WHEN FAIR PROCEDURES DON’T WORK:
THE SELF-THREAT MODEL OF JUSTICE

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ABSTRACT

Fair procedures typically tend to ameliorate negative reactions to unfavorable decision outcomes. However, we overall found that high levels of self-threat and external self-serving bias may create a situation, in which fair procedures do not possess such an effect. Specifically, self-serving bias and self-threat are negatively related to procedural justice.

Keywords: Procedural justice, fair procedure, self-threat, self-serving bias

INTRODUCTION

Organizational justice is an important issue that has numerous practical applications in workplace. For example, studies have demonstrated that justice perceptions are significantly correlated to employee attitudes such as job satisfaction (Loi, Diefendorff & Yang, 2009) or organizational commitment (Viswesvaran & Ones, 2002) and to employee behaviors such as workplace deviance (Aquino, Galperin & Bennett, 2004) and organizational citizenship behavior (Viswesvaran & Ones, 2002). Research that helps clarify our understanding of organizational justice is, therefore, beneficial to managers managing their workforce.

One particular finding in justice research that has generated much attention is the interaction between procedural and distributive justice (Brockner, 2010; Brockner and Wiesenfeld, 1996; 2005), and its general support of the fair process effect (Folger, Rosenfield, Grove & Corkran, 1979) which proposes that fair procedures tend to override negative reactions to unfavorable decision outcomes. Although the fair process effect has received much empirical support, the interaction between procedural and distributive justice has been found to fluctuate between supporting the fair process effect and not supporting it. The purpose of this paper is to evaluate the theoretical explanations used to account for the interaction and to present a new theoretical model of justice. We propose that current justice theory does not adequately explain all points in the interaction pattern, but combining elements of attribution theory (Heider, 1958; Kelley, 1972) with justice theory will.
A number of justice researchers have included elements of attribution to explain reactions to decision outcomes. For example, referent cognitions theory (Folger, 1986) and fairness theory (Folger & Cropanzano, 2001) propose that counterfactual thinking, or making attributions for those implementing decisions, has an impact on justice and fairness perceptions. The model of dues paying (Martinko, Douglas, Ford & Gundlach, 2004) proposes that rewards attributed to internal sources (e.g., an individual “paid their dues” to receive reward) are just while rewards attributed to external sources (e.g., an individual did not “pay their dues”) are unjust. Brockner and his colleagues have focused recent work on attribution and the self-relevant variables that appear to further explain the interaction pattern reported in 1996 (e.g., Brockner, 2002; Brockner, 2010; Brockner, Heuer, Magner, Folger, Umphress, van den Bos, Vermunt, Magner & Siegel, 2003; Brockner & Weisenfeld, 2005). The present study contributes to the literature by continuing this stream of research on attribution and self-relevant variables within the justice realm. In addition, it proposes and tests a new model of justice that combines self-threat theory (Campbell & Sedikides, 1999) and the group identification component in several justice theories.

**LITERATURE REVIEW**

In their review article that examined 45 independent samples, Brockner and Wiesenfeld (1996) found the most frequently reported pattern of process x outcome interaction was that shown in figure 1. When process fairness is high, the favorability of the participant’s reaction is rather high, even when the participant receives an unfavorable outcome. Thus, regardless of the outcome, under a fair process, the favorability of the participant’s reaction is consistently high. A favorable outcome causes the favorability of the participant’s reaction to be high even if the process is unfair, while an unfavorable outcome under an unfair process causes the favorability of the participant’s reaction to be low.

**Figure 1.** Common interaction pattern of procedural and distributive justice reported by Brockner and Weisenfeld (1996)
Two points in figure 1 are particularly interesting because they contain two inconsistent cognitive ideas, the fair process/unfavorable outcome condition (point A) and the unfair process/favorable outcome condition (point D). Cognitive dissonance occurs when certain cognitions are contradictory or inconsistent with each other (Festinger, 1957). One reason individuals value procedures is that it gives them a sense of control in the process and decision (Lind & Tyler, 1988). If people participate in a procedure believing that they will get what they want because the procedure gives them some control, an individual who receives an unfavorable outcome from a fair process will most likely experience some dissonance. In addition, an individual who receives a favorable outcome from an unfair process should also experience dissonance because unfair procedures are not right, and outcomes resulting from unfair procedures are not just. Even if the individual expects a favorable outcome, when the normative standards of procedural justice clearly are not met, the individual who benefits from unfair procedures should experience dissonance based on the self-interest model of justice (Lind & Tyler, 1988). The self-interest model of justice suggests that individuals value fair procedures because it is in their best long-term interest to do so.

What is interesting about the two experimental conditions (points A and D) described above is that if the individuals do experience dissonance as suggested, it is not manifested in the commonly reported process x outcome pattern reported by Brockner and Wiesenfeld (1996). In the fair process condition, subjects who receive an unfavorable outcome rate the dependent variable (usually perceptions of fairness, organizational commitment, etc.) highly, suggesting that procedural fairness overrides desired outcomes. However, subjects in the unfair process condition who receive a favorable outcome appear to ignore procedural fairness concerns because they also rate the dependent variable highly, suggesting that favorable outcomes override concerns about process fairness. Thus, subjects within the same research study seem to have opposing views of procedural justice, in that some rate the dependent variable based on the outcome they receive while others rate the dependent variable based on the procedure used to determine the outcome. Brockner and Wiesenfeld (1996) offer four explanations to make sense of this interaction pattern, and these four explanations are discussed below.

**BROCKNER AND WIESENFELD EXPLANATIONS FOR INTERACTION PATTERN**

**Referent Cognitions Theory and Fairness Theory**

Referent cognitions theory (Folger, 1986) and its revision into fairness theory (Folger & Cropanzano, 1998; 2001) suggest that accountability for an unfavorable outcome acts as an antecedent to justice perceptions. Using counterfactual thinking, individuals receiving an unfavorable outcome will have lower justice perceptions when the individual believes he would have been better off with a different outcome and the authority implementing the procedure could have done something different and should have done something different.

Referent cognitions theory (Folger, 1986) is used to explain the interaction effect in figure 1 by suggesting that subjects in the unfair process/unfavorable outcome condition (point C) will reason that a different process would have led to a more favorable outcome. Therefore, they will be critical of the process that was used, and they will be less satisfied and less accepting of the outcome than subjects in the favorable outcome condition. Alternatively, when fair or unfair
procedures lead to favorable outcomes (points B and D), individuals will be satisfied, because they received a positive outcome and because they have no need to envision alternate processes. The last point on the interaction pattern involves the fair process/unfavorable outcome condition (point A). When procedures are fair, referent cognitions theory suggests it is more difficult for individuals to imagine an alternative process that would result in a different, more favorable outcome than if the procedures are unfair.

Fairness theory (Folger & Cropanzano, 1998; 2001) makes similar predictions with more emphasis on the negative impact of the outcome and accountability for the outcome. Thus, according to Brockner and Wiesenfeld (1996), referent cognitions theory helps explain the fair process/unfavorable outcome condition in the interaction just as it helps explain the other three conditions. However, even if the process is fair, it is quite possible for individuals receiving a negative outcome to envision a different process, fair or unfair, that would lead to a more favorable outcome. If subjects who receive a favorable outcome show no preference for fair or unfair procedures, why should subjects who receive an unfavorable outcome have a preference for fair or unfair procedures? Folger & Cropanzano (1998) suggest that accountability may be the key. If the recipient of an unfavorable outcome does not hold the authority implementing the decision accountable, then the fair process effect is supported as depicted in the interaction. However, when does this accountability kick in and when does it not matter? Neither referent cognitions theory nor fairness theory can answer this question, and other explanations must be explored to account for all points of the process x outcome interaction.

**Instrumental (Self-interest) Hypothesis**

The instrumental hypothesis (Lind & Tyler, 1988) assumes that people want to maximize their outcomes from exchange relationships. If outcomes can be maximized in the long-term, individuals are willing to forego short-term gains and accept unfavorable outcomes. Fair procedures suggest that future outcomes will be more predictable and more favorable than unfair procedures which are unpredictable. Therefore, an individual who receives an unfavorable outcome under a fair procedure is likely to be more accepting and satisfied with the process than an individual who receives an unfavorable outcome under an unfair process.

The instrumental hypothesis proposes that outcomes are more important than procedures; however, it is confusing in the sense of long-term and short-term gains. An individual is willing to accept a negative outcome in the short-term if procedures are fair only because fair procedures will lead to predictable and favorable outcomes in the future. This premise explains the fair process/favorable outcome condition (point B), the fair process/unfavorable outcome condition (point A), and the unfair process/unfavorable outcome condition (point C) reported in Brockner and Wiesenfeld (1996). It does not, however, fully explain the unfair process/favorable outcome condition (point D). Individuals in this condition rate the dependent variables highly, suggesting that short-term gain is more important than long-term predictability.

According to the instrumental hypothesis, people want to maximize their outcomes for the long-term, but accepting a short-term gain at the expense of potential future gains makes little sense if the same individual is willing to forego a short-term gain for potential future gains. In other words, the individual in the unfair process/favorable outcome condition is potentially ruining his
or her chances for favorable outcomes in the future by accepting an unfair process. This idea runs counter to the propositions of the instrumental hypothesis; therefore, the instrumental hypothesis cannot fully explain the interaction effect found by Brockner and Wiesenfeld (1996).

**Relational (Group Value) Theory and the Group Engagement Model**

Relational theory (Lind & Tyler, 1988) suggests that individuals care about process fairness because it is the right thing to do and because it enhances self-esteem and identification with the group. An expansion of this theory into the group engagement model (Tyler & Blader, 2003) also focuses on how fairness perceptions drive identity judgments received from the group. Under relational theory and the group engagement model, if procedures are fair, the individual’s need for self-esteem and self-identity are likely to be fulfilled; therefore, negative material outcomes do not affect their perceptions of the process. Unfair procedures, however, threaten the individual’s sense of self-esteem causing them to redefine the relationship between decision-maker and individual. In this case, material outcomes become important because self-identity with the group has changed.

Relational theory (Lind & Tyler, 1988) and the group engagement model (Tyler & Blader, 2003) inherently make sense because they propose that individuals participating in a fair process have their self-esteem and self-identity needs met within the group or organization implementing the fair procedures. Indeed, the group engagement model suggests that an individual’s willingness to cooperate with the group (e.g., accept group-determined outcomes) flows directly from identity information received from the group. Because group membership is important to the individual, fair procedures boost their dignity and self-respect as a group member, so material outcomes are less important than fair procedures. Therefore, individuals receiving an unfavorable outcome under a fair procedure will still rate the acceptance of, or satisfaction with, the process as high.

With unfair procedures, relational theory (Lind & Tyler, 1988) and the group engagement model (Tyler & Blader, 2003) suggest that the benefits of group membership such as self-esteem and self-identity are threatened, causing the individual to redefine their relationship to the organization. Instead of valuing group membership, the individual involved in an unfair process redefines the relationship as businesslike, or as transactional (Rousseau & Parks, 1993). Thus, outcomes are more important than process and a positive outcome increases the favorability of the individual’s reaction, even if the process used to determine the outcome is unfair.

The problem with relational theory (Lind & Tyler, 1988) and the group engagement model (Tyler & Blader, 2003) is that if unfair procedures cause individuals to focus on the outcome only, this situation is identical to that described in the self-interest hypothesis. Even if group membership is redefined as transactional, work relationships are continuous over time, and unfair or arbitrary procedures are not beneficial, especially to an alienated group member who cannot rely on the group for help. The group engagement model even states that individuals “...evaluate their identity and status in a particular group by the level of resources they are receiving from that group,” (Tyler & Blader, 2003, p. 355). If an individual is not receiving positive outcomes (favorable resources) from the group, then over time the individual would surely prefer a fair to an unfair process. As previously discussed, it makes little sense for an individual to ruin their chances for favorable outcomes in the future by accepting an unfair process in the present. Thus,
relational theory and the group engagement model explain all points in the interaction except the unfair process/favorable outcome condition (point D).

Attribution Theory

Brockner and Weisenfeld (1996) use attribution theory (Heider, 1958; Kelley, 1972) to explain the process x outcome interaction pattern by looking at two different aspects of the theory. The first explanation focuses on basic internal and external causes for the process and outcome while the second explanation focuses on behavior or motivational aspects of attribution theory. People attribute behavior and outcomes to either internal or external causes that originate from the individual, or the environment, respectively. Attributions are dependent upon prior expectations of processes and outcomes. For instance, if an unfair process is expected to result in an unfavorable outcome, individuals receiving an unfavorable outcome using an unfair process are likely to attribute the bad outcome to the process—an external attribution. Conversely, individuals receiving a favorable outcome using an unfair process may be even more likely to attribute the good outcome to the process because the process somehow overcame the detrimental effects of unfairness. This explanation helps explain both favorable and unfavorable outcomes received from an unfair process. It does not, however, fully explain the fair process/unfavorable outcome condition (point A). Individuals getting an unfavorable outcome often engage in self-serving bias and attribute their lack of success to an external attribution, such as the process, but they don’t. So Brockner and Wiesenfeld’s (1996) explanation on outcome attributions may not completely account for the process x outcome interaction pattern.

Attribution theory may, however, help account for the process x outcome interaction when people look at attributions for their behavior. Brockner and Wiesenfeld (1996) explain that if a decision process is unfair, individuals may attribute their participation in the process to an external cause — a potentially rewarding outcome. If a decision process is fair, however, individuals may see their participation as internally motivated and are less dependent on the outcome. From a behavioral perspective, individuals participating in a fair process are less concerned about outcome than they are about the process because their participation in the process is internally motivated, and the participation in and of itself is their reward. Individuals in an unfair process are in it simply for the outcome, so their motivation for participation in the process is strictly external. This is why individuals in the fair process condition rate the dependent variables highly regardless of whether the outcome is positive or negative, and why individuals in the unfair process condition rate the dependent variable differently depending on outcome.

Brockner (2010) considers attributions at length in an attempt to further understand the interaction effect reported in 1996, and discusses self-relevant variables and their impact on the interaction effect such as how high process fairness may increase the effect of outcome favorability. Essentially, he focuses on how point A in the interaction pattern may be moved such that individual reactions are outcome-driven rather than process-driven. He also discusses a number of studies finding situations in which respondents may accept unfair procedures to enhance self-esteem such that a favorable outcome under an unfair process (point D) is acceptable.
**PROPOSED MODEL**

In this paper, we build on the attribution theory explanations offered by Brockner (2010) and Brockner and Wiesenfeld (1996) by including elements of self-serving bias and self-threat in a model that helps explain when a fair process may not work to ameliorate negative reactions to a decision outcome. Brockner (2002) argued that outcome favorability has more influence in the interaction pattern when the dependent variable is based on self-evaluation as opposed to when the dependent variable is based on support for decisions made by the organization or by an individual decision maker. For example, Brockner, et al. (2003) found that high procedural fairness reduces the effect of outcome favorability on dependent variables that are system-based (such as organizational commitment), but increases the effect of outcome favorability on dependent variables that are self-relevant (such as self-esteem). Additionally, Brockner and Wiesenfeld (2005) discuss potential attribution issues such as self-evaluation, self-relevance, and status, in increasing our understanding of when outcome favorability interacts with procedural justice. We thus build our model on the self-relevant variables of self-threat and self-serving bias and include group identification since several justice theories are based on the element of social identity within the group as discussed above.

The model focuses on group identification as the starting point for understanding how self-threat and self-serving bias affect justice perceptions. Specifically, the model attempts to explain when point A in Figure 1 may be moved to reduce the interaction effect on the dependent variable. Although point D also represents contradictory cognitive elements as described above, the distributive justice component of point D is inherently intuitive, except when considering self-esteem enhancement as discussed by Brockner (2010, pp. 154-156). Thus, the model focuses on potential movement of point A only, and the new theory, if supported, may provide at least one explanation for when fair procedures do not work.

**The relationship between group identification, self-threat, and self-serving bias**

Studies on group identification often report that high levels of group identification are positively related to in-group favoritism (DeCremer, 2001; Reynolds, Turner & Haslam, 2000; Smurda, Wittig & Gokalp, 2006; Voci, 2006). When group members exhibit in-group favoritism, it is sometimes due to competition with an out-group (Wann & Grieve, 2005) or to self-esteem or self-identity issues (DeCremer, 2001; Voci, 2006). Regardless of why group identification leads to biased views of the group, the fact remains that individuals who strongly identify with the group will tend to be biased toward the group.

Many justice theories are based on the idea of group identification. For example, the instrumental model (Lind & Tyler, 1988) and the relational model (Lind & Tyler, 1988) both suggest individuals need groups as a reference point for perceptions of justice. The instrumental model proposes that people try to maximize their personal gains when interacting with others, and one way to ensure that they will actually benefit from long-term group membership is to insist on fairness in decision-making processes. The relational model is based on the idea that identification with a group may cause individuals to put the group’s interests before their own, and thus be more accepting of an unfavorable outcome from a group decision. Studies have found that institutional identification moderates the relationship between outcome favorability...
and perceptions of procedural fairness (Blader, 2007), and the group engagement model (Tyler & Blader, 2003) proposes that justice perceptions drive identity judgments received from the group.

Combining the ideas from justice theory with the findings on group identification, it seems likely that individuals with high group identification will find comfort and security in group membership. As such, group members with high levels of group identification should not only be more accepting of group decisions in general, they should also feel less threatened on a personal level when group decisions are made. In addition, high levels of group identification should reduce the tendency to make external attributions for group decisions affecting the individual (i.e., blaming the group for an unfavorable outcome rather than blaming oneself for the unfavorable outcome). Therefore, as group identification increases, self-threat and self-serving bias resulting from group decision outcomes should decrease.

Hypothesis 1. There is a negative relationship between group identification and self-threat.

Hypothesis 2. There is a negative relationship between group identification and externalized self-serving bias.

The relationship between self-threat and self-serving bias

An individual’s perception of fairness in reaction to a decision depends upon a number of factors. Prior research has shown that unfavorable outcomes combined with unfair procedures lead to decreased perceptions of both procedural and distributive fairness (see Brockner & Wiesenfeld, 1996, for a review). An unfavorable outcome is assumed to be included as part of the self-threat construct, which is defined as the extent to which "...favorable views about oneself are questioned, contradicted, impugned, mocked, challenged, or otherwise put in jeopardy..." (Baumeister, Smart & Boden, 1996, p. 8). The definition initiated by Baumeister, et al. (1996) is endorsed by Campbell and Sedikides (1999) and captures the theoretical dimensions of the self-threat construct. Thus, an individual who receives an unfavorable outcome will most likely experience some form of self-threat because the unfavorable outcome may lead to a loss of self-esteem or a loss of material well-being.

This threat to self-esteem often requires the individual to restore self-esteem by engaging in self-serving bias (Campbell & Sedikides, 1999). Indeed, studies on social identity theory suggest when group identification is threatened (a threat to group self-esteem), individuals often resort to ingroup bias or discrimination against other groups to restore self-esteem (Branscombe & Wann, 1994; Smurda, Wittig & Gokalp, 2006; Tajfel, 1982). These efforts to discriminate are ways in which individuals can externalize to some degree the attributions for a threatening or unfavorable outcome. Since Brockner, et al. (2003) found that high levels of procedural fairness increased the effect of outcome favorability on dependent variables that are self-relevant, it seems likely that an unfavorable outcome that creates self-threat would lead to an increase in a self-relevant dependent variable such as self-serving bias. Therefore, the relationship between self-threat and externalized self-serving bias is expected to be positive based on findings from studies on social identity and based on the self-threat model proposed by Campbell and Sedikides (1999).

Hypothesis 3. There is a positive relationship between self-threat and externalized self-serving bias.
The relationship between self-threat and perceptions of justice

As self-threat increases, individuals tend to react in ways that protect the self, such as engaging in self-serving bias (Campbell & Sedikides, 1999). The appraisal theory of stress (Lazarus & Folkman, 1984) suggests that people first make a primary appraisal of how much an event is threatening to their well-being and then make a secondary appraisal of how they can use resources to control the threat. In his discussion of the appraisal theory of stress, Brockner (2010) suggests that outcome favorability may be a proxy for the primary appraisal of perceived threat while procedural fairness may be a proxy for the secondary appraisal of perceived control. Thus, we propose that the primary appraisal of self-threat will lead to a secondary appraisal of procedural justice.

Individuals experiencing self-threat are likely to reach for any explanation that puts blame for their situation on something other than themselves. Justice theorists suggest when people get an unfavorable outcome from a decision-making process, one of the first things they do is scrutinize the process to look for inconsistencies, biased judges, and other signs of unfairness (Thibaut & Walker, 1975). Therefore, it is possible that an increase in self-threat represented by an increase in the unfavorability of an outcome will negatively impact perceptions of procedural justice. This premise is supported by the finding that high levels of procedural justice increase the effect of outcome favorability on a self-relevant dependent variable (Brockner, et al., 2003). The Brockner, et al. (2003) study investigates the interaction effect and does not suggest a causal relationship, per se, between outcome favorability and justice perceptions. However, if justice perceptions increase the effect of outcome favorability on a self-relevant dependent variable, it is likely that the more unfavorable the self-relevant outcome, the lower the perception of justice.

Hypothesis 4. There is a negative relationship between self-threat and perceptions of procedural justice.

The relationship between externalized self-serving bias and perceptions of justice

An individual’s satisfaction with a process or outcome is based upon many factors including feelings of equity when making comparisons to others, the fairness of procedures used, and attributions made for outcomes and the implementation of procedures. As such, an individual who receives an unfavorable outcome is likely to scrutinize both the process and the outcome to help explain why the outcome was negative before deciding if the process or outcome is fair.

*Equity theory*. Equity theory (Adams, 1963) proposes that individuals calculate outcome/input ratios for themselves and for others to determine if inequity exists. Because equity calculations are highly subjective, an individual displaying high levels of self-serving bias is likely to interpret an unfavorable outcome as inequitable. High levels of self-serving bias indicate the individual will blame external factors for unfavorable outcomes, suggesting that comparison others in the same situation may benefit undeservingly from the external factor’s injustice. Because this situation creates inequity between the individual and the comparison other (either real or imagined), the individual must restore equity (Pritchard, 1969), and one method might be to distort cognitions of procedural and distributive fairness. Self-serving bias, by definition, suggests that individuals receiving an unfavorable outcome will attempt to attribute the cause of the outcome to some source external to the self. Because of this biased view in which internal
sources are excluded in explaining an unfavorable outcome, higher levels of self-serving bias are likely to increase external attributions for unfavorable outcomes received.

**Fairness of procedures used.** Many studies in procedural justice indicate that the fairness of procedures used is a key factor in determining whether or not subjects perceive an unfavorable outcome is fair; and the Brockner and Wiesenfeld (1996) review article shows that fair procedures tend to increase perceptions of procedural and distributive fairness, even when an unfavorable outcome is received. In contrast, Van den Bos, Vermunt, and Wilke (1997) found that when outcome information was presented before process information, perceptions of procedural and distributive justice decreased significantly even when a fair process was used. In addition, Lind and Lissak (1985) found that perceptions of procedural justice were higher when subjects received a favorable outcome under an unfair procedure than they were when subjects received a favorable outcome under a fair procedure. Both studies suggest that under certain conditions, the outcome may drive perceptions of fairness rather than the procedures. In these conditions, then, an unfavorable outcome would be expected to result in decreased perceptions of procedural justice. We propose that high levels of externalized self-serving bias will create one of these special situations in which an unfavorable outcome will drive perceptions of procedural justice. This premise is supported by studies showing that individuals who are exposed to alarming or threatening conditions, such as unfavorable outcomes leading to self-threat, are more influenced by procedural fairness than individuals who are not exposed to alarming conditions (Van den Bos, Ham, Lind, Simonis, van Essen & Rijpkema, 2008).

**Attributions for outcomes and procedural implementation.** When individuals feel threatened, they may engage in attributional processes to make a judgment on how much to attribute an outcome to themselves or others (Brockner, 2010, p. 33). Research has shown that attributions of responsibility for outcomes mediate the relationship between process fairness and organizational commitment when the outcome is unfavorable (Brockner, Fishman, Reb, Goldman, Spiegel & Garden, 2007); however, attributions for outcomes could also be an antecedent to procedural fairness. For example, when people experience a contrast in how they expect to be treated and how they are actually treated, their tendency to react negatively is increased (Aggarwal & Larrick, 2010). One possible explanation for this heightened negativity is that people may believe they have done something wrong to cause the unfavorable outcome but want to distance themselves from the authority or group (Brockner, 2010). Thus, individuals could conceivably make an internal attribution at first if procedures are fair, since studies have shown that higher process fairness leads people to make more self-attributions for their outcomes (Leung, Su & Morris, 2001). However, if individuals want to distance themselves from the authority or group as Brockner (2010) suggests, they may then make an external attribution for the outcome by finding fault with the procedure.

Fairness theory argues that counterfactual thinking could conceivably occur with both negative and positive events (Folger & Cropanzano, 1998); thus, an unfavorable outcome combined with a fair process may trigger an external self-serving bias that leads to decreased perceptions of procedural justice. If this is correct, it could possibly explain why individuals who initially seem to accept an unfavorable outcome later claim they were treated unfairly. For example, an individual who is laid off may initially accept the outcome and make an internal attribution for the event by acknowledging that his sales figures were not as high as those who survived the
layoff. However, as the outcome becomes more self-threatening, perhaps realizing it will be difficult to find a new job in the present economy, the terminated employee might engage in counterfactual thinking and then make an external attribution for the outcome by finding something wrong with the process to determine layoffs. This external attribution allows the individual to distance himself from the authority by claiming an unfair or unjust process was used.

The preceding explanation also fits with the premises of the accessible identity model (Skitka, 2003) which suggests people define fairness based on the identity most accessible at a particular point in time. It is possible for an individual to initially make a fairness judgment based on their social identity within the work group, but to make a fairness judgment based on personal identity or material identity at a later time. The time frame from initial to final judgment of fairness of a particular outcome could conceivably consist of minutes, hours, days, months, or even years. Thus, even though individuals are more likely to make self-attributions for outcomes when procedural justice is high (Leung, Su & Morris, 2001), unfavorable outcomes leading to self-threat are likely to trigger external attributions which then reduce perceptions of procedural justice, regardless of whether the procedure is normatively fair or not.

Hypothesis 5: There is a negative relationship between externalized self-serving bias and perceptions of procedural justice.

METHODS

Procedure

The sample included 142 undergraduate students in management classes who were given an opportunity for extra credit for participating in a research experiment conducted at a university in the southwestern United States. Subjects reported for the one-hour experiment eight at a time and were randomly assigned to two teams of four to play a game, either Pictionary or Boggle. Subjects were told that whichever team won the game after eight rounds of play would receive additional extra credit points, and one person on each team who received the highest evaluation from their peers would win $10. After playing the game and declaring the winning team, subjects completed peer evaluations of their teammates, the time 1 questionnaire. Complete silence was enforced during the time questionnaires were completed. The time 1 evaluations were collected, and while the scores were being added together, subjects completed the time 2 questionnaire on group identification and personality measures. The key variable being measured at time 2 was group identification, but the additional questions were necessary to fill in time while the experimenter “calculated” the peer evaluation scores. After ten minutes, the experimenter collected the time 2 questionnaire, and distributed a false peer evaluation score along with the time 3 questionnaire measuring self-threat, self-serving bias, and procedural fairness. The peer evaluation scores were false to create different levels of self-threat, such that high evaluation scores would represent low self-threat and low evaluation scores would represent high self-threat. This method of creating self-threat fits with the suggestion by Brockner (2010) that outcome favorability may serve as a proxy for perceived threat in the context of frameworks on stress and strain (Lazarus & Folkman, 1984; Lazarus & Launier, 1978). Subjects were then debriefed, with the $10 awarded to each team through a drawing and all subjects receiving additional extra credit points.
The game part of the experiment lasted from 20 to 25 minutes, and allowed subjects to form group identity through competition for winning additional extra credit points as a team. During the debriefing, some subjects reported being angry and confused at their ratings, suggesting that the manipulation to create feelings of self-threat was successful.

**Measures**

All constructs were measured on a 5-point scale, with 1 = strongly disagree and 5 = strongly agree. Group identification was measured using seven items adapted from Mael and Ashforth’s (1992) scale. Self-threat was operationalized with a seven-item scale developed for this study, and it is based on the definition of self-threat given by Baumeister, Smart, and Boden (1996) which defines self-threat as the extent to which favorable views about oneself are questioned or contradicted. Self-serving bias was also measured with a six-item scale developed for this study, and it is based on measures of causal attribution or self-serving bias used by Knee and Zuckerman (1996), Reifenberg (1986) and Silvia and Duval (2001). The scale was designed to measure external self-serving bias. Procedural justice was measured with items adapted from Colquitt (2001). Table 1 lists the reliability measures for each scale.

**ANALYSES AND RESULTS**

To analyze the measurement and structural models, SmartPLS 2.0 M3 (Ringle, Wende & Will, 2005) was used. Rather than using a covariance-based Structural Equation Modeling (SEM) used in LISREL, we believe that a component-based SEM or Partial Least Squares (PLS) is a more appropriate method for the present study, because PLS neither strictly requires multivariate normality in the data nor a large sample size (Chin, Marcolin & Newsted, 2003).

**Measurement Model**

To validate discriminant validity, convergent validity, and reliability of the constructs using SmartPLS, we ran both measurement and structural models simultaneously, but would proceed to examine the structural model only if the quality of the measurement model were satisfactory. Using 0.6 as a cutoff value, we eliminated three items of the group identification construct, two items of the self-serving bias construct, and one item of the self-threat construct. The results of the next run attested discriminant validity, convergent validity, and reliability of all the constructs as described below. As shown in Table 1, the square root of the average variance extracted (AVE) of each of the constructs was greater than its correlation with all the other constructs, thus demonstrating discriminant validity (Gefen & Straub, 2005). Additionally, the all of the items loaded well (> 0.65) on their respective factors (see Table 2), showing evidence of discriminant validity (Gefen & Straub, 2005). The t-statistics of all the items loading on their own factors (ranging from 6.67 to 36.86) were significant at the 0.001 level, exhibiting convergent validity (Gefen & Straub, 2005). Finally, both composite reliability and Cronbach’s alpha coefficients of all the constructs were greater than 0.8, therefore indicating satisfactory reliability (Fornell & Larcker, 1981; Nunnally, 1978). Once the measurement model had been validated, we turned to examine the structural model.
Table 1 Means, standard deviations, correlations, reliabilities, and square roots of the average variance extracted

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<th>Construct</th>
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<tbody>
<tr>
<td>1  External Self-Serving Bias</td>
<td>2.26</td>
<td>.71</td>
<td>.83</td>
<td>.73</td>
<td>.74</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2  Group Identification</td>
<td>3.95</td>
<td>.69</td>
<td>.86</td>
<td>.80</td>
<td></td>
<td>.30***</td>
<td>.78</td>
<td></td>
</tr>
<tr>
<td>3  Procedural Justice</td>
<td>3.61</td>
<td>.75</td>
<td>.90</td>
<td>.86</td>
<td></td>
<td></td>
<td>.59***</td>
<td>.77</td>
</tr>
<tr>
<td>4  Self-Threat</td>
<td>2.55</td>
<td>.75</td>
<td>.90</td>
<td>.87</td>
<td></td>
<td>.60***</td>
<td>.00</td>
<td>.68***</td>
</tr>
</tbody>
</table>

Note. N = 150. SD = standard deviation. CR = composite reliability. CA = Cronbach's alpha. The italicized diagonal values are the square root of the average variance extracted (AVE) for each construct. *** p < 0.001.

Table 2 Confirmatory factor analysis results

<table>
<thead>
<tr>
<th>Item</th>
<th>External Self-Serving Bias</th>
<th>Group Identification</th>
<th>Procedural Justice</th>
<th>Self-Threat</th>
</tr>
</thead>
<tbody>
<tr>
<td>I would like to be in this group again if we did another experiment.</td>
<td>-0.15</td>
<td>0.75</td>
<td>0.06</td>
<td>0.02</td>
</tr>
<tr>
<td>I feel a strong sense of belonging to this group.</td>
<td>-0.18</td>
<td>0.77</td>
<td>-0.03</td>
<td>0.04</td>
</tr>
<tr>
<td>I feel loyal toward my group.</td>
<td>-0.24</td>
<td>0.81</td>
<td>0.03</td>
<td>0.07</td>
</tr>
<tr>
<td>When my group is successful, I feel successful.</td>
<td>-0.31</td>
<td>0.80</td>
<td>0.17</td>
<td>-0.09</td>
</tr>
<tr>
<td>Using students to rate my performance was a fair process to use in determining the best group player.</td>
<td>-0.42</td>
<td>0.06</td>
<td>0.76</td>
<td>-0.46</td>
</tr>
<tr>
<td>I believe the student evaluation was a fair process to use in assessing my player skills.</td>
<td>-0.47</td>
<td>0.03</td>
<td>0.86</td>
<td>-0.60</td>
</tr>
<tr>
<td>I believe my performance rating was based on accurate information.</td>
<td>-0.53</td>
<td>0.03</td>
<td>0.84</td>
<td>-0.74</td>
</tr>
<tr>
<td>I believe the process used to determine the best player was ethical.</td>
<td>-0.48</td>
<td>0.12</td>
<td>0.79</td>
<td>-0.44</td>
</tr>
<tr>
<td>I believe the process used to determine the best player was unbiased.</td>
<td>-0.37</td>
<td>0.22</td>
<td>0.66</td>
<td>-0.39</td>
</tr>
<tr>
<td>I believe the performance rating system was applied consistently to everyone.</td>
<td>-0.44</td>
<td>0.05</td>
<td>0.72</td>
<td>-0.43</td>
</tr>
<tr>
<td>I feel completely responsible for my performance in the game. *</td>
<td>0.66</td>
<td>-0.28</td>
<td>-0.31</td>
<td>0.28</td>
</tr>
<tr>
<td>My performance rating for the game was due mainly to my actions during the game. *</td>
<td>0.79</td>
<td>-0.31</td>
<td>-0.47</td>
<td>0.40</td>
</tr>
<tr>
<td>My performance in the game is a good indicator of my ability to work with a group. *</td>
<td>0.76</td>
<td>-0.18</td>
<td>-0.49</td>
<td>0.46</td>
</tr>
</tbody>
</table>
I can see how my actions led to my group’s rating of my performance in the game. * 0.76 -0.16 -0.46 0.59
I believe my group members have a favorable impression of me. * 0.45 0.05 -0.54 0.76
I feel comfortable with my performance rating. * 0.54 0.01 -0.55 0.85
My group members are right about my performance in the game. * 0.48 0.03 -0.56 0.84
My performance rating is not accurate. 0.53 0.04 -0.61 0.85
I played the game better than my group members say I did. 0.39 0.04 -0.44 0.73
I don’t believe my group members like me. 0.42 -0.21 -0.49 0.65

Note. N = 150. * denotes reversed items.

Structural Model

A bootstrapping procedure (n = 150 with 300 samples) in SmartPLS was performed to analyze the significance of the paths. Overall, the results (see Figure 2) showed that approximately 45% of the variance in external self-serving bias was explained by the variance in group identification and self-threat, and that approximately 52% of the variance in procedural justice was explained by the variance in group identification, external self-serving bias, and self-threat. Surprisingly, none of the variance in self-threat was associated with group identification. Thus, the first hypothesis was not supported. As expected, group identification was found to be negatively associated with external self-serving bias (b = -0.30, t = 4.04), supporting the second hypothesis. Importantly, self-threat was found to be not only positively associated with external self-serving bias (b = 0.60, t = 10.72), supporting the third hypothesis, but also negatively associated with procedural justice (b = -0.51, t = 6.64), supporting the fourth hypothesis. Finally, procedural justice was also found to be negatively influenced by external self-serving bias (b = -0.28, t = 3.44), supporting the fifth hypothesis.

Figure 2. Results of path analysis

Note. N = 150. *** p < 0.001 in one-tailed tests. Dashed line denotes insignificant path.
The results indicate that self-oriented variables play a key role in predicting perceptions of procedural justice. Indeed, a number of factors may influence the self-relevance of workplace events, and prior research suggests individuals may use procedural fairness perceptions “…to make attributions of responsibility to themselves and the other party for the outcomes of their encounters,” (Brockner & Wiesenfeld, 2005, p. 549). Although many justice researchers have discussed the self-oriented issue of justice, none to date have considered the specific self-threat, self-serving bias perspective addressed in this study. For example, individual researchers have argued that high procedural fairness may cause individuals to feel more responsible for outcomes received (Brockner, et al., 2003; Van den Bos, Bruins, Wilke & Dronkert, 1999) and thus influence issues of self-esteem (Schroth & Shah, 2000) and status within the group (Chen, Brockner & Greenberg, 2003), but none of these studies examined the specific impact of self-threat or self-serving bias on perceptions of justice.

Traditional justice theories such as the instrumental (Lind & Tyler, 1988), relational (Tyler & Lind, 1992) and group engagement (Tyler & Blader, 2003) models are based on self-focused issues such as protecting the self in the long term and enhancing self-identity within a group, but do not account for attributions in making justice judgments. Referent cognitions theory (Folger, 1986) and fairness theory (Folger & Cropanzano, 2001) include attributions for the decision-maker, but do not address issues of self-threat other than saying the attributional process is triggered when unfavorable outcomes are received. Uncertainty management theory (Lind & Van den Bos, 2002) suggests that perceptions of justice become more influential under conditions of uncertainty, a potential form of self-threat if the individual is uncertain about the work environment, but it does not address attributions for the outcome.

We argue that inserting self-threat theory (Campbell & Sedikides, 1999) into the justice literature will increase our understanding of antecedents to justice. The literature on distributive justice is clear in terms of defining antecedents and consequences, most likely because there must be some sort of outcome before an individual can perceive the fairness of the outcome. The literature on procedural justice is not always as clear. In fact, some procedural justice theories appear to be contradictory in terms of whether group identification is an antecedent or a consequence of justice perceptions. For example, the instrumental model (Lind & Tyler, 1988), the relational model (Lind & Tyler, 1988), the group engagement model (Tyler & Blader, 2003), and uncertainty management theory (Lind & Van den Bos, 2002) suggest group identification is a consequence of procedural justice perceptions, while fairness theory (Folger, 1993) and fairness heuristic theory (Van den Bos, Lind & Wilke, 2001) suggest identification with a group in terms of status or trust may act as an antecedent of justice perceptions.

The instrumental model (Lind & Tyler, 1988) and the relational model (Lind & Tyler, 1988) both suggest individuals need groups as a reference point for perceptions of justice. The instrumental model proposes that people try to maximize their personal gains when interacting with others, and one way to ensure that they will actually benefit from long-term group membership is to insist on fairness in decision-making processes. The relational model is based on the idea that identification with a group may cause individuals to put the group’s interests before their own, and thus be more accepting of an unfavorable outcome from a group decision.
It appears that group identification is a consequence of justice perceptions in these two models – once individuals believe they are a valued member of the group, they perceive decisions made by the group as more fair. Indeed the group engagement model (Tyler & Blader, 2003), proposes that justice perceptions drive identity judgments received from the group, again supporting the idea that group identification is a consequence of justice perceptions.

Referent cognitions theory (Folger, 1986) and fairness theory (Folger, 1993), however, suggest that accountability for an unfavorable outcome acts as an antecedent to justice perceptions. Using counterfactual thinking, individuals receiving an unfavorable outcome will have lower justice perceptions when the individual believes he would have been better off with a different outcome and the authority (or group) implementing the procedure could have done something different and should have done something different. In this model, the individual’s attributions for the authority’s (or group’s) actions are an antecedent to justice perceptions. Antecedents of these attributions could conceivably be influenced by identity judgments, as we found in the present study. Indeed, a number of studies have found that high levels of group identification lead to in-group bias (DeCremer, 2001; Reynolds, et al., 2000; Smurda, et al., 2006; Voci, 2006) in which individuals positively assess the in-group more favorably than the out-group. Thus, group identification influences attributions for group decision outcomes which, in turn, influence procedural justice perceptions, making group identification an antecedent of justice.

Fairness heuristic theory (Van den Bos, Lind & Wilke, 2001) suggests that individuals form fairness judgments quickly, and the heuristic is used to make future fairness judgments. The fairness judgments (heuristics) are based on the first few encounters with authority figures or groups who make decisions and are closely related to issues of trust (Van den Bos, Wilke & Lind, 1998). Thus, the fairness heuristic is formed only after information concerning the “trust status” of the individual/authority relationship or the individual/group relationship is processed.

Our model suggests that group identification is an antecedent to justice and is based partly on the idea that the work environment is often designed to socialize new members into an organization through structured orientation sessions. Properly implemented, socialization tactics create a sense of group identity before the employee is subjected to specific workplace decision outcomes. Indeed, the experiment used was specifically designed to create a group identity before any group decision outcomes were made. Of course, when no socialization tactics are formally implemented, uncertainty and ambiguity about employee roles may give rise to fair procedures acting as an antecedent to group identity, giving strong validity to justice theories arguing as such.

Interestingly, the correlation between group identification and procedural justice was weak in the present study (r = .09, p < .44), suggesting that group identification did not play a significant role in predicting justice perceptions, although it did play a significant role in predicting external self-serving bias. The explanation for this may be due to the fact that the group did not design the decision process, but simply implemented the process it was given. Studies on voice certainly indicate the importance of allowing individual input into the decision-making process (Grienberger, Rutte & van Knippenberg, 1997; Maas & van den Bos, 2011; van den Bos, Vermunt & Wilke, 1996), and perhaps it is more difficult to relate group identity to procedural justice when the group is using a pre-determined decision process. Alternatively, it is possible
that group identification is a consequence of procedural justice perceptions rather than an antecedent. We measured group identification on the second survey and measured procedural justice on the third survey which did not allow us to test group identification as a result of procedural justice perceptions.

CONCLUSION

Researchers in organizational justice sometimes appear to argue that fair procedures or respectful treatment will solve most of an organization’s problems with employees. Indeed, fairness and respect are certainly required for good management practice as well as for ethical and moral reasons. However, we believe the self-threat model of justice helps explain at least some of the situations in which fair procedures do not work.

Managers are often perplexed when an employee complaint appears to come out of nowhere about a work decision that would be considered fair by any reasonable interpretation of societal standards. By including self-threat and self-serving bias as antecedents of justice, managers may better understand why employees react in a negative manner, especially if the complaint is raised after the employee appeared to agree with the earlier decision. Consider a promotion decision, for example. An employee may initially agree that a coworker who is better qualified and has longer tenure deserves the promotion. A few months later, however, that same employee complains that the promotion decision was unfair. Perhaps the employee has realized there will be no more promotions for the next few years and worries about how others will view the situation. If there is any chance the employee will feel self-threat where “…favorable views about oneself are questioned, contradicted, impugned, mocked, challenged, or otherwise put in jeopardy” (Baumeister, Smart & Boden, 1996, p. 8), the employee could begin to re-think the promotion decision and engage in external self-serving bias to make the decision look unfair. Of course, treating the employee with respect and dignity throughout the process as interpersonal justice suggests should help, but it does not change the fact that the employee must now wait years for the next promotion opportunity.

We believe the self-threat model, if supported by additional empirical studies, will help managers better understand the implications of individual traits when reacting to workplace decisions. As with any study, there are limitations that should be discussed. One limitation is the use of an experimental design to stimulate group identification and to manipulate self-threat by creating favorable and unfavorable outcomes. Although we believe the experimental design was sound, student subjects playing games for money and extra credit may not be generalizable to all organizational settings. Despite the possible lack of generalizability, however, some scholars have suggested that the internal validity created by laboratory conditions is more important in testing new theory than ensuring a diverse working sample (see Greenberg, 1987, for a discussion of this topic).

Another limitation is that we use only procedural justice as the dependent variable of interest. Other justice measures, particularly interpersonal and informational justice, may have different relationships with self-relevant variables. Many of the theories upon which we base the self-threat theory of justice, however, such as the relational model (Lind & Tyler, 1988), the group engagement model (Tyler & Blader, 2003), and the instrumental model (Lind & Tyler, 1988)
focus on procedural justice as the primary justice type of interest. Thus, we focus procedural justice to remain consistent with these theories.

Future studies should continue to explore the boundaries of current justice theory to determine when fair procedures do not work to ameliorate negative reactions from employees. Brockner’s (2010) discussion is an important one in examining individual situations such as when self-relevant variables may interfere with the fair process effect (Folger, et al., 1979), but managers need more information on when and how fair procedures work. It is not possible to discover everything that can influence individual reactions, but practical information that can be used by managers in the workplace is sorely needed.

REFERENCES

Lilly et al.  Self-threat Model of Procedural Justice


