition reported means scores of 2.49 and 2.53 on distributive and procedural justice, respectively – compared to 2.14 and 2.09 for those in the structurally unjust condition, [$F(1,149)=5.97$, $p<.05$] for distributive justice and [$F(1,149)=15.72$, $p<.01$] for procedural justice. These values indicate that the manipulation of structural justice was successful. The manipulation of social justice was also successful. Those participants in a socially just condition reported means of 3.50 and 3.07 for interpersonal and informational justice, respectively, while the participants who were exposed to the socially unjust condition reported means of 2.16 and 2.58 for interpersonal and

informational justice, respectively – [$F(1,149)=84.12, p<.01$] for interpersonal justice and [$F(1,149)=12.04, p<.01$] for informational justice.

Hypothesis tests. As an initial test, I ran a MANOVA of the entire model that is examined in this dissertation. This MANOVA demonstrated significant multivariate effects. Using Wilk's multivariate Lambda, I found that there were three significant main effects, one for each of the manipulations in the study which is consistent with the finding above. The main effects are as follows: affect condition [$\lambda=.84, F(10, 132)=2.42, p<.01$], social justice manipulation [$\lambda=.55, F(10, 132)=10.84, p<.01$], and structural justice manipulation [$\lambda=.85, F(10, 132)=2.41, p<.01$]. None of the interactive effects reached statistical significance. The significance of the main effects is indicative of the success of the manipulations. Table 3 presents the cell means for the variables of interest that were examined in the MANOVA.

Hypotheses 1 and 2 were tested using stepwise regression equations. In the first step I entered the control variables - gender, whether the participant had used the internet to purchase hotel rooms in the past, and the comfort level of the individual in using the internet to purchase hotel rooms and the first bid amount. In the second step I entered the affect manipulation for Model 1, or the actual measured levels of positive and negative affect for Model 2. The justice perceptions of the participants were then regressed on these variables. These regressions are presented in Tables 4, 5, and 6.

The regression equations in Table 4, Model 1 do not reach significance. The controls do not have any predictive value on the constructs of social and structural justice. The affective manipulation doesn't have a statistically significant effect on social justice, but it does have a moderately significant effect on structural justice perceptions.

That is, those that are in the positive affective condition are likely to have lower perceptions of structural justice than those that are in the negative affect condition. This relationship should be interpreted with great caution as it is not statistically significant and is in the opposite direction of the prediction.

However, as Table 4, Model 2 shows, the measured negative affective state is a significant predictor of social justice perceptions. However, the finding is opposite the prediction and counter intuitive and shows that more negative affect leads to greater perceptions of social justice.

Table 5 presents the breakdown within structural justice, again I present two models, one for the affective state manipulation and one for the measured positive or negative affect. Since there were no effects for structural justice, it is not surprising that the two components that make up structural justice are also generally without effect, other than an effect for comfort booking rooms over the internet. There were also two moderately significant effects, one in each model. There is a moderate effect for the affect manipulation on procedural justice, that is, those that are in the positive affect condition are likely to have lower perceptions of procedural justice. In Model 2, those with higher measured negative affect were more likely to perceive the procedures as more just as well. These effects are only moderately significant and should be interpreted with caution as the possibility of error is definitely higher when interpreting these results.

Table 6 breaks down the effects on social justice into the two components of informational and interpersonal justice. Once again Model 1 lacks significance, the affect condition does not impact perceptions of interpersonal or informational justice. And once again the counter-intuitive result is present in Model 2. Negative affect has an

effect on both perceptions of interpersonal and informational justice. Once again this effect is such that those with more negative affect are more likely to perceive the interaction and the information as just.

These regression equations are evidence that neither Hypothesis 1 nor Hypothesis 2 is supported.

Hypothesis 3 states that across participants, negative affective states will have a stronger effect on perceptions of justice than will positive affective states. The beta weights were compared using the following formula (Gujarati, 1995, pg. 255):

$$t = \frac{(\hat{\beta}_3 - \hat{\beta}_4) - (\beta_3 - \beta_4)}{se(\hat{\beta}_3 - \hat{\beta}_4)}$$

or, substituting the values for the standard error:

$$t = \frac{(\hat{\beta}_3 - \hat{\beta}_4)}{\sqrt{\text{var}(\hat{\beta}_3) + \text{var}(\hat{\beta}_4) - 2\text{cov}(\hat{\beta}_3, \hat{\beta}_4)}}$$

This formula compares the β weights from a single regression equation and from a single sample, such that if the t value reaches significance, the difference between the two β weights is statistically significantly different. The regression equation was used was a “pure” regression equation – an equation that regressed the justice perceptions on PA and NA with no other variables. The control variables are not included in this equation as they would absorb some of the variance in the two variables of interest. The standardized Beta weights are used as the measured are all on an equal 5-point Likert-type scale and are therefore equivalent. The absolute values of the Beta weights are used to compare the magnitude of the difference, rather than the distance between the Beta weights.

I applied the test to two of the four dimensions of justice; distributive justice and

interpersonal justice. There was no need to complete the comparison for procedural justice as the Beta weight for positive affect is greater than the Beta weight for negative affect. Thus the test is pointless, as simply looking at the Beta weights tells us that the effect of negative affect is not as great as the effect of positive affect. Similarly there is no reason to complete the test for informational justice as the Beta weight for negative affect is in the opposite of the predicted direction. The equations for the other two dimensions of justice follow.

Distributive justice:

$$1.76 = \frac{(.17 - .14)}{\sqrt{.011 + .012 - 2(.003)}}$$

Interpersonal justice:

$$.37 = \frac{(.08 - .07)}{\sqrt{.018 + .019 - 2(.005)}}$$

The Beta values and t statistics for each of these equations is listed in Table 7.

The equations for distributive and interpersonal justice did not reach significance, indicating that there was no difference in the impact of the sign of the affective state on the perceptions of either distributive or interpersonal justice. As indicated earlier, procedural justice and informational justice were not tested. Given the evidence presented above I can say that Hypothesis 3 is not supported.

Hypotheses 4 states that those participants that experience a structural injustice will pursue more restoration than retaliation. In a similar line of thinking, hypothesis 5 states that those that experience a social injustice will pursue more retaliation than restoration. I used a contingency table analysis to examine whether the two groups differed in the amount of restoration. Table 8 provides the count values for each of the

cells in the study design. The count values support hypothesis four, as those participants that experienced a structural injustice did pursue more restoration than retaliation. Of the participants that experienced a structural injustice, fourteen pursued a behavioral restoration, three chose a retaliatory behavior, and four pursued both behaviors. Of the participants that experienced a social injustice, twenty-six pursued restorative behavior, 1 chose to retaliate, and 3 participants chose both behaviors. This was not significantly different from the expected values for this contingency table [$\chi^2(df=6)=6.21, ns$].

However, I also completed a focused chi-squared analysis that examined the differences between those that experience only structural injustice or only social injustice and whether they pursued only restoration or only retaliation to determine if there were significant differences in those variables. This chi-squared analysis approached significance [$\chi^2(df=1)=2.45, p=.12$]. The low number of individuals that pursued a retaliatory behavior alone is contributing to the lack of significance in this chi-squared number. For that reason I added the individuals who pursued both behaviors to the totals for each column of retaliation behavior and restoration behavior. I then completed a second focused chi-square analysis. This analysis yielded a similar result [$\chi^2(df=1)=2.33, p=.12$]. Therefore, using the contingency table analysis and the cell count values I find very limited evidence to support hypothesis 4 and no evidence to support hypothesis 5.

Hypothesis 6 was tested in a similar method to the two previous hypotheses. I used a contingency table analysis (see Table 9) and the Chi-squared statistic to determine whether the behavioral reactions to the interaction of injustice and affective state condition are statistically significant. Hypothesis 6 states that affective state and injustice will interact such that, following any injustice, those in the positive affective state

condition will engage in a) more restoration and b) less retaliation than those in the negative affective state condition. None of the Chi-squared values were significant for hypothesis six. This indicates that the expected values for the contingency table were not statistically significantly different than the actual values. Focused Chi-squared tests were not completed on this data due to the low numbers, particularly in the retaliation cells. Contingency table analysis requires that the majority of the cells contain a number greater than 5 for an accurate analysis. Since many of the focused Chi-squared analyses that could be done would include one or two cells with a value below two the extended analyses would be inconclusive.

Post Hoc Analyses

I examined the behavioral intentions that were collected after the experiment concluded. I used regression analysis to examine the relationship between the intention to retaliate or restore and the affective conditions and the justice conditions within the experiment, see Table 10. In the first step I entered gender, previous use of the internet to book hotels, and comfort level using the internet to book hotels and the first bid for controls. The second step included affective condition and structural and social justice conditions, while the final step included the interaction term for the appropriate justice condition with affect condition. Consistent with the earlier regressions I also completed a second model which included the measured affect rather than the affect condition. In step three the appropriate interaction terms - the justice condition by positive and negative affect – are reported. Looking first to model 1 and the intent to retaliate, there was a significant effect for gender, males were more likely to have retaliatory intentions than females. In the second step there was a significant effect for the social justice

condition. Those that were in the condition that violated social justice were more likely to have retaliatory intentions. The overall equation was significant [$F(7,141) = 2.61$, $p < .05$].

Model 2 paints a very similar picture for retaliation intentions. There is no change in the information reported in step 1 of the regression equation as no changes were made to that step. Males are more likely to have retaliation intentions. Similarly, the social justice condition has the same impact in model 2 as it did in model 1, that is those participants in the condition that violated social justice were significantly more likely to have retaliation intentions than those that were in the condition that did not violate social justice. Again, the overall equation was significant [$F(9,139) = 1.94$, $p < .05$].

When examining the intent to restore I entered the same variables with the same order, again specifying two models to examine the affect condition in the first and the measured affect in the second. There was a moderately significant effect for prior use of the internet to book hotels, with those that had experience buying hotel rooms on the internet more likely to have intentions to participate in restorative behavior. While many of the relationships were in the predicted direction, none reached statistical significance. The entire equation was not significant for intention to restore [$F(7,141) = 1.12$, ns]. Model 2 followed a similar pattern. Again, the entire equation was not significant [$F(9,139) = 1.39$, ns].

CHAPTER 5 - DISCUSSION

General Discussion. What impact do affective states have on perceptions of justice? Byrne and her colleagues (2003) argue that justice may be an amplifier or an attenuator in regard to emotions and affect. That is if one enters a situation that may provide fairness information and is in a negative affective state, the perception of unfairness or fairness can either focus (Baron, 1993) or deflect that affective state. If I enter an online purchasing situation such as the situation described in this study and I am angry, if I perceive the situation as fair the anger could be deflected and I could leave the transaction less angry. If on the other hand if I perceive the situation as unfair, that may serve to increase and focus my anger.

I did not examine discrete emotions in this study, but rather focused on the general affective state. Unfortunately the prediction of hypothesis one, that negative affective state would lead to lower perceptions of distributive and procedural justice was not supported. Those that are in a negative mood do not perceive the same situation as less fair distributively and procedurally, than those who are in a positive mood.

Comfort with purchasing products with the internet was a predictor of lower distributive justice. This is likely due to the fact that those that are savvy internet users felt that the bids that were made were significant enough for them to be accepted. Individuals that are comfortable purchasing things over the internet are likely to be more knowledgeable about pricing and how to enter a competitive bid that has a higher likelihood of being accepted. Since none of the bids were accepted regardless of how high they were that could explain the effect on distributive justice.

The fact that no one in the study received a positive outcome is one aspect of this study that may have had a greater impact on the perceptions of structural justice, particularly the perceptions of distributive justice, than I initially thought. Everyone in the study was rejected when trying to book a room, regardless of bid amount and condition. While distributive justice could be interpreted as being met even if the outcome that was desired was not received, it rarely happens. Rather, if an individual doesn't get the outcome that s/he desires, the situation is interpreted as unfair. The reason that I chose to reject everyone is that a consistent outcome in justice research is that those that receive a positive outcome perceive the situation as fair. In this study I thought that this would merely add noise. As it would not be predictive, there should be no reason to include a positive outcome in the study. However, it appears that this negative outcome for everyone was very important in the justice equation and even became more important than the procedural injustice, which was manipulated. It may be that distributive justice should have also been manipulated.

Hypothesis two asked whether there was a difference between the effects of positive affect and negative affect on interpersonal and informational justice. There was no difference, that is, the equation did not reach statistical significance. The affective condition that the participants were in had no impact on the judgments they made concerning interpersonal or informational justice. Both groups, those in the negative affect condition and those in the positive affect condition, perceived low levels of interpersonal and informational justice. Interesting, however, is that the measured negative affect did impact perceptions of both interpersonal and informational justice.

This impact was opposite the hypothesized direction. More measured negative affect lead to greater perceptions of interpersonal and informational justice.

This significant finding reveals that those with higher negative affect are more likely to perceive the interpersonal interaction and the information provided as just. This is a surprising finding. One would expect that if I enter an interaction in a bad mood I will judge the interaction as less fair, but the data show the opposite.

One explanation that I have for this is that the individual's expectations are very different based on affective state. There has been some research that has examined the interactive effects of the strength of the interpersonal interaction and the affective state. Those individuals that were in a negative affective state were only impacted by strong arguments while those that were in a positive affective state were impacted equally by weak and strong arguments (Bagozzi, 1993; Bless & Fiedler, 1995). In a similar fashion, those individuals in this study that were in a negative affective state may not have been impacted by justice manipulations, as one could argue that the manipulations are probably weak arguments. However, those that were in a positive affective state were more likely to be impacted by the justice manipulations as the manipulations would not need to be nearly as strong to impact the judgment about the fairness for these individuals.

Individuals that are in a negative affective state are likely to expect less out of the interaction – particularly the interpersonal or social aspects of the interaction - and will therefore be more likely to judge the interaction as fair. An individual develops expectations from various sources, direct experience, indirect experience, and other beliefs (Bell, Ryan, & Wiechmann, 2004). If a participant's expectations are low for the

fairness of the interaction, it will be much easier to hit that threshold of fairness and therefore get a higher rating. This expectation can be shaped by the affective state, particularly if that state is manipulated. Participants can anticipate that they will not be treated fairly and that will have an impact on the behaviors and their judgments (Shapiro & Kirkman, 2001). If a person feels that they may be treated unfairly and they are treated in a neutral way, they will judge that as higher on a justice scale than those that enter the transaction with an expectation of fair treatment.

Therefore, those individuals that entered the experiment with the expectation that they would not be treated fairly – which could have been manifested in the negative affective state – were pleasantly surprised and did not receive a terribly strong affront to fairness. However those that entered the experiment in a positive affective state more easily had their expectations, which were likely to be more demanding in terms of fairness, violated and therefore reported lower perceptions of fairness.

Hypothesis three was not supported, negative affect was not a more important predictor of justice perceptions than was positive affect. This prediction did not hold true for any of the dimensions of justice. This is not in line with theory that negative emotions have a stronger effect than do positive emotions (Allred, 1999; Fredrickson, 2003; Kamins et al., 1991) on cognitions. This also contradicts previous theory that a person in a negative mood will feel more strongly about the injustice than will the person in the positive mood (Byrne et al., 2003). Much of this theory draws on evolutionary concepts that show that negative emotions exist to effectively move humans out of harms way, and therefore requires an effort (Fredrickson, 2003). Studies in this area look at specific emotions of disgust, fear, and anger. These emotions lead to specific responses

that protect from ingesting bad food, preparing the body to flee, or preparing the body to fight for example. If the participant is in a positive mood they are less likely to push back and escalate the situation (Barry, Fulmer, & Van Kleef, 2004; Carnevale & Isen, 1986). Positive affective state leads to a more creative and open mindset (Fredrickson, 2003). This creative and open mindset could lead the participants to question the outcome, procedures, and interaction and think of possible other outcome, procedures, and interaction or to examine the relationship in greater depth. In this study the positive affect did not have a significantly different effect than the negative affect.

Hypothesis four was not supported, but data indicate that the hypothesized relationship may exist. Hypothesis five was not supported when analyzed with the contingency table. The outcome of retaliation did not reach significance when the specific relationships were examined. That is, individuals may be more likely to have the intent to restore after a structural injustice but are not more likely to have the intent to retaliate after a social injustice. The intent to retaliate or the intent to restore are important aspects of this study. As I will discuss further in the *Limitations* section, it may have been problematic to have the individual who created the study and intended to analyze the results in the room while the participants completed the instrument. In addition to this, some of the participants were also in classes that were being taught by the experimenter. This may have led to impression management tactics on the part of the participants. Individuals may not have pursued behaviors that they normally would have due to my presence at the experiment. However, the same individuals may have felt more comfortable admitting to the intention to do the behavior.

Hypothesis six was not supported. There was no interaction between affective state and injustice that was evident in this study. It has been shown that mood congruence is a general effect and that individuals color their subsequent cognitions based on the prevailing mood they take into a situation (Mayer et al., 1992). Affective states have been shown to have an effect on various cognitive processes including attention, learning, and memory (Muramatsu & Hanoch, 2005). The mood congruence view would say that in the above experiment, affective state would elicit similar memories and therefore color the entire transaction. In this experiment it is possible that previous experience with the type of system contained here had an overpowering effect on the individual's perceptions of fairness. For structural justice, comfort using the internet was an important predictor, with those that were less comfortable seeing both the outcome and the process as less fair. The converse is true then also, those that are more comfortable see both the process and the outcome as more fair – based on the previous experience that they have with similar online bidding systems. This previous experience allows them to shortcut the cognitive process. There is no reason to include the affective state into the heuristic (Muramatsu & Hanoch, 2005), as they already have a strong heuristic that the process is fair. The affective state is not attributed to the issue, but rather to the meaning of the issue (Davidson & Greenhalgh, 1999) – those that are comfortable with the process of making a purchase over the internet view the process as more fair. Mood congruence operates in a way such that memory is recalled that is congruent with the mood and that is what will impact the cognitive process (Blaney, 1986). In this experiment the affective state was primed by the manipulation. According to the manipulation check, the proper affective state was achieved, although it was not

strong. After the manipulation of the affective state, the participants were introduced to the online buying simulation. While there were questions about the amount of experience and the comfort level of the participants with online buying experiences, there were no questions about the previous affective experiences that participants had with online purchasing. The online system may have inadvertently primed a second affective state. As most of the participants reported that they had used an online system to purchase a hotel room (97 of 150 reporting that they had done so twice or more times), and most also reported a high comfort level with online purchasing (96 of 150 reporting they were either comfortable or very comfortable purchasing goods or services over the Internet), this could be an alternative explanation for the lack of findings in this experiment.

I examined the bids for the rooms further to see if they were different across affective states. An ANOVA showed that the first bid – a bid that was made by all participants, regardless of condition – was different for members of the two different affective conditions. Those that were in the negative affective condition had a mean bid of \$125.48, while those in the positive affective condition had a mean bid of \$141.07. This difference was statistically significant [$F(1,149)=4.66, p<.05$]. Individuals that were in a better mood were willing to pay more for a hotel room. When this result is coupled with the previous theory and empirical support that negative emotions lead to lower perceptions of distributive and procedural justice (Byrne et al., 2003) it becomes quite important to the situation. Those consumers that come to the transaction with a negative affective state will be more likely to provide a lower bid and will be more likely to perceive the transaction as unfair. This is a pattern that may be difficult to overcome for organizations that are participating in these types of ultimatum or even negotiated

transactions. Managing the affective state of the party coming in to the transaction would seem to be quite important if that affective state can have an impact on the economic outcome and the perceptions of fairness of the outcome and process.

Limitations of the Current Study. The first limitation of this study that must be acknowledged is the fact that this is a lab study that was completed by undergraduate volunteer subjects. While they were given instructions that they should take the activity as seriously as they would if they were actually purchasing a hotel room for a trip with their significant other, they did in fact know that they were participating in a lab study. And while this study is important to the researcher, it would be a stretch to assume that it was important to many of the participants. A second issue with the nature of this study was that the participants in the study were junior or senior level students. Students do not have the life experience that individuals in organizations have and could therefore have reacted differently to the manipulations than would the working individuals for whom the theory was created. Finally, I asked participants in this study to react and make judgments and pursue behaviors based on a simulated transaction. So after losing a bid for a hotel room for 125 dollars that were not real, individuals pursued more restoration, regardless of any other variable. If however there were real dollars involved or real hotel rooms, the participants could have had different reactions. Had they thought that the social justice manipulation came from an actual individual at a real company they would likely have a different reaction. Rather than the fairly tame reaction they had to what they assuredly attributed to the researcher that was standing in front of them during the task. It was much harder for the participants in this study to make judgments. In essence it was harder for them to care.

It is possible that individuals who participated in the study were concerned about the image that they were giving in the study, and even though they were guaranteed anonymity, acted in a way that was meant to manage impressions. That is, these students did not want to give the impression that they were complaining and therefore, likely did not retaliate in the experiment when given the same opportunity in an actual experience wouldn't hesitate to retaliate against the organization. This belief is furthered by the fact that even those participants that were insulted pursued restorative behavior, but indicated on the final questionnaire that they did have retaliatory intentions. One possible reason for this is that the participants knew that the response that was written would be read by someone that could feasibly attach their name to the words that were written. So while the participants had an opportunity to "flame" the individuals who were responsible for the website, they did not have the anonymity that most flammers enjoy. Not only were the participants not anonymous, but the individuals that represented the travel website were for all intents and purposes not anonymous. I introduced the study in every case and was present during the entire time the participants completed the instrument. So while individuals that flame an unknown entity or an unknown person that is connected with a real internet site with which they are displeased, in this case the creator and representative of the website was in the room. There is a strong cultural norm that would discourage retaliation in this instance. Everyone has been told by his/her mother at one time or another, "If you don't have anything nice to say, don't say anything at all." It may be that a similar norm was in operation during this experiment.

Another limitation in this study is the decision not to distinguish between the various forms of positive or negative emotions. While this is not unreasonable, given that

this is an initial experiment into a very broad phenomenon, future work should certainly consider the possibility that specific emotions will have very different influences on the cognitive and behavioral outcomes examined here (DeSteno, Petty, Rucker, Wegener, & Braverman, 2004). Initial research in this area would support the notion that different specific emotions will have very different influences on perceptions and behaviors (Byrne et al., 2003).

The measurement of justice, while validated in the literature may be masking the effect of emotion. When participants read the justice items it primes them to think if the cognitive decision about whether this is a fair or unfair outcome/process, etc. This is a limitation of the construct of organizational justice as it is defined in the literature. The best way to remove this limitation would be to develop an expanded view of the construct of justice. Justice should be expanded to include an affective side, as well as the existing cognitive side.

Another line of work that could have explanatory power in this experiment looks at the moderating effect of personality on the effect of emotions (Forgas & Ciarrochi, 2001). This work says that affect is infused into the situation and that this infusion makes individuals view the situation in a mood congruent manner similar to the work of Blaney (1986). Forgas however shows that an individual difference measure – Openness to Feelings – is a moderator in the operation of mood congruence. Forgas and Ciarrochi (2001) found that individuals who are high in Openness to Feelings (OF), those that are more likely to give credence to the affective information that is present in the situation, are more likely to exhibit mood congruent information while those that are low in Openness to Feelings are actually likely to show opposite effects. Applying that logic to

this situation, those that are high in OF are likely to exhibit mood congruent feelings – if the positive affective state was primed, they will perceive higher levels of justice – if the negative affective state was primed, they will perceive lower levels of justice. However, those that are low in OF will react the opposite way – if the positive affective state were primed, they will view the transaction as less fair – if the negative affective state were primed they will view the transaction as more fair. The researchers propose this effect is a result of those that are not open to their feelings act in a way that is contrary to mood congruence because they do not trust their feelings and therefore act against them (Forgas & Ciarrochi, 2001). This effect could explain the lack of consistent mood congruence in this study. Positive moods elicited feelings of security and a tendency to imitate the behavior of others – if others cooperate, the subject in the positive mood would reciprocate. Those that were in a negative mood had a lower feeling of security and would therefore increase cooperative effort in the face of lower effort by other participants. This increased cooperation was to make up for the decreased effort of others. Conversely, if the others were cooperative, the subject in the negative mood was less likely to cooperate and was more willing to free ride on the efforts of others.

Contribution. This research is important to both the study of affect and the study of justice. Particularly this research suggests that justice perceptions are not impacted by affective states. While affect has been shown to be an important factor in many decisions (DeSteno et al., 2004; Forgas & Ciarrochi, 2001; Kahneman et al., 2004; Kamins et al., 1991), it appears that they have a very complex influence on justice judgments.

There has been an absence of emotion as a determining factor in the justice literature that I attempt to address in this paper. Previous views of justice have been

entirely cognitive (Adams, 1965; Thibaut & Walker, 1975; Tyler & Blader, 2002), and the measurement of the construct has followed suit and also focused on the cognitive aspect of fairness judgments (Colquitt, 2001). While emotion is immediate and automatic, it does not necessarily impact the perception of justice – as we know and measure it today. As I propose in the section on Future Research, it may be that scholars need to add to the dimensionality of organizational justice by including those affective components to the justice equation.

Contributions to practice. What does this study tell those that are involved in online commerce? First, as the data on the first bids indicate, those that are in a positive mood are more willing to make a higher bid. Data show that those in a positive mood made a bid that was an average of \$15.49 higher than those in a negative mood. If an online retailer or other online sales agent could manipulate the mood of the clients, a positive mood would facilitate higher profits and would be worth the online organization manipulating the mood of potential clients. There are a number of ways that these online organizations could impact the affective state of their clients. One of these ways is in use at a number of websites already. Many of these sites greet patrons by name and provide personalized preferences to these clients. This personalization could have a positive effect on the affective state of the clients. The organizations could also give gifts or use other methods of ingratiation to impact their bottom line. If the organization announces that it gives a \$5 gift to every person upon acceptance of their bid and that makes people happy and they increase their bid by \$15, the organization will directly impact their bottom line. Each transaction could improve for the organization.

Future Directions for Research. Over the years the justice literature has become more specialized and fragmented. Scholars interested in the organizational justice question have looked at very specific questions and outcomes – such as the relationship between justice and sabotage (Ambrose et al., 2002), the relationship between justice and theft (Greenberg, 1993), the relationship between justice and selection procedures (Gilliland, 1993, , 1994) – just to name a few. While this has been an interesting and prolific area for many individuals, as theorists we need to continually add to the knowledge base. The intent of this paper is to link organizational justice and affective states. Distinctions have been shown in three factor models of justice (Bies & Moag, 1986), as well as between the factors of distributive, procedural, interpersonal, and informational justice (Colquitt, 2001). A better understanding of the operation of affect in the justice process may be important and helpful to prediction of behavior in organizations. Weiss and Cropanzano (1996) remind us that emotion in the workplace impacts outcomes that are important to the organization, such as satisfaction and production. Brief and Weiss (2002), argue that emotions are important aspects that drive behavior. Understanding the operation of emotions in the realm of justice would be a positive addition to theory and research on behavior and motivation for action in organizations.

Cognitive and Affective Justice. While in this particular study I did not find that emotion impacted perceptions of justice I would still argue that there are emotional impacts on justice perceptions. It may be that much like the operation of trust (McAllister, 1995), justice perceptions come in both cognitive and affective flavors. That is, we make distinct cognitive justice judgments and have distinct affective justice

reactions. Cognitive justice is the justice that is at work when an individual looks at the typical justice ratio of inputs compared to outcomes and compares that to a referent other. Cognitive justice is what is measured by the justice measures that have been accepted in the literature (Colquitt, 2001). This would also have an impact on the study presented here. The measures are cognitive in nature rather than affective. Affective justice would be the feeling that something is fair. Affective justice looks past the ratios and responds that something is fair because it makes us happy, not because the input/output ratio equals that of the referent group. Affective justice could explain why Adams found that individuals who were over paid did not find that to be unjust. It has been explained in the past as a cognitive adjustment, but it could be that we see that as fair, because it feels good. We know it's not right, but it feels good and that makes it affectively just. For example, cognitive justice made many people think that the Rodney King verdict was plausible, affective justice made people riot. Affective justice can be skewed much more easily than can the mathematical basis of cognitive justice. Affective justice should be very susceptible to input from emotional stimuli, whereas cognitive justice – as shown here – should be more impervious to this influence.

Individuals in this particular study appear to be very influenced by the mathematical calculation of fairness. This may be due to the importance of that economic outlook, or it may be that the items that we currently use to determine a perception of fairness focus us on the economic impact.

Conclusions. The interplay of affect and justice judgments appears to be more complex than what was proposed in this paper. The two are not entirely independent as evidenced by the effects for actual affective state – in the absence of effects for affective

manipulation. There is some influence on the judgment that one makes about the fairness of a situation that comes from actual affective state. It may be that naturally occurring affective state, or underlying mood, is a more important driver of the justice judgment. It may be that naturally occurring emotions are more important drivers of the justice judgment. It may be that trait based affect is most important to perceptions of justice. More examination of this problem is warranted.

A final conclusion is that the justice construct may be more complex than what is accepted in the literature. It may be that there are more dimensions than we currently consider. The paradigm of the four factors of justice is a fairly recently accepted definition. Distributive and procedural justice are fairly cognitive dimensions. These dimensions were not affected by the positive or the negative affective states that were aroused in this study. However, one could argue that the dimensions of interpersonal and informational justice are much more affectively driven. The dimensions of interpersonal and informational justice were also the only dimensions in this study that were significantly impacted by affective state, although in the opposite direction of the prediction.

This evidence when taken together points to the possible existence of an affectively driven form of justice. Future research should examine this possibility.

APPENDIX

TABLE 1

Correlations

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 Gender																
2 Internet use	-.10															
3 Internet comfort	.08	.33**														
4 Bid 1	.03	.05	-.03													
5 DJ	-.13	.02	-.20*	-.02												
6 PJ	-.06	.09	-.05	.02	.45**											
7 IntJ	-.10	.02	-.02	-.01	.27**	.64**										
8 InfJ	-.04	.13	.10	-.09	.29**	.57**	.65**									
9 StrucJ	-.11	.05	-.14*	-.01	.85**	.86**	.53**	.50**								
10 SocJ	-.08	.08	.05	-.06	.31**	.67**	.91**	.91**	.57**							
11 PA	.17*	.04	.03	-.20*	-.10	-.12	-.09	-.04	-.13*	-.07						
12 NA	-.09	.01	.05	-.01	-.13	.09	.12	.10	-.02	.12	-.25**					
13 Affect	.04	-.06	-.03	.17*	-.09	-.19*	-.09	-.08	-.17*	-.09	.19*	-.31**				
14 Retaliation	.19*	.07	.01	.07	-.15*	-.13	-.23**	-.09	-.16*	-.18*	.05	-.02	.11			
15 Restoration	-.03	.20*	.15*	.08	-.01	.03	-.02	.09	.02	.04	.00	.10	-.08	.60**		
16 Ret Behav	-.05	-.23**	-.14*	.01	-.04	-.06	-.04	-.05	-.06	-.05	.01	.03	.08	.24**	.06	
17 Res Behav	-.01	-.03	.15*	-.13	-.05	-.01	-.05	.03	-.05	-.01	.12	.01	-.06	.05	.20*	-.22**

† p < .10, * p < .05, ** p < .01, n=150

Notes:

1. Gender: 0=female, 1=male
2. Internet use refers to the frequency with which the participant has used the internet to book hotel rooms in the past
3. Internet comfort refers to the level of comfort the participant has in booking hotel rooms over the internet
4. Bid 1 is the first bid, entered by all participants, for a hotel room
5. DJ is measured distributive justice
6. PJ is measured procedural justice
7. IntJ is measured interpersonal justice
8. InfJ is measured informational justice
9. StrucJ is the combined measure of DJ & PJ
10. SocJ is the combined measure of IntJ & InfJ
11. PA is positive affect measured with the PANAS
12. NA is negative affect measured with the PANAS
13. Affect is a condition 1=negative, 2=positive
14. Retaliation is the measured retaliatory intentions
15. Restoration is the measured restorative intentions
16. Ret Behav is Retaliation Behavior 0=no retaliation, 1=yes retaliation
17. Res Behav is Restoration Behavior 0=no restoration, 1=yes restoration

TABLE 2*Means and Standard Deviations*

	Mean	Std. Deviation	N
Gender	.47	.501	150
Internet Use	3.34	1.698	150
Internet Comfort	3.65	1.242	150
Bid 1	132.81	44.820	150
Distributive Justice	2.2997	.88292	150
Procedural Justice	2.2780	.76069	150
Interpersonal Justice	2.7235	1.10119	150
Informational Justice	2.7917	.88420	150
Structural Justice	2.2889	.69528	150
Social Justice	2.7624	.88980	150
PA	3.1944	.67705	150
NA	1.8642	.73425	150
Affect Condition	1.4702	.50077	150
Retaliation Intentions	2.0814	.95040	150
Restoration Intentions	2.7075	.86421	150
Retaliation Behavior	.2185	.41463	150
Restoration Behavior	.6755	.46975	150

Cell means for the variables in the MANOVA

Notes:

- 77

TABLE 4

*The Effect of Affect on Perceptions of Social and Structural Justice**MODEL 1*

Hierarchical Step	Independent Variable	Social Justice		Structural Justice	
		β	ΔR^2	β	ΔR^2
1	Gender	.00	.09†	-.05	.06
	Internet Use	.17		-.14	
	Internet Comfort	.17		-.18	
	Bid 1	-.09		.05	
2	Affect	.03	.00	-.19†	.03†
Full Model Statistics		$F(5,80) = 1.68$ Total $R^2 = .10$		$F(5,76) = 1.58$ Total $R^2 = .10$	

Note: $n = 85$ for social justice. $n = 81$ for structural justice. The β reported is the standardized coefficient.

† $p < .10$, * $p < .05$, ** $p < .01$

MODEL 2

Hierarchical Step	Independent Variable	Social Justice		Structural Justice	
		β	ΔR^2	β	ΔR^2
1	Gender	.00	.09†	-.06	.06
	Internet Use	.17		-.13	
	Internet Comfort	.17		-.18	
	Bid 1	-.09		.04	
2	Positive Affect	.14	.09*	.15	.02
	Negative Affect	.30**		.08	
Full Model Statistics		$F(6,78) = 2.97^*$ Total $R^2 = .19$		$F(6,75) = 1.10$ Total $R^2 = .08$	

Note: $n = 84$ for social justice. $n = 81$ for structural justice. The β reported is the standardized coefficient.

† $p < .10$, * $p < .05$, ** $p < .01$

TABLE 5

*The Effect of Affect on Perceptions of Distributive and Procedural Justice**MODEL 1*

Hierarchic al Step	Independent Variable	Distributive Justice		Procedural Justice	
		β	ΔR^2	β	ΔR^2
1	Gender	-.08	.07	-.02	.04
	Internet Use	-.07		-.15	
	Internet Comfort	-.24*		-.06	
	Bid 1	.01		.06	
2	Affect	-.13	.02	-.19†	.03†
Full Model		$F(5,76) = 1.48$		$F(5,76) = 1.06$	
Statistics		Total $R^2 = .09$		Total $R^2 = .07$	

Note: n = 82. The β reported is the standardized coefficient.

† $p < .10$, * $p < .05$, ** $p < .01$

MODEL 2

Hierarchic al Step	Independent Variable	Distributive Justice		Procedural Justice	
		β	ΔR^2	β	ΔR^2
1	Gender	-.08	.07	-.02	.03
	Internet Use	-.07		-.15	
	Internet Comfort	-.24*		-.06	
	Bid 1	.01		.06	
2	Positive Affect	.11	.02	.14	.05
	Negative Affect	-.06		.20†	
Full Model		$F(6,75) = 1.23$		$F(6,75) = 1.03$	
Statistics		Total $R^2 = .09$		Total $R^2 = .08$	

Note: n = 82. The β reported is the standardized coefficient.

† $p < .10$, * $p < .05$, ** $p < .01$

TABLE 6

*The Effect of Affect on Perceptions of Interpersonal and Informational Justice**MODEL 1*

Hierarchical Step	Independent Variable	Interpersonal Justice		Informational Justice	
		β	ΔR^2	β	ΔR^2
1	Gender	-.05	.06	.00	.10†
	Internet Use	-.14		.17	
	Internet Comfort	-.18		.16	
	Bid 1	.05		-.12	
2	Affect	.14	.02	-.01	.00
Full Model Statistics		$F(5,80) = .95$ Total $R^2 = .06$		$F(5,80) = 1.80$ Total $R^2 = .10$	

Note: $n = 85$. The β reported is the standardized coefficient.

† $p < .10$, * $p < .05$, ** $p < .01$

MODEL 2

Hierarchical Step	Independent Variable	Interpersonal Justice		Informational Justice	
		β	ΔR^2	β	ΔR^2
1	Gender	-.05	.06	.00	.10†
	Internet Use	-.14		.17	
	Internet Comfort	-.18		.16	
	Bid 1	.05		-.12	
2	Positive Affect	.16	.11*	.09	.05†
	Negative Affect	.33**		.23*	
Full Model Statistics		$F(6,78) = 2.58^*$ Total $R^2 = .17$		$F(6,78) = 2.36^*$ Total $R^2 = .15$	

Note: $n = 84$. The β reported is the standardized coefficient.

† $p < .10$, * $p < .05$, ** $p < .01$

TABLE 7

Beta weight comparison

	Positive affect β	Negative affect β	t statistic
Distributive justice	-.14	-.17	1.76
Procedural justice	-.11	.07	n/a
Interpersonal justice	-.07	.08	.37
Informational justice	-.02	.08	3.33

Note: The β reported is the standardized coefficient.

TABLE 8

Cell count for retaliation and restoration behavior

	Restoration Behavior	Retaliation Behavior	Both Behaviors	Neither behavior
No injustice	19	4	3	7
Social injustice only	26	1	3	4
Structural injustice only	14	3	4	7
Both types of injustice	27	9	6	13
Totals (n=150)	86	17	16	31

TABLE 9

Cell count for retaliation and restoration behavior by affective condition

		No Injustice	Social Injustice	Structural Injustice	Both
No Behavior	Negative Affect	3	1	6	6
	Positive Affect	4	4	4	4
Restorative Behavior	Negative Affect	13	16	6	14
	Positive Affect	6	10	8	13
Retaliatory Behavior	Negative Affect	3	0	1	4
	Positive Affect	1	1	2	5
Both Behaviors	Negative Affect	1	2	3	1
	Positive Affect	2	1	1	5

TABLE 10

*The Effect of Affect and Justice Conditions on Intention to Retaliate or Restore**MODEL 1*

Hierarchical Step	Independent Variable	Retaliation Intentions		Restoration Intentions	
		β	ΔR^2	β	ΔR^2
1	Gender	.20*	.05	-.02	.05
	Internet Use	.10		.17†	
	Internet Comfort	-.04		.10	
	Bid 1	.06		.07	
2	Affect	.08	.07*	-.08	.01
	Social Justice Condition	.25*		-	
	Structural Justice Condition	-		.03	
3	Affect x Social	.17	.00	-	.01
	Affect x Structural	-		-.45	
Full Model		$F(7,141) = 2.61^*$		$F(7,141) = 1.12$	
Statistics		Total $R^2 = .12$		Total $R^2 = .07$	

Note: $n = 148$. The β reported is the standardized coefficient.

† $p < .10$, * $p < .05$, ** $p < .01$

MODEL 2

Hierarchical Step	Independent Variable	Retaliation Intentions		Restoration Intentions	
		β	ΔR^2	β	ΔR^2
1	Gender	.20*	.05	-.02	.05
	Internet Use	.10		.17†	
	Internet Comfort	-.04		.10	
	Bid 1	.06		.07	
2	Measured Positive Affect	-.02	.06*	.03	.01
	Measured Negative Affect	.01		.11	
	Social Justice Condition	.26*		-	
	Structural Justice Condition	-		.02	
3	PA X Social Justice	-.28	.00	-	.02
	PA X Structural Justice	-		-.50	
	NA X Social Justice	.32		-	
	NA X Structural Justice	-		.85	
Full Model Statistics		$F(9,139) = 1.94^*$ Total $R^2 = .11$		$F(9,139) = 1.39$ Total $R^2 = .08$	

Note: $n = 148$. The β reported is the standardized coefficient.

† $p < .10$, * $p < .05$, ** $p < .01$

Web page depicting the bidding screen



FIGURE 2

Web page depicting the structural justice manipulation



FIGURE 3

Graphical Display of Affect Manipulation Check Results

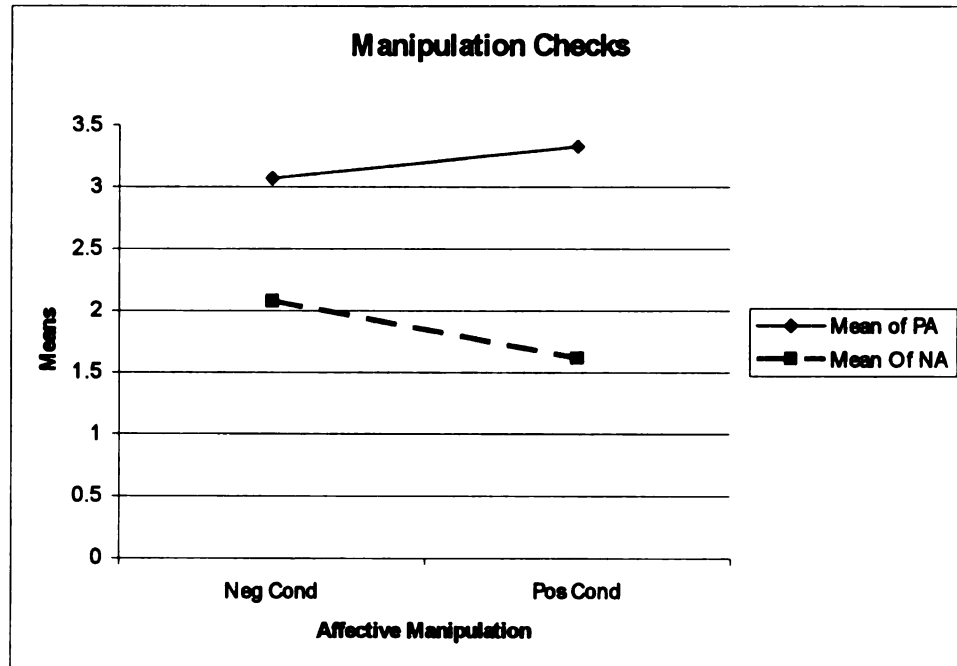


FIGURE 4

Web page for the retaliation versus restoration options

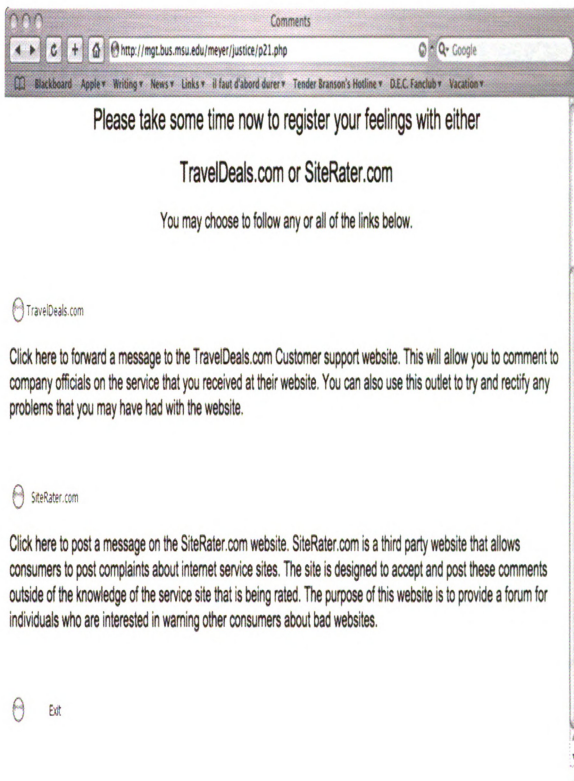


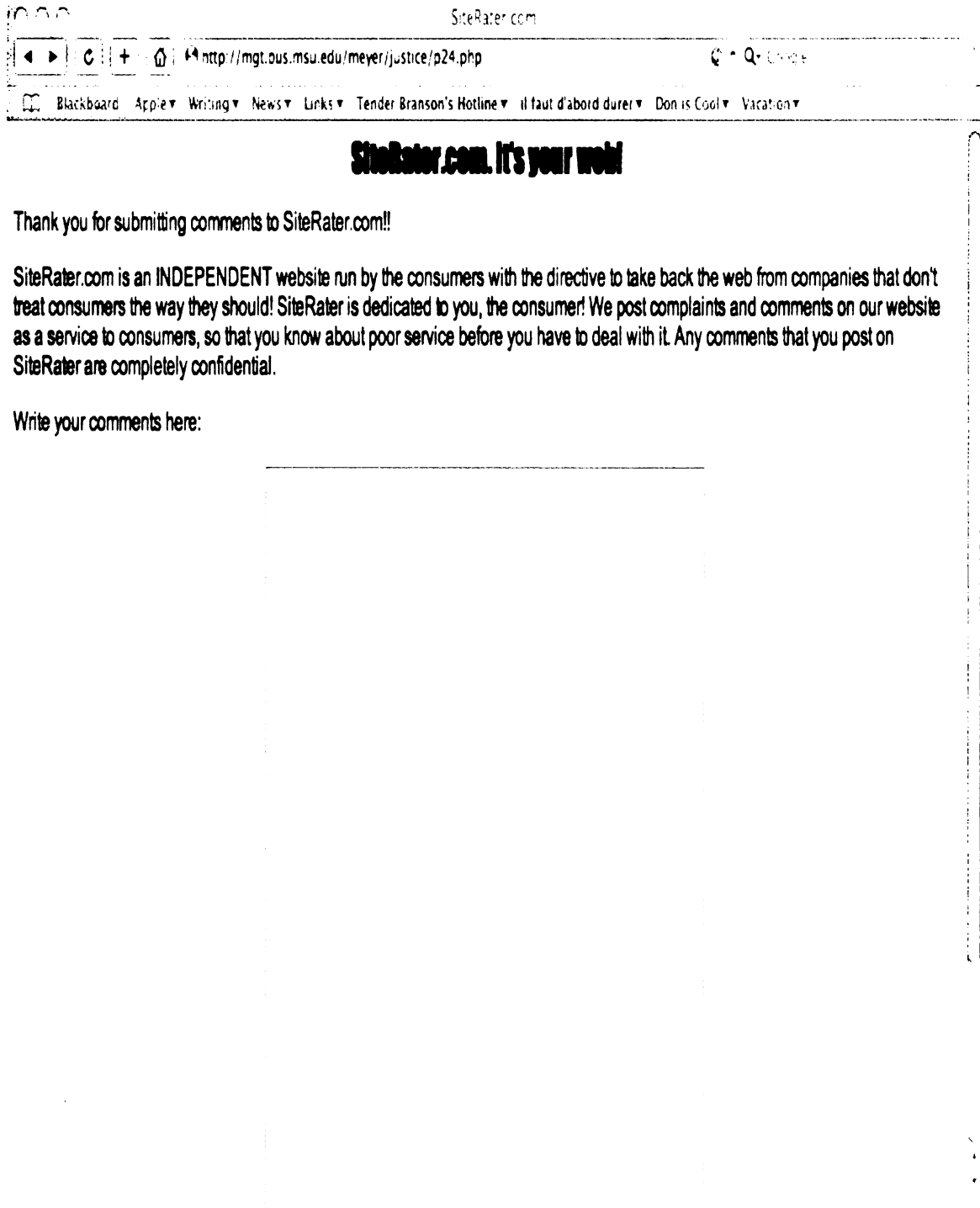
FIGURE 5

Web page depicting the restoration behavior



FIGURE 6

Web page depicting the retaliation behavior



MEASURES

PANAS (Watson & Clark, 1994)

Instructions: This scale consists of a number of words that describe different feelings and emotions. Indicate to what extent you are experiencing this feeling right now, that is, at the present moment, using this scale:

1=Very slightly or not at all

2=A little

3=Moderately

4=Quite a bit

5=Very much

_____ Interested	_____ Distressed	_____ Excited	_____ Upset
_____ Strong	_____ Guilty	_____ Scared	_____ Enthusiastic
_____ Hostile	_____ Proud	_____ Irritable	_____ Alert
_____ Ashamed	_____ Inspired	_____ Nervous	_____ Determined
_____ Attentive	_____ Jittery	_____ Active	_____ Afraid

Justice Measures (based on Colquitt, 2001)

Procedural Justice

The following items refer to the process used by TravelDeals to determine an outcome.

To what extent:

- Have you been able to express your views and feelings during the bid procedures?
- Have you had influence over the outcome arrived at by those procedures?
- Have the TravelDeals bid procedures been applied consistently (i.e. did they treat you the same way they treated others)?
- Have the bid procedures been free from bias?
- Have the bid procedures used accurate information?
- Could you have appealed the outcome arrived at by those procedures?
- Have the bid procedures conformed to ethical and moral standards?

Distributive Justice

The following items refer to TravelDeals's response to you. To what extent:

- Does TravelDeals's final decision reflect the effort you put into the transaction?
- Is TravelDeals's final decision appropriate for the work you have put into the transaction?
- Does TravelDeals's response to you reflect what you have contributed to the transaction?
- Is TravelDeals's response to you justified?
- Is TravelDeals's response to you fair?

Interpersonal Justice

The following items refer to TravelDeals. To what extent:

- Has TravelDeals treated you in a polite manner?
- Has TravelDeals treated you with dignity?
- Has TravelDeals treated you with respect?
- Has TravelDeals refrained from improper remarks and comments?

Informational Justice

The following items refer to the authority figure who enacted the procedure. To what extent:

- Has TravelDeals been candid in his/her communication with you?
- Has TravelDeals explained the procedures thoroughly?
- Were TravelDeals's explanations regarding the procedure reasonable?
- Has TravelDeals communicated details in a timely manner?
- Has TravelDeals seemed to tailor his/her communications to individuals' specific needs?

Customer Deviance (based on Ambrose et al., 2002; based on Robinson & Bennett, 1995) - Retaliation

During this task did you want to:

- Say something hurtful about someone from this company
- Report behavior of a specific individual to an authority to get them in trouble
- Act or speak rudely toward someone from this company (or send a rude written message)
- Attempt to publicly embarrass someone from this company
- Harm the reputation of this company
- Report the company's actions to a third party monitor
- Steer business away from this company
- Tell others about a bad experience with the company

Customer Deviance (based on Ambrose et al., 2002; based on Robinson & Bennett, 1995) - Restoration

During this task did you want to:

- Attempt to obtain an outcome that you felt you deserved
- Provide suggestions to improve the operation of the company
- Contact authority figures with suggestions
- Provide guidance to individuals within the company
- Change the systems of the company
- Change the way that outcomes were distributed
- Blow off steam to make yourself feel better

References

- Adams, J. S. (1965). Inequity in social exchange. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 2, pp. 267-299). New York: Academic Press.
- Allred, K. G. (1999). Anger and retaliation toward an understanding of impassioned conflict in organizations. *Research on Negotiation in Organizations*, 7, 27-58.
- Ambrose, M. L., Seabright, M. A., & Schminke, M. (2002). Sabotage in the workplace: The role of organizational injustice. *Organizational Behavior and Human Decision Processes*, 89, 947-965.
- Aristotle. (trans. 1934). *Nicomachean Ethics* (H. Rackham, Trans.). Cambridge, MA: Harvard University Press.
- Babcock, L., & Laschever, S. (2003). *Women don't ask: Negotiation and the gender divide*. Princeton, NJ: Princeton University Press.
- Bagozzi, R. P. (1993). An examination of the psychometric properties of measures of negative affect in the PANAS-X scales. *Journal of Personality and Social Psychology*, 65, 836.
- Bandura, A. (1997). *Self efficacy: The exercise of self-control*. New York: W.H. Freeman and Company.
- Baron, R. A. (1993). Affect and organizational behavior: When and why feeling good (or bad) matters. In J. K. Murnighan (Ed.), *Social psychology in organizations: Advances in theory and research*. Englewood Cliffs, NJ: Prentice-Hall, Inc.
- Barry, B., Fulmer, I. S., & Van Kleef, G. A. (2004). I laughed, I cried, I settled: The role of emotion in negotiation. In M. Gelfand & J. Brett (Eds.), *Negotiation: Theoretical advances and cross-cultural perspectives*. Palo Alto, CA: Stanford University Press.
- Bell, B., Ryan, A. M., & Wiechmann, D. (2004). Justice expectations and applicant perceptions. *International Journal of Selection and Assessment*, 12, 24-38.
- Bennett, R. J. (1998). Taking the sting out of the whip: Reactions to consistent punishment for unethical behavior. *Journal of Experimental Psychology: Applied*, 4, 248-262.
- Bennett, R. J., & Robinson, S. L. (2000). Development of a measure of workplace deviance. *Journal of Applied Psychology*, 85, 349-360.

- Bennett, R. J., & Robinson, S. L. (2003). The past, present and future of workplace deviance research. In J. Greenberg (Ed.), *Organizational behavior: The state of the science* (Vol. 2). Mahwah, NJ: Lawrence Erlbaum Associates, Publishers.
- Bies, R. J. (2001). Interactional (in)justice: The sacred and the profane. In J. Greenberg & R. Cropanzano (Eds.), *Advances in organizational justice* (pp. 89-118). Stanford, CA: Stanford University Press.
- Bies, R. J., & Moag, J. F. (1986). Interactional justice: Communication criteria of fairness. In R. J. Lewicki, B. H. Sheppard & M. H. Bazerman (Eds.), *Research on negotiations in organizations* (Vol. 1, pp. 43-55). Greenwich, CT: JAI Press.
- Bies, R. J., & Tripp, T. M. (1996). Beyond distrust: "Getting even" and the need for revenge. In R. M. Kramer & T. R. Tyler (Eds.), *Trust in organizations*. Newbury Park, CA: Sage Publications.
- Bies, R. J., & Tripp, T. M. (2001). A passion for justice: The rationality and morality of revenge. In R. Cropanzano (Ed.), *Justice in the workplace: From theory to practice* (Vol. 2, pp. 197-208). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Blaney, P. H. (1986). Affect and memory: A review. *Psychological Bulletin*, 99, 357-367.
- Bless, H., & Fiedler, K. (1995). Affective states and the influence of activated general knowledge. *Personality and Social Psychology Bulletin*, 21, 766-778.
- Bower, G. H. (1981). Mood and memory. *American Psychologist*, 36, 129-148.
- Bradley, M. M., Codisotti, M., Cuthbert, B. N., & Lang, P. J. (2001). Emotion and motivation I: Defensive and appetitive reactions in picture processing. *Emotion*, 1, 276-298.
- Brief, A. P., & Weiss, H. M. (2002). Organizational behavior: Affect in the workplace. *Annual Review of Psychology*, 53, 279-307.
- Brockner, J. (1988). *Self-esteem at work: Research, theory, and practice*. Lexington, MA: Lexington Books.
- Byrne, Z. S., Rupp, D. E., & Eurich, T. (2003). *Effects of discrete emotions on distributive, procedural, and interactional justice*. Paper presented at the 18th Annual Conference of the Society for Industrial and Organizational Psychology, Orlando, FL.
- Cacioppo, J. T., & Gardner, W. L. (1999). Emotion. *Annual Review of Psychology*, 50, 191-214.

- Carnevale, P. J. D., & Isen, A. M. (1986). The impact of positive affect and visual access on the discovery of integrative solutions in bilateral negotiation. *Organizational Behavior and Human Decision Processes*, 37, 1-13.
- Clark, M., & James, K. (1999). Justice and positive and negative creativity. *Creativity Research Journal*, 12, 311-320.
- Cohen-Charash, Y., & Spector, P. (2001). The role of justice in organizations: A meta-analysis. *Organizational Behavior and Human Decision Processes*, 86, 278-XXX.
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation for the behavioral sciences*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Colquitt, J. A. (2001). On the dimensionality of organizational justice: A construct validation of a measure. *Journal of Applied Psychology*, 86, 386-400.
- Colquitt, J. A., Conlon, D. E., Wesson, M. J., Porter, C. O. L. H., & Ng, K. Y. (2001). Justice at the millennium: A meta-analytic review of 25 years of organizational justice research. *Journal of Applied Psychology*, 86, 425-445.
- Conlon, D. E., Meyer, C. J., & Nowakowski, J. M. (forthcoming). What types of justice relate most strongly to key organizational outcomes? In J. Greenberg & J. A. Colquitt (Eds.), *Handbook of organizational justice: Fundamental questions about fairness in the workplace*. Mahwah, NJ: Erlbaum.
- Conlon, D. E., Porter, C. O. L. H., & McLean-Parks, J. (2004). The fairness of decision rules. *Journal of Management*, 30, 329-349.
- Cropanzano, R. (Ed.). (2001). *Justice in the workplace: From theory to practice* (Vol. 2). Mahwah, NJ: Lawrence Erlbaum Associates, Incorporated.
- Davidson, M. N., & Greenhalgh, L. (1999). The role of emotion in negotiation: The impact of anger and race. In R. J. Bies, R. J. Lewicki & B. H. Sheppard (Eds.), *Research on negotiation in organizations* (Vol. 7, pp. 3-26). Stamford, CT: JAI Press.
- DeSteno, D., Petty, R. E., Rucker, D. D., Wegener, D. T., & Braverman, J. (2004). Discrete emotions and persuasion: The role of emotion-induced expectancies. *Journal of Personality and Social Psychology*, 86, 43-56.
- Deutsch, M. (1975). Equity, equality, and need: What determines which value will be used as the basis of distributive justice? *Journal of Social Issues*, 31, 137-150.
- Elfenbein, H. A., & Ambady, N. (2002). Predicting workplace outcomes from the ability to eavesdrop on feelings. *Journal of Applied Psychology*, 87, 963-971.

- Erez, A., & Isen, A. M. (2002). The influence of positive affect on the components of expectancey motivation. *Journal of Applied Psychology*, 87, 1055-1067.
- Folger, R., & Cropanzano, R. (2001). Fairness theory: Justice as accountability. In J. Greenberg & R. Cropanzano (Eds.), *Advances in organizational justice*. Stanford, CA: Stanford University Press.
- Forgas, J. P., & Bower, G. H. (1987). Mood effects on person perception judgements. *Journal of Personaliy and Social Psychology*, 53, 53-60.
- Forgas, J. P., & Ciarrochi, J. (2001). On being happy and possessive: The interactive effects of mood and personality on consumer judgments. *Psychology and Marketing*, 18, 239-260.
- Forgas, J. P., & Moylan, S. (1987). After the movies: Transient mood and social judgements. *Personality and Social Psychology Bulletin*, 13, 467-477.
- Fredrickson, B. L. (2003). The value of positive emotions. *American Scientist*, 91, 330-335.
- Fredrickson, B. L., & Joiner, T. (2002). Positive emotions trigger upward spirals toward emotional well-being. *Psychological Science*, 13, 172-175.
- Frijda, N. H. (1993). Moods, emotion episodes, and emotions. In M. Lewis & J. Haviland (Eds.), *Handbook of emotions*. New York: Guilford.
- Gasper, K. (2004). Do you see what I see? Affect and visual information processing. *Cognition and Emotion*, 18, 405-421.
- George, J. M., & Zhou, J. (2002). Understanding when bad moods foster creativity and good ones don't: The role of context and clarity of feelings. *Journal of Applied Psychology*, 87, 687-697.
- Gilliland, S. W. (1993). The perceived fairness of selection systems: An organizational justice perspective. *Academy of Management Review*, 18, 694-734.
- Gilliland, S. W. (1994). Effects of procedural and distributive justice on reactions to a selection system. *Journal of Applied Psychology*, 79, 691-701.
- Greenberg, J. (1993). Stealing in the name of justice: Informational and interpersonal moderators of theft reactions to underpayment inequity. *Organizational Behavior and Human Decision Processes*, 54, 81-104.

- Greenberg, J. (1996, April). *What motivates employee theft? An experimental test of two explanations*. Paper presented at the Annual meeting of the Society for Industrial-Organizational Psychologists, San Diego, CA.
- Greenberg, J. (2002). Who stole the money and when? Individual and situational determinants of employee theft. *Organizational Behavior and Human Decision Processes*, 89, 985-1003.
- Greenberg, J., & Cropanzano, R. (Eds.). (2001). *Advances in organizational justice*. Stanford, CA: Stanford University Press.
- Gujarati, D. N. (1995). *Basic econometrics* (Third ed.). New York: McGraw Hill.
- Hegtvedt, K. A., & Killian, C. (1999). Fairness and emotions: Reactions to the process and outcomes of negotiations. *Social Forces*, 78, 269-303.
- Heise, D. R. (1989). Effects of emotion displays on social identification. *Social Psychology Quarterly*, 52, 10-21.
- Hersey, R. B. (1932). *Workers' emotions in shop and home: A study of individual workers from the psychological and physiological standpoint*. Philadelphia: University of Pennsylvania Press.
- Hertel, G., Neuhof, J., Theuer, T., & Kerr, N. L. (2000). Mood effects on cooperation in small groups: Does positive mood simply lead to more cooperation? *Cognition and Emotion*, 14, 441-472.
- Homans, G. C. (1961). *Social behavior: Its elementary forms*. London: Routledge & Kegan Paul.
- Humphrey, S. E., Ellis, A. P. J., Conlon, D. E., & Tinsley, C. H. (2004). Understanding customer reactions to brokered ultimatums: Applying negotiation and justice theory. *Journal of Applied Psychology*, 89, 466-482.
- Isen, A. M., Shalke, T. E., Clark, M., & Karp, L. (1978). Affect, accessibility of material in memory, and behavior - cognitive loop. *Journal of Personality and Social Psychology*, 36, 1-12.
- James, K., Brodersen, M., & Eisenberg, J. (2004). Workplace affect and workplace creativity: A review and preliminary model. *Human Performance*, 17, 169-194.
- Judge, T. A., & Hulin, C. L. (1993). Job satisfaction as a reflection of disposition: A multiple source causal analysis. *Organizational Behavior and Human Decision Processes*, 56, 388-421.

- Kahneman, D., Krueger, A. B., Schadke, D. A., Schwarz, N., & Stone, A. A. (2004). A survey method for characterizing daily life experience: The day reconstruction method. *Science*, 306, 1776-1780.
- Kamins, M. A., Marks, L. J., & Skinner, D. (1991). Television commercial evaluation in the context of program induced mood: Congruency versus consistency effects. *Journal of Advertising*, 20, 1-14.
- Keltner, D., Ellsworth, P. C., & Edwards, K. (1993). Beyond simple pessimism: Effects of sadness and anger on social perceptions. *Journal of Personality and Social Psychology*, 64, 740-752.
- Kemper, T. (1987). How many emotions are there? Wedding the social and autonomic components. *American Journal of Sociology*, 93, 263-289.
- Keppel, G. (1991). *Design and analysis: A researcher's handbook* (3 ed.). Upper Saddle River, NJ: Prentice Hall.
- Kuppens, P., Van Mechelen, I., Smits, D. J. M., & De Boeck, P. (2003). The appraisal basis of anger: Specificity, necessity, and sufficiency of components. *Emotion*, 3, 254-269.
- Lawler, E. J. (1992). Affective attachments to nested groups: a choice-process theory. *American Sociological Review*, 57, 327-339.
- Lee, B., & Schafer, C. S. (2002). The dynamic nature of leisure experience: An application of affect control theory. *Journal of Leisure Research*, 34, 290-310.
- Lerner, J. S., & Keltner, D. (2000). Beyond valence: Toward a model of emotion-specific influences on judgment and choice. *Cognition and Emotion*, 14, 473-493.
- Lerner, J. S., & Keltner, D. (2001). Fear, anger, and risk. *Journal of Personality and Social Psychology*, 81, 146-159.
- Leventhal, G. S. (1976). The distribution of rewards and resources in groups and organizations. In L. Berkowitz & W. Walster (Eds.), *Advances in experimental social psychology* (Vol. 9, pp. 91-131). New York: Academic Press.
- Leventhal, G. S. (1980). What should be done with equity theory? New approaches to the study of fairness in social relationships. In M. G. K. Gergen, R. Willis (Eds.), *Social exchange: Advances in theory and research* (pp. 27-55). New York: Plenum Press.
- Lind, E. A. (2001). Fairness heuristic theory: Justice judgements as pivotal cognitions in organizational relations. In J. Greenberg & R. Cropanzano (Eds.), *Advances in organizational justice*. Stanford, CA: Stanford University Press.

- Lind, E. A., Greenberg, J., Scott, K. S., & Welchans, D. (2000). The winding road from employee to complainant: Situational and psychological determinants of wrongful termination claims. *Administrative Science Quarterly*, 45, 557-590.
- Lind, E. A., Kulik, C., Ambrose, M. L., & Park, M. (1993). Individual and corporate dispute resolution: Using procedural fairness as a decision heuristic. *Administrative Science Quarterly*, 38, 224-251.
- Lind, E. A., & Tyler, T. R. (1988). *The social psychology of procedural justice*. New York: Plenum.
- Linden, W., Hogan, B. E., Rutledge, T., Chawla, A., Lenz, J. W., & Leung, D. (2003). There is more to anger coping than "in" or "out". *Emotion*, 3, 12-29.
- Lowenstein, G., Weber, E. U., Hsee, C. K., & Welch, N. (2001). Risk as feelings. *Psychological Bulletin*, 127, 267-286.
- Martinko, M. J., Gundlach, M. J., & Douglas, S. C. (in press). Toward an integrative theory of counterproductive workplace behavior: A causal reasoning perspective. *International Journal of Selection and Assessment*.
- Mayer, J. D., Gaschke, Y. N., Braverman, D. L., & Evans, T. W. (1992). Mood-congruent judgement is a general effect. *Journal of Personality and Social Psychology*, 63, 119-132.
- McAllister, D. J. (1995). Affect- and cognition-based trust as foundations for interpersonal cooperation in organizations. *Academy of Management Journal*, 38, 24-59.
- Morgan, R., & Heise, D. R. (1988). Structure of emotions. *Social Psychology Quarterly*, 51, 19-31.
- Muramatsu, R., & Hanoch, Y. (2005). Emotions as a mechanism for boundedly rational agents: The fast and frugal way. *Journal of Economic Psychology*, 26, 201-221.
- Neumann, R., Seibt, B., & Strack, F. (2001). The influence of mood on the intensity of emotional responses: Disentangling feeling and knowing. *Cognition and Emotion*, 15, 725-747.
- Newell, S. J., Henderson, K. V., & Wu, B. T. (2001). The effects of pleasure and arousal on recall of advertisements during the Super Bowl. *Psychology and Marketing*, 18, 1135-1153.
- Pauls, C. A., & Stemmler, G. (2003). Repressive and defensive coping during fear and anger. *Emotion*, 3, 284-302.

- Pavelchak, M. A., Antil, J. H., & Munch, J. M. (1988). The Super Bowl: An investigation into the relationship among program context, emotional experience, and ad recall. *Journal of Consumer Research*, 15, 360-368.
- Pillutla, M. M., & Murnighan, J. K. (1995). Being fair or appearing fair: Strategic behavior in ultimatum bargaining. *Academy of Management Journal*, 38, 1408-1426.
- Pillutla, M. M., & Murnighan, J. K. (1996). Unfairness, anger, and spite: Emotional rejections of ultimatum offers. *Organizational Behavior and Human Decision Processes*, 68, 208-224.
- Quinones, M. A. (1995). Pretraining context effects - Training assignment as feedback. *Journal of Applied Psychology*, 80, 226-238.
- Richins, M. L. (1997). Measuring emotions in the consumption experience. *Journal of Consumer Research*, 24, 127-146.
- Robinson, S. L., & Bennett, R. J. (1995). A typology of deviant workplace behaviors: A multidimensional scaling study. *Academy of Management Journal*, 38, 555-572.
- Robinson, S. L., & Bennett, R. J. (1997). Workplace deviance: Its definition, its nature, and its causes. In R. J. Lewicki, B. H. Sheppard & R. J. Bies (Eds.), *Research on negotiation in organizations* (Vol. 6, pp. 3-28). Greenwich, CT: JAI Press.
- Roethlisberger, F. J., & Dickson, W. J. (1939). *Management and the worker*. New York: Wiley.
- Russell, J. A. (1978). Evidence of convergent validity on the dimensions of affect. *Journal of Personality and Social Psychology*, 36, 1152-1168.
- Rusting, C. L., & DeHart, T. (2000). Retrieving positive memories to regulate negative mood: Consequences for mood-congruent memory. *Journal of Personality and Social Psychology*, 78, 737-752.
- Scher, S. J., & Heise, D. R. (1993). Affect and the perception of injustice. *Advances in Group Processes*, 10, 223-252.
- Schlenker, B. R. (1997). Personal responsibility: Applications of the triangle model. In L. L. Cummings & B. M. Staw (Eds.), *Research in Organizational Behavior* (Vol. 19, pp. 241-301). Greenwich, CT: JAI Press.
- Shapiro, D. L., & Kirrkman, B. L. (2001). Anticipatory injustice: The consequences of expecting injustice in the workplace. In G. Greenberg & R. Cropanzano (Eds.), *Advances in Organizational Justice*. Stanford, CA: Stanford University Press.

- Skarlicki, D. P., & Folger, R. (1997). Retaliation in the workplace: The roles of distributive, procedural and interactional justice. *Journal of Applied Psychology*, 82, 434-443.
- Smith, S. M., & Petty, R. E. (1995). Personality moderators of mood congruency effects on cognition: The role of self-esteem and negative mood regulation. *Journal of Personality and Social Psychology*, 68, 1092-1107.
- Stajkovic, A. D., & Luthans, F. (1998). Self-efficacy and work related performance: A meta-analysis. *Psychological Bulletin*, 124, 240-261.
- Sundarajan, L. (2000). Background-mood in emotional creativity: A microanalysis. *Consciousness and Emotion*, 1, 227-243.
- Taylor, S. E. (1991). The assymetrical impact of positive and negaitve events: The mobilization-minimization hypothesis. *Psychological Bulletin*, 110, 67-85.
- Tesser, A., Pilkington, C. J., & McIntosh, W. D. (1989). Self-evaluation maintenance and the mediational role of emotion: The perception of friends and strangers. *Journal of Personality and Social Psychology*, 57, 442-456.
- Thayer, R. E. (1987). Problem perception, optimism, and related states as a function of the time of day (diurnal rhythm) and moderate exercise - 2 arousal systems in interaction. *Motivation and Emotion*, 11, 19-36.
- Thibaut, J., & Walker, L. (1975). *Procedural justice: A psychological analysis*. Hillsdale, NJ: Erlbaum.
- Tripp, T. M., & Bies, R. J. (1997). What's good about revenge: The avenger's perspective. *Research on Negotiation in Organizations*, 6, 145-160.
- Tyler, T. R., & Blader, S. L. (2002). Autonomous vs. comparative status: Must we be better than others to feel good about ourselves? *Organizational Behavior and Human Decision Processes*, 89, 813-838.
- Tyler, T. R., & Lind, E. A. (1992). A relational model of authority in groups. In M. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 24, pp. 155-192). New York: Academic Press.
- Vroom, V. H. (1964). *Work and motivation*. New York: Wiley.
- Wacker, J., Heldmann, M., & Stemmler, G. (2003). Separating emotion and motivational direction in fear and anger: Effects on frontal asymmetry. *Emotion*, 3, 167-193.
- Watson, D. (2000). *Mood and temperament*. New York: Guilford Press.

- Watson, D., & Clark, L. A. (1994). *The PANAS-X: Manual for the positive and negative affect schedule - expanded form*. Iowa City, IA: The University of Iowa.
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, 54, 1063-1070.
- Watson, D., & Pennebaker, J. W. (1989). Health complaints, stress, and distress: Exploring the central role of negative affectivity. *Personnel Review*, 96, 234-254.
- Watson, D., & Tellegen, A. (1985). Toward a consensual structure of mood. *Psychological Bulletin*, 98, 219-235.
- Weiss, H. M., & Cropanzano, R. (1996). Affective events theory: A theoretical discussion of the structure, causes, and consequences of affective experiences at work. *Research in Organizational Behavior*, 18, 1-74.
- Weiss, H. M., Nicholas, J. P., & Daus, C. S. (1999). An examination of the joint effects of affective experiences and job beliefs on job satisfaction and variations in affective experiences over time. *Organizational Behavior and Human Decision Processes*, 78, 1-24.
- Weiss, H. M., Suckow, K., & Cropanzano, R. (1999). Effects of justice conditions on discrete emotions. *Journal of Applied Psychology*, 84, 786-794.
- Weitz, J. (1952). A neglected concept in the study of job satisfaction. *Personnel Psychology*, 5, 201-205.
- Wright, W. F., & Bower, G. H. (1992). Mood effects on subjective probability assessment. *Organizational Behavior and Human Decision Processes*, 52, 276-291.
- Zajonc, R. B. (1980). Feeling and thinking: Preferences need no inferences. *American Psychologist*, 35, 151-175.

