This thesis titled
Identifying the Relationship Between Employee Sabotage and Organizational Justice

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Abstract

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Identifying the Relationship Between Employee Sabotage and Organizational Justice

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Sabotage is a severe behavior that has professional and legal ramifications for both the saboteur and the organization. Currently, research investigating sabotage has relied on self-report methodology to measure retaliation behavior. However, self-report of negative behavior can result in severe consequences for employees (i.e., saboteurs), raising the question of respondent honesty. To address this issue, an objective measure of employee reactions was developed and implemented in a work simulation task to better understand employee reactions. This study found that participants who experienced a single occurrence of injustice would engage in sabotage behaviors. This finding supports the current literature and provides new directions and methods for assessing sabotage and other counterproductive work behaviors.

Approved: _____________________________________________________________

Paula M. Popovich

Associate Professor of Psychology
Dedication

For my wife Jackie and my brother Kevin,

the two people who have always understood me
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Introduction

Considering recent reports of organizations losing more than 200 billion dollars each year to employee sabotage (Flaherty & Moss 2007), it is necessary to understand the sources of such counterproductive behavior. As defined by Crino (1994), sabotage is behavior intended to ‘‘damage, disrupt, or subvert the organization’s operations for the personal purposes of the saboteur by creating unfavorable publicity, embarrassment, delays in production, damage to property, the destruction of working relationships, or the harming of employees or customers.’’ Sabotage is a severe behavior that has both professional and legal ramifications for both the saboteur and the organization. Engaging in sabotage can result in employee termination, lawsuits, and capital loss.

Researchers have explored several theories to explain possible antecedents to sabotage behavior. However, sabotage is a multifaceted counterproductive work behavior that consists of at least two categories of behavior; restoration equity and retaliation. Sabotage researchers (e.g. Fisher & Baron 1982; Greenberg, 1990) have been primarily interested in restoration equity (based on Adams, 1965), which describes a situation where individuals perceive an imbalance between the level of their contributions and rewards. These individuals then engage in thoughts or behaviors to restore this balance. Research with restoration equity has utilized the theory and other findings of distributive justice. Distributive justice is a form of organizational justice that deals with concerns of the perceived fairness of resource distribution and outcome resolution (Cropanzano & Ambrose, 2001). The use of distributive justice to explain restoration equity has received the most attention by sabotage researchers (c.f. Cropanzano & Greenberg, 1997).
The other form of sabotage, employee retaliation, has not been as thoroughly studied as restoration equity. Employee retaliation is behavior intended to punish, disrupt, or seek revenge against one’s employer, coworker, or boss (Skarlicki & Folger, 1997). Research on employee retaliation has begun to utilize organizational justice theories to better understand sabotage behavior. However, these investigations of employee retaliation have relied on self-report methodology to measure retaliation behavior. Reporting this type of negative behavior can result in severe consequences for employees and raises the question of the accuracy in self-report methodology. This accuracy issue deals with the willingness of participants to be honest and report engaging in sabotage behavior.

In summary, employee retaliation, like other counterproductive behaviors in organizations, has received little empirical attention, because of the severity of this negative behavior and the difficulty of measurement. Therefore, it is important to make progress in the research on employee retaliation to better understand why individuals engage in these and related types of counterproductive work behaviors. The purpose of this study was to investigate the relationships between organizational justice and employee retaliation. Specifically, I tested the occurrence of sabotage behaviors by manipulating procedural and interactional justice. In the next section, I briefly review the general concept of counterproductive work behaviors, and then focus on a specific type of deviant behavior (i.e. sabotage).
Counterproductive work behaviors (CWB) are defined as any voluntary behavior that violates organization norms and subsequently threatens the welfare of an organization, its associates, or both (Robinson & Bennett, 1995). Counterproductive behaviors in organizations have taken on many names (e.g. deviant behavior, bad behavior, counterproductive work behaviors), and there exists a plethora of research investigating different types and subtypes of these behaviors (see Martinko, Gundlach, & Douglas, 2002, for a review). However, the literature thus far does not exhaustively define, describe, predict, or understand the complexity of this multifaceted construct.

An attempt to organize CWB research was made by Robinson and Bennett (1995). Their investigations led to the development of a typology of deviant work behavior. This typology consisted of four categories of deviant workplace behavior; “production deviance,” “property deviance,” “political deviance,” and “personal aggression.” Each of these categories serves an organization tool for different forms of CWB. For example, sabotaging equipment and stealing from the company fall into the property deviance category, whereas leaving early or wasting resources fall into the production deviance category. This typology provides initial information on the categorization of the different types of counterproductive work behaviors and a framework for further investigation of different types of CWB.

As psychologists have begun studying this behavior, it has become evident that counterproductive work behaviors are difficult to study. Researchers have stressed the difficulty of creating laboratory settings that mimic real life and provide the opportunity
for people to engage in these negative, sometimes illegal behaviors (Giacalone & Rosenfeld, 1987). Additionally, Giacalone and Rosenfeld (1987) speak to the issue that these types of behaviors have real or severe consequences and the authors question whether individuals are willing to admit they engage in such behavior.

Sabotage researchers must deal with the same issues that any counterproductive work behavior researcher must address. Each type of researcher has to deal with literature that uses different definitions and operationalizations for the behaviors being studied, which can make it difficult to resolve theoretical issues. Other issues include difficulties in measuring the negative behavior and the methods used to study the desired behavior (e.g. self-report). Additionally, research on both sabotage and counterproductive work behaviors has attempted to identify multiple antecedents, explanations, and consequences.

Sabotage

Sabotage is one of the many different forms of counterproductive work behaviors in organizations. The literature on sabotage consists primarily of two types of sabotage behavior; restoration equity and retaliation behavior. Restoration equity consists of behaviors that attempt to restore or counterbalance a perceive loss in one’s situation (e.g. vandalizing or stealing company supplies when denied a pay raise). Employee retaliation behaviors are those behaviors that are intended to punish, disrupt, or seek revenge against one’s employer, coworker, or boss (Skarlicki & Folger, 1997). Purposefully damaging equipment, intentionally working slow, taking long breaks are examples of employee retaliation behavior.
Sabotage researchers have developed research using several theories and models of possible antecedents and explanations for occurrence of this type of behavior. Proposed influences on sabotage behavior have included: aggression (e.g. Neuman & Baron, 1997), workplace frustration (e.g. Spector 1975; Storms & Spector, 1987), emotions (Miles, Borman, Spector, & Fox, 2002), individual and personality factors (Colbert, Mount, Harter, Witt, & Barrick 2004), and the organizational context (Greenberg, 1990; Skarlicki & Folger 1997). Similar to other research with counterproductive work behaviors, sabotage researchers have investigated different theories to aid in the explanation and prediction of sabotage.

Studies of sabotage have primarily investigated reactions to organizational injustice and their effect on subsequent behavior (e.g. Greenberg, 1990; Ambrose, Seabright, & Schminke, 2002). Organizational justice is commonly referred to as the perceived fairness of organizational occurrences and situations.

The existing empirical literature on sabotage has relied on self-report or peer-report methodology, and these studies have found initial support for perceptions of organizational justice to influence retaliation behaviors. Specifically, Skarlicki and Folger (1997) studied factory workers to determine if there was an association between injustice and retaliation behavior. The authors developed an extensive list of possible retaliation behaviors by interviewing subject matter experts who worked at the company of interest. For this study, the authors used peer-reports to measure the frequency and occurrence of injustice and retaliation behavior. Their results indicated that employees who perceive high levels of organizational justice will be disinclined to engage in retaliation behaviors.
When investigating supervisor-subordinate relationships, Townsend, Phillips, and Elkins (2000) hypothesized that the occurrence of employee retaliation will be influenced by the supervisor-subordinate relationship. For this study, subordinates and supervisors completed a questionnaire that indicated the type of relationship between the supervisor and the subordinate. Additionally, the supervisors reported the frequency of retaliation behaviors. Using this design Townsend et al., (2000) found those individuals with negative perceptions of supervisor-subordinate interactions, or a poor relationship with one’s supervisor, tended to display more employee retaliation behaviors than subordinates who had positive perceptions of their relationship with their supervisor. However, we must consider that the reports of retaliation behavior were only made by the supervisor. This is a limitation of passive observation research. Sabotage behaviors are meant to be covert operations. Therefore, these researchers were relying on supervisors to notice behaviors that are supposed to be conducted discretely.

Operationalization of constructs is another issue that limits passive observation research on counterproductive work behaviors. Literature on deviant work behavior has yet to create a consensus on what behaviors should be classified as counterproductive and which behaviors is another form of behavior. This disagreement is the result of not identifying what behaviors are considered to be CWBs. However, some researchers have utilized reliable methods to determine how or what sabotage behaviors, participants can engage in. For example, Skarlicki and Folger (1997) developed a list of seventeen possible retaliation behaviors (see Appendix). This list was developed by surveying and interviewing employees and subject matter experts at the company the authors were
investigating. This list was meant to be inclusive of all possible behaviors that the employees have the opportunity to engage in. Using this method to create a list of behaviors for an operationalization of sabotage should help in advancing research on sabotage. This method allows researchers to identify the sabotage behaviors in which employees have the opportunity to engage. This would eliminate unnecessary questioning and allow researchers to further investigate only those behaviors that are relevant to that organization or work setting.

In addition to issues with operationalizations, research on sabotage and other counterproductive behaviors must deal with multiple theories and antecedents for these behaviors. As mentioned above, several sabotage researchers have found fruitful results when using reactions to organizational justice as an explanation for why people engage in sabotage behaviors.

*Organizational Justice*

Recent empirical investigations have indicated that perceived injustice is a common determinant of employee sabotage (Greenberg, 1990; Folger & Baron, 1996; Skarlicki & Folger, 1997; Neuman & Baron, 1997; Ambrose et al., 2002; Flaherty & Moss, 2007). Organizational justice (i.e. the perceived fairness of organizational occurrences and situations) is the combination of distributive, procedural, and interactional justice (Greenberg 1987). Distributive justice is the concern about the fairness of resource distributions or outcome resolutions (Cropanzano & Ambrose, 2001). Procedural justice pertains to the perceived fairness of the process in which outcomes are resolved and why the issues were handled in that manner (Cropanzano & Ambrose,
Interactional justice deals with concerns of the nature of the interpersonal treatment with one’s co-worker, supervisor, or boss (Bies & Moag, 1986).

Organizational justice research originally dealt exclusively with distributive justice and equity theory (Adams, 1965). Adams (1965) proposed the theory of inequity, which dealt with violations of perceived fairness of outcomes or rewards (e.g. pay or promotions). Although distributive justice received much attention, progress in organizational justice research shifted to accept a two factor model of justice. This new model retained distributive justice, but has made the distinction of procedural justice as a separate from distributive justice. Subsequent research has supported a two-factor model of organizational justice, consisting of distributive and procedural justice (e.g. Thibaut & Walker, 1975; Tyler, Rasinski, & McGraw, 1985; Folger & Konovsky, 1989). In the two-factor model, interactional justice was a subset of procedural justice and not a distinct factor. Some justice researchers (e.g. Bies & Moag, 1986; Bies, 1987) have proposed interactional justice to be a distinct factor, and not a function of procedural justice.

In a meta-analysis of organizational justice literature, Choen-Charash and Spector (2001) found each of the three justices to be separate constructs, although they do acknowledge that the factors are related to one another. Skarlicki and Folger (1997) investigated the effects of all three forms of justice on sabotage behavior. However, their results showed that distributive justice was not related to retaliation behaviors if the participant perceived the procedures or interactions to be fair. This finding indicates the importance of having positive perceptions of procedural justice and fair communication.
Procedural Justice

Procedural justice is defined as the fairness of the means or procedures by which decisions are made or outcomes are reached (Cropanzano & Ambrose, 2001). Seminal research involving procedural justice perceptions originates with Thibaut and Walker's (1975, 1978) emphasis on decision and process control, and advanced with Leventhal's (1980) concept of procedural rules.

Leventhal (1980) conceptualized six procedural rules that individuals use to assess the fairness of procedures. The six procedural rules are consistency, bias suppression, accuracy of information, correctability, representativeness, and ethicality (Leventhal, 1980; Leventhal, Karuza, & Fry, 1980). This conceptualization of procedural justice has had several important implications for subsequent research. First, it identified factors other than process and decision control to be important for justice perceptions. Secondly, this model has generated a significant amount of research investigating procedural justice. A critique of Leventhal’s procedural rules is that these rules were derived from Leventhal’s speculations of what are fair procedures and were not based on empirical evidence (Lind & Tyler, 1988). Despite this critique, the procedural rules have been found to be useful when slightly modified (e.g. Cropanzano & Greenberg, 1997).

Leventhal’s procedural rules also do not tell us why individuals desire procedural fairness. However, these procedural rules do help our understanding of how perceptions of fairness are formed. Therefore by incorporating voice as “the opportunity to express to an allocator one’s own perception of just desserts” (Folger, 1977) into other models
(group-value and group-engagement), it could be further understood why individuals
desire justice and engage in negative behaviors as a reaction to injustice.

Several studies on perceptions of procedural justice have shown that the
opportunity to express one’s opinions (i.e., voice) will significantly increase procedural
fairness perceptions (Lind & Tyler, 1988; Kanfer, Sawyer, Earley & Lind, 1987).
Theories and research of voice and justice reference the work of Thibaut and Walker’s
(1975, 1978) theory of procedure. Their theory differentiates between two types of
control involved in conflict resolution: decision and process control. Decision control
concerns the actual control over a decision being made, or the degree to which one has
control over the outcomes. Process control involves control over information or the
manner in which these procedures are executed. The authors’ theory of procedure was
designed to address all issues of interpersonal conflict (Thibaut & Walker, 1978). Their
model stemmed from research on conflict resolution in courtrooms and perceptions of
justice involving legal disputes with third party decision makers. Thibaut and Walker’s
(1975, 1978) model of control assumes disputants judgments’ of procedural fairness are
based on instrumentality. That is, disputants perceive influence over policies or
proceedings as opportunities to improve their outcomes. According to this model,
individuals want either decision or process control, because they perceive both types of
control as instrumental in influencing their outcomes. Individuals value decision control
because it allows disputants to reject decisions that would be detrimental to their
situation. Process control is valued because it ensures disputants that the decision maker
will receive information that the disputer deems valid or necessary. Other researchers
(e.g. Leventhal, 1980) have developed additional instrumental control models based on Thibaut and Walkers’ original justice research.

Research has continued to evolve and diverged from Thibaut and Walker’s decision and process control. Studies have shown that key concepts of Thibaut and Walker’s theory do not apply to all situations. Specifically, there is evidence that process control will remain important when it is not associated with decision control (Tyler, 1987; Tyler, Rasinski, & Spodick, 1985). This new direction in research has shown that both the physicality and the symbolism of such outcomes are important. Thus, a relational model was proposed by Lind and Tyler (1988) that they refer to as the “group-value model.” The authors propose procedural fairness as a means of informing group members of their status. The group-value model describes a situation in which individuals evaluate a procedure’s repercussion for their groups’ values. That is, group members will evaluate how they are treated by their group for their actions, based on the groups’ values. Then those individuals use how these procedures transpired to estimate their group status or the groups’ perceptions of those individuals.

This conceptualization of the group-value model incorporated Thibaut and Walker’s (1975) control processes, but it focused on antecedents of procedural justice judgments. Additionally, the group-value model highlights that individuals are concerned with long term relationships with policy holders, which was not a concern of previous control process models (Tyler & Lind, 1992). The group-value model differs from previous models by assuming that procedures contain symbolism of one’s group values, and that individuals are highly apprehensive with the procedures themselves and not just
with the outcomes. Thus, procedures that are perceived to be just or fair are those that show full-status, which means the group member has a positive relationship with the group or an authority figure (Tyler & Lind, 1992). Procedures are perceived to be unjust or unfair if they indicate a low-status position, in which a group member has a negative relationship with the group (Tyler & Lind, 1992).

Research based on the group-value model predicted and empirically supported that non-instrumental factors (e.g., non-instrumental voice) will have significant influence on perceptions of procedural justice (Lind et al., 1990; Tyler, 1987). Kanfer et al. (1987) found increased justice perceptions with evaluation procedures when participants expressed post-decision (non-instrumental) voice. In this condition, subjects were informed that a goal was predetermined for them and would not change, although the experimenter was interested in the subject's opinion of the goal. Even after the subject's requests to change the goal were denied and the task completed, subjects reported this condition to be more procedurally just, than those subjects in the no voice condition. In light of this research, it is evident that providing an opportunity to express one’s opinions can increase procedural justice perceptions.

Tyler and Blader (2003) expanded the group-value model in an attempt to focus on attitudes and values of group behavior. Labeled the "group engagement model," Tyler and Blader (2003) sought to further explain why procedural justice facilitates cooperation in relationships, groups, etc. The group engagement model distinguished itself by broadening the perspective of justice and incorporating unique features dealing with values, attitudes, and cooperation. This model suggested that cooperation behaviors occur
in two forms: mandatory and discretionary. As Tyler and Blader (2003) describe, mandatory behaviors are required by or for the group and discretionary behaviors originate in the individual. According to the group engagement model, individual’s attitudes and values influence engagement in cooperative behaviors within one’s group. When one aligns their judgments of identity with the group, they are internally motivated to engage in behaviors that will benefit their group (Tyler & Blader, 2003).

This model shows the importance of perceptions of procedural fairness, group status and group identity. Douthitt and Aiello (2001) investigated employee’s perceptions of fairness to computer monitoring by manipulating voice opportunity. In the high-voice condition, participants were asked for their opinions on how employees work on the task and a supervisor would adjust the task to show the participant their input was influential. In the low-voice condition, participants were not provided an opportunity to express their opinions on the task. The authors’ results indicated that participants in the high-voice condition perceived higher levels of procedural justice than individuals in the low-voice condition. Despite the variation in models, the researchers of voice and justice generally agree that individuals in a high input condition (voice opportunity), would reported higher levels of procedural justice than subjects of the low input condition (no voice opportunity) (e.g., Douthitt & Aiello, 2001).

Investigations of procedural justice on subsequent employee behavior have found significant results tying procedural justice perceptions to employee reactions. Individuals who perceive procedures to be fair or just will engage in more positive behavior, such as prosocial or organizational citizenship behaviors (e.g., Podsakoff et al., 2000; Tepper &
Research on deviant behavior shows that employees report engaging in sabotage behavior when a procedure or policy lacked fairness (Ambrose et al., 2002; Flaherty & Moss, 2007). Specifically, Ambrose et al., (2002) reported individuals who experienced a lack of procedural justice engaged in both forms of sabotage (i.e. restoring equity and retaliation). The authors suggest that both types of sabotage behavior were a result of how individuals interpreted the fairness of a procedure’s structure. When individuals perceived the unfair procedures as harming them or their status, they would engage in retaliation. These studies have provided preliminary support for the idea that positive perceptions of procedural justice and voice opportunity may dissuade individuals from engaging in sabotage behavior. However, as mentioned above, justice researchers do not agree on the make-up of procedural justice. Regardless of opinion, researchers have shown that procedural and interactional justices are closely related (Choen-Charash & Spector, 2001). Therefore, in order to better understand the role of procedural justice, it is also important to investigate interactional justice, especially the relationship among voice, justice, and retaliation.

Interactional Justice

Another form of organizational justice, interactional justice, has been defined as concerns with the fairness of interpersonal communication, or voice. Research on interactional justice indicates that individuals are sensitive to both the type and quality of interpersonal communication (Bies & Moag, 1986). As noted above, interactional justice has begun to emerge as a separate factor in justice research. Bies and Moag (1986) suggest that interactional justice could explain why individuals still experience feelings
of injustice when the procedures and outcomes of their situation are perceived to be fair. That is, the effects of communication during these procedures and the occurrence of the outcomes can affect individual’s fairness perceptions. In two initial studies, Bies and Moag (1986) found support for interactional justice as a separate factor. The authors’ results supported Leventhal’s (1980) model, although four of the six criteria were more concerned with interactional justice than with the procedures involved. In relation to procedural rules, researchers have felt there was a distinction between the fairness of procedures and the communication involved with procedures (Bies & Moag, 1986), which had been previously grouped together by other researchers (Cropanzano & Randall, 1993).

As previously mentioned, there is discord among the various justice researchers concerning the status of interactional justice (Ambrose, 2002). Bies and colleagues suggested that interactional justice is separate from procedural justice, and therefore should be conceptualized as a distinct factor. Others have conceptualized interactional justice as a component of procedural or distributive justice (Cropanzano & Randall, 1993; Tyler & Blader, 2000). However, this disagreement occurs over the type of factor interactional justice is (i.e. a distinct factor or a subset of another justice), and not about its importance. However, there appears to be no disagreement that interactional justice can have significant impact on individuals’ perceptions and behaviors (Ambrose, 2002).

Interestingly, there have been few studies that investigated the unique effects of interactional justice on deviant behaviors (Cohen-Charash & Spector, 2001). Preliminary investigations of sabotage have indicated that the absence of interactional justice may
lead to retaliation against one’s supervisor or employer (Skarlicki & Folger, 1997; Ambrose et al., 2002). Also, Flaherty and Moss (2007) indicate that counterproductive behaviors can be inhibited by perceived respect and openness from one’s supervisor, suggesting that interactional justice could play an important role in deterring employees from acting out against an employer. Skarlicki and Folger (1997) investigated the relationship among organizational justice and organizational retaliation. The authors also suggested that justice was indicative of retaliation behavior. They indicated that interactional justice played an important role in the interaction of both procedural and distributive justice. Specifically, they found that individuals who experience high levels of interactional justice (i.e. respectful treatment from a supervisor), would tolerate a lack of procedural and distributive justice. These findings indicate that perceived fair treatment from one’s supervisor would discourage employees from retaliating against one’s employer. This line of research has begun to show the potential negative behaviors or consequences that are associated with an employee’s justice perceptions. It is necessary to further investigate the role that perceived justice can play on an individual’s subsequent behavior. In the following section, I will briefly review some of the supporting literature for perceptions of organizational justice as antecedents to sabotage behaviors.

Sabotage and Justice

Support for the role of equity theory and distributive justice in sabotage was provided in Greenberg’s (1990) investigation of employee reactions to a temporary salary cut. Employees were assigned to one of three conditions: (a) the high justice condition, in
which employees received a justified explanation for the temporary pay cut; (b) the low justice condition, in which employees received an inadequate explanation for the pay cut; or (c) a control condition, in which employees received no pay cut. The author hypothesized that employees in the high justice condition would be less likely to engage in sabotage behavior than those in the low justice condition. This prediction was formulated on the basis of previous research that has shown that treating employees with respect and providing meaningful explanations will increase perceptions of fairness (e.g. Tyler & Bies, 1990). Greenberg’s (1990) results indicated that individuals who were in the low justice condition were twice as likely to report engaging in restoration equity behavior (i.e. theft), than were those who were in the high justice condition.

Retaliation

As mentioned earlier, the theory of organizational justice has shifted from concentrating primarily on distributive justice to a three-factor model that includes distributive, as well as procedural, and interactional forms of justice. Sabotage researchers (e.g. Folger & Baron, 1996; Folger & Skarlicki, 1998; Ambrose et al., 2002; Flaherty & Moss, 2007) have used organizational justice to explain why sabotage occurs. As the understanding of organizational justice has advanced, so has research on sabotage has advanced, particularly in the investigation of behaviors other than restoration equity. From the development of procedural justice (e.g. Leventhal, 1980; Thibaut & Walker, 1975) and interactional justice (e.g. Bies & Moag, 1986), more research on the fairness of organization procedures, decision-making, and communication has influenced the focus of sabotage research (Colquitt, Conlon, Wesson, Porter, & Ng, 2001). Sabotage
researchers have begun to recognize the relationship between procedural justice and sabotage and the relationship between interactional justice and sabotage.

Support for the relationships between organizational justice and employee retaliation has been provided by Ambrose and colleagues (2001). The authors analyzed self reports from individuals who responded to accounts of something that they were not supposed to do at work, in order to investigate the relationship between sabotage and organizational justice. The authors used three trained raters who read each of the reports and coded them based on four criteria: (1) the cause of sabotage, (2) the target of the saboteur, (3) the actual victim of the sabotage, and (4) the severity of the sabotage. Analyses of the results indicated that the most prevalent cause of sabotage was perceived injustice. Interestingly, Ambrose et al. (2002), investigated the relationship between the type of injustice that occurred and the type of sabotage the individual engaged in. In line with previous research, they showed that when an individual experienced distributive injustice they engaged in restoration equity. Additionally, they found that individuals who experienced interactional injustice were more likely to engage in retaliation rather than in restoration equity. Furthermore, individuals who experienced procedural injustice engaged in both restoration equity and retaliation. These findings imply a varying and unique relationship between procedural and interactional justice and employee retaliation that has not been fully identified. In addition to separating these justices, it is important to understand other factors that could influence the engagement in sabotage behaviors. Therefore, it could be beneficial to investigate the role of individual differences, such as personality.
Organizational research has incorporated measures of personality to further investigate how it can affect employee behaviors and reactions (e.g. Barrick & Mount, 1991; Judge & Ilies, 2002). The most common measurements of personality are based on the Five Factor (or “Big Five”) Model (Goldberg, 1981). The five empirically supported markers are Extraversion, Agreeableness, Conscientiousness, Emotional Stability, and Openness (c.f. Goldberg 1992).

Researchers have begun to investigate the relationship of personality and deviant employee behavior (Skarlicki, Folger, & Tesluk, 1999; Colbert, Mount, Harter, Witt, & Barrick, 2004). These researchers hypothesized and investigated personality characteristics that could influence the engagement in employee deviance. Two traits that are particularly related to employee behavior are conscientiousness and agreeableness. These traits have been theoretically and empirically tied to employee deviance. Agreeableness is the extent to which someone is flexible, soft-hearted, cooperative, and trusting. It has been conceptualized that someone who is high in agreeableness will be more tolerant and less likely to react negatively to a stressful situation (Skarlicki et al., 1999). Therefore, an individual who is low on agreeableness would be more likely to react to a stressful or confrontational situation, because of the inability to deal with that situation in a professional manner. Conscientiousness is found in individuals who are organized, responsible, thorough, and dependable. Conscientious individuals are hard workers who set focused goals, and are more likely to work on a task than individuals who have lower conscientiousness (Mount and Barrick, 1995).
To investigate personality traits of interest, Skarlicki et al. (1999) extended their study on organizational retaliation behaviors (Folger & Skarlicki, 1997) by investigating the potential influence of personality factors on engagement of these behaviors. They hypothesized that negative affectivity and agreeableness would moderate the relationship between fairness perceptions and retaliation behaviors. Using the same design as Skarlicki and Folger (1997), the authors found that when agreeableness, distributive, and interactional justice were low, individuals were more likely to engage in retaliation behaviors. This provides support that agreeableness can influence how individuals react to perceptions of injustice.

A recent meta-analysis by Salgado (2002) investigated for relationships between counterproductive work behavior and the Big Five personality dimensions. Utilizing both U.S. and European field studies, Salgado (2002) found support for dimensions of the Big Five personality factors as predictors of deviant behavior and turnover. The author conceptualized deviant behavior as measures of theft, disciplinary problems, substance abuse, property damage, and organizational rule breaking. Several of these behaviors are considered to be sabotage behaviors (i.e. property damage, theft, etc.). On the basis of previous meta-analyses (e.g. Barrick & Mount, 1991), the author proposed that conscientiousness, emotional stability, and agreeableness would be predictive of deviant behavior. However, Salgado (2002) found that only conscientiousness and agreeableness were valid predictors of deviant behavior.

Research by Colbert et al. (2004) provides support for both conscientiousness and agreeableness influencing the engagement in counterproductive work behaviors (i.e.}
withholding effort). The authors utilized four different samples, each containing different professions, to test their hypotheses of conscientiousness, agreeableness, and emotional stability influencing the engagement in counterproductive work behaviors. Colbert et al. (2004) found that both agreeableness and conscientiousness influenced some form of deviance in all four of their samples. Similar to Salgado (2002), Colbert et al. (2004) did not find support for emotional stability having influence on withholding effort. Thus, it appears the current research indicates conscientiousness and agreeableness may have the most impact on counterproductive work behaviors, including sabotage.

The Present Study

Previous researchers have investigated antecedents or determinants of employee sabotage (Folger & Skarlicki, 1997; Ambrose et al., 2002; Flaherty & Moss, 2007). The majority of sabotage research has investigated only one form of sabotage, restoration equity. Many laboratory and field studies have supported perceptions of inequity and distributive injustice to be related to employee theft and stealing (e.g., Greenberg, 2002). Specifically, research by Greenberg (1990) has shown restoration equity behavior (e.g., stealing) to be the result of perceived inequity (i.e. lack of distributive justice). Other investigations (e.g., Flaherty & Moss, 2007) of organizational justice have suggested that sabotage behavior can be avoided with high levels of respect from one’s supervisor (i.e. interactional justice).

Additionally, there has been some support using self report data for the role positive perceptions of interactional and procedural justice in deterring individuals from engaging in employee retaliation behavior (Ambrose, et al., 2002; Sarlicki & Folger
These researchers suggest that negative perceptions of organizational justice have been a common cause for employee retaliation behavior. These studies have begun initial investigations of employee retaliation behavior using procedural and interactional justice by employing self-report and passive observation. However, these researchers cannot make causal statements about their investigations. In self-report and peer-report, the researchers cannot determine the order of these events. For example, employees could engage in sabotage behaviors for some reason other than organizational justice. However, when presented with a questionnaire about engaging in sabotage behaviors and exposure to different forms of organizational injustice, participants could retrospectively attribute their sabotage behaviors to the exposure of organizational injustice. Therefore, it is necessary to use other methodologies to assess the relationship between organizational justice and sabotage.

McGrath (1982) discussed the issue of a “three-horned dilemma”, in which the various research strategies contain or lack generalizability, precision of control and behavior measurements, and realism of the context. As the previous sabotage authors have indicated (Ambrose, et al., 2002), their studies show a relationship between the two variables, but there exists a lack of control over the measures of both injustice and sabotage. Laboratory experiments have the power to maximize control over measurements of behavior; however, they can lack generalizability and realism of the context (McGrath, 1982). Researchers and scholars have suggested that the combination of self-reports and laboratory experiments can make it possible to increase the generalizability of the findings (Scandura & Williams, 2000), and to make causal
inferences about the direction of the relationship between injustice and sabotage. Based on these suggestions, it is necessary to develop experiments that accurately manipulate organizational justice and objectively measure sabotage behaviors. With this study, I propose to manipulate justice using have more direct measures to investigate individual’s reactions and behaviors.

A relevant issue that arises when studying this type of negative behavior is the availability and opportunity to engage in sabotage. For example, in a work setting there could be countless opportunities to secretively engage in a range of the possible negative behaviors. Conversely, under laboratory constraints (e.g. time, physical setting or ethical concerns), the type of sabotage behavior one could engage in is very limited by the task and environment. As described by McGrath (1982), laboratory experiments can lack realism. In an attempt to create a realistic situation, this experiment utilized a setting to mimic actual work events and provided participants with realistic opportunities to engage in sabotage behaviors.

Another key factor of engaging in sabotage behavior is the belief that the act of sabotage can be conducted in a secretive manner (Crino, 1994). To address this issue, participants in the current study engaged in a task that appears to have consequences, and the participants will perceive they can commit sabotage in a secretive manner. Creating a task that involves these elements should provide realism and the opportunity to engage in sabotage behaviors.

In line with previous research, I proposed that individuals would engage in sabotage behavior as a response to perceptions of an injustice. I further proposed that an
occurrence that lacks procedural or interactional justice would influence individuals to engage in sabotage behaviors.

_Hypothesis 1:_ Individuals in the High Justice condition, who complete the task, will work on the task longer than individuals in the Low Justice conditions.

_Hypothesis 2:_ Individuals in the High Justice condition, who complete the task, will miss fewer boxes than individuals in the Low Justice conditions.

_Hypothesis 3:_ Individuals in the High Justice conditions will be less likely to refuse to complete the task than individuals in the Low Justice conditions.

*Research Question:* Does conscientiousness or agreeableness influence the engagement in sabotage behaviors?
Method

Participants

Participants for this study were 165 undergraduate students who were enrolled in an introductory psychology course at a medium sized mid-western university. Participants signed up for the experiment via a web-based subject pool and received one course credit for participation. Females constituted 54.5 percent of the sample. The average participant was 19.1 (s.d. = 1.83) years old. Respondents’ class rank was predominantly freshman (56.4%), followed by sophomores (26.7%), and other (16.9%).

Design Statement

To investigate the stated hypotheses, a three condition (procedural injustice, interactional injustice, high justice) between-subjects design was used. In this design, high procedural justice and high interactional justice were collapsed into one condition (i.e. high justice). This method was utilized because it was not meaningful to this study to create separate manipulations to induce perceptions of high levels of justice. Therefore, a fully crossed design was not utilized. For participants in the low procedural justice condition, they experienced low justice, in which the procedures were unfair. In the low interactional justice condition, participants experienced low justice, in which the “supervisor” treated the participants rudely and was disrespectful. In the high justice condition, the procedures of the experiment were fair and the “supervisor” treated participants in a respectful and polite manner.

To measure the dependent variable, potential sabotage behaviors were based on the Skarlicki and Folger’s (1997) research on organizational retaliation behavior. Relative
sabotage behaviors to investigate could include disobeying a supervisor’s instructions, taking an extended break, intentionally working inefficently, and quitting work early. Using this list of behaviors, time spent working on the task, task performance, quitting the task, supervisor rating, and task procedures were operationalized as the measures of sabotage.

Task

Experimental sessions were conducted with one supervisor (i.e. experimenter) and several participants, with each participant working individually on a computer task. Upon signing up for the experiment, participants were block randomized to conditions. That is, the participants in each of the groupings were all experiencing the same condition and the presentation of the conditions were unsystematic. Participants were instructed that the task involves working as an inspector at a toy factory. Their specific task as an inspector was to remove boxes of toys from the conveyor belt that do not meet the company’s quality standards. The toy inspector task involved participants observing moving boxes on a computer screen and left-clicking the mouse to remove them. The set up of the display contained three conveyor belts that moved boxes horizontally across the screen. During the task, boxes with different labels moved on the conveyor belt from right to left. The faulty boxes were marked by a symbol that is different from the other boxes. For example, faulty boxes were marked with an “x”, while acceptable boxes were marked with a square, triangle or circle (see Figure 1).
Figure 1. Toy shipping inspector screen-shot.

Using this type of computer task allowed for several different ways of recording the participant’s behaviors. This computer task gave individuals control over their work environment, while recording their choices. The information that the computer collected was primarily how the measures of sabotage were assessed. In the task, participants were able to take a break from working at anytime he or she chose by clicking the “Take a Break” button. Additionally, participants had the option to quit working at anytime by clicking on the “Quit” button. Furthermore, participants were given control over the speed at which the boxes moved across the screen. There was an option on the screen that allowed participants to speed up or slow down the conveyor belts. In the fastest setting, it allowed participants to complete the task quickly; however the rate was so rapid that they...
could not actually remove boxes. This is important, because completing the task was a matter of “inspecting” a certain number of boxes and not how long it would take. Finally, the computer program recorded how long a participant worked for, the speed he or she set the conveyor belt at, and how many faulty boxes were removed.

Measures

*Personality.* Agreeableness and conscientiousness were measured using items from the International Personality Items Pool (http://ipip.org/). Ten items were used to measure Agreeableness ($\alpha = .82$) and ten items were used to measure conscientiousness ($\alpha = .79$). Each of the items were asked using a 5-point scale with anchors of 1 = Very Inaccurate to 5 = Very Accurate. The reliabilities for these scales in the present study were $\alpha = .80$ for agreeableness and $\alpha = .80$ for conscientiousness.

*Procedural justice.* To measure procedural justice, four items ($\alpha = .86$) were taken from Colquitt (2001). The scale developed by Colquitt (2001) utilizes items form Thibaut and Walker (1975) and Leventhal (1980). These questions determine the degree to which procedures are consistent, ethical, and free from bias. One sample question is “Have the procedures upheld ethical and moral standards”. Each of these items were asked using a 5-point scale with anchors of 1 = to a lesser extend and 5 = to a greater extent (Colquitt, 2001). The reliability of this scale in the present study was $\alpha = .83$.

*Interactional justice.* To measure interactional justice, eight items ($\alpha = .90$) were taken from Colquitt (2001). The items from this scale are congruent with Bies and Moag (1986) and their criteria of respect and propriety. For example “The experimenter has treated you in a polite manner”. Each of these items were asked using a 5-point scale with
anchors of 1 = to a lesser extend and 5 = to a greater extent (Colquitt, 2001). These items were presented as an opportunity for participants to rate how their supervisor treated them. The reliability of this scale in the present study was $\alpha = .75$

_Sabotage._ A measure of sabotage was operationalized using multiple methods and measures of the desired behavior. It is important to note that these behaviors represent actions that are purposefully committed and are not due to inability or unfamiliarity with the computer program. Understanding of the task was insured by requiring participants to complete a training phase. Using the list of potential sabotage behaviors presented by Skarlicki and Folger (1997), sabotage was operationalized by three measures; performance on the task, the amount of time spent working on the task, and if the participant quit working on the task. Performance was measured by the number of correctly removed boxes. Time spent working on the task was measured by the computer program, which recorded when the participant started the task and when he or she finished. Quitting the task was recorded if the participant selected the quit button at anytime during the task.

_Demographic information._ At the end of the session, participants completed a questionnaire that included items for age, race, gender, college status, grade point average, and major.

_Follow-up questionnaire._ In an attempt to better understand participant cognitions during the task, several follow-up questions were asked to aid in the understanding of how people react to unjust situations. Participants were asked to assess the influence of the supervisor message across the three conditions. This item was phrased as, “Did your
supervisor’s message influence you to want to quit this task”. An analysis of variance (ANOVA) was conducted to detect differences among the three conditions for this item. This ANOVA was significant, \( F(2, 162) = 3.48, p < .05 \). A Fisher’s LSD post-hoc test revealed that participants in the low procedural and low interactional justice conditions reported the supervisor message as having greater influence in making participants want to quit than in the high justice condition (MD = .60, \( p < .05 \) and MD = .58, \( p < .05 \), respectively). This indicates that participants were cognizant of the supervisor message and that the messages were effective in manipulating their intended purpose (i.e. creating either a fair or unfair situation).

Other analyses were conducted to detect differences among the conditions on perceptions of task difficulty and task boringness. For each item, an ANOVA was conducted to determine if participants in the three conditions reported significant differences. For each of the ANOVAs, participants did not significantly differ on perceived task difficulty or perceptions of the task as boring.

*Procedure*

At the beginning of each experimental session, participants were asked to read over and sign a consent form. Once participants completed the consent form, they were stationed individually at a computer console. The computer had a welcome screen that instructed them to click “start” to begin the experiment. Before the participants were allowed to begin the task, the experimenter briefly described the nature of the task and the purpose of the task. Participants were led to believe that the experimenter had designed a training program that needed to be tested before implementation in actual
organizations. Once the participants understood the purpose of the task and any questions were resolved, they could begin working on the task.

The participant first answered a short questionnaire that contained the personality items. Specifically this questionnaire was used to determine agreeableness and conscientiousness scores. Following the short personality questionnaire, the screen displayed a message informing the participant that they were going to being working on a task called Toy Shipping Inspector. Once a participant selected the continue option, a set of instructions were displayed to explain what they would be doing during the experiment (see Appendix B). The instructions informed participants about the company that they were working for, as well as the components of the work task. Each page of the instructions was on a time delay, so that participants were shown an instruction page for a minimum of ten seconds. This delay was implemented to discourage participants from bypassing the instructions of the task. After each page of the instructions was presented, participants were required to complete a practice version of the task. This practice round would not allow participants to continue to the actual task unless they successfully removed all of the target boxes. This practice round was implemented to ensure that participants had read the instructions and understood that they must click to remove the boxes. Once the practice round was completed, participants began working on the actual task.

After 120 seconds into the trial, one of three manipulations of justice occurred. Each manipulation utilized a message on the computer screen that was displayed while participants were working on the task. That is, the task stopped and the participants
“supervisor” had a message for the participant to read. This study utilized these messages to manipulate procedural and interactional justice. After reading the message, participants were instructed to return to work. Once participants had completed the work task, they were presented with another questionnaire. This questionnaire contained the manipulation checks and demographic information. After completing this questionnaire, participants exited the experiment room and were debriefed by the experimenter. During the debrief, participants were informed of the true purpose of the study and that the messages were preprogrammed. Once any issues were resolved, participants were thanked and allowed to leave.

**Manipulations**

Contained in the supervisor message was an update for the participant. This update contained the same information for each condition, with the exception of the specific manipulation of that condition. In all conditions, the statement told participants that more boxes need to be inspected. Then, based on condition, the statement contained one of three additional pieces of information to manipulate a form of justice (see Appendix C). To manipulate interactional justice, the manner in which the supervisor told the participant he or she needed to inspect more boxes was manipulated. Procedural justice was manipulated by varying the decision making process the supervisor used to have the participant do more boxes. Finally, in the high justice condition, the supervisor message contained fair procedures and was conveyed in a polite and respectful manner.
Results

Manipulation Checks

I hypothesized that there would be differences among the conditions when participants were asked to state their perceptions of procedural and interactional justice during the work task. I speculated that participants who experienced high procedural justice would perceive the decision making process to be more fair than would participants who experienced low procedural justice. Also, those participants who experienced high interactional justice were expected to perceive the interaction and communications with the supervisor (experimenter) to be more respectful or fair than those participants who experienced low interactional justice.

To analyze these manipulation checks, a multivariate analyses of variance (MANOVA) was conducted to compare the three conditions on the dependent variables of procedural justice ratings and interactional justice ratings. A MANOVA is appropriate when the data contains an independent variable with three or more levels, and multiple, highly correlated, dependent variables. The means, standard deviations, correlations and internal consistency for all variables of interest are presented in Table 1.

The overall MANOVA for the manipulations checks was significant, F(4, 324) = 2.45, p <.05. The model did show support for differences between the low justice conditions and the high justice condition on the interactional justice rating, F(2, 162) = 2.20, p <.05. However, contrary to expectation, the high justice condition, low procedural justice, and low interactional justice conditions did not significantly differ on procedural justice ratings, F(2, 162) = 1.65, p=.29. There was no significant difference
among the conditions for the fairness rating of the procedures used to make decisions during the task. Table 2 displays the means and standard deviations for the interactional justice ratings, procedural justice ratings, and the other variables of interest for each condition.

Table 1

Overall Means, Standard Deviations, Pearson Correlation Coefficients and Internal Consistency

<table>
<thead>
<tr>
<th>Variables</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Time In Task</td>
<td>1294.92</td>
<td>315.42</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 X boxes</td>
<td>213.50</td>
<td>73.95</td>
<td>.99*</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Interactional Justice</td>
<td>4.55</td>
<td>0.50</td>
<td>.14</td>
<td>.15*</td>
<td>(.75)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Procedural Justice</td>
<td>3.60</td>
<td>0.81</td>
<td>.19*</td>
<td>.19*</td>
<td>.24**</td>
<td>(.83)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Quit</td>
<td>0.02</td>
<td>0.13</td>
<td>-.28*</td>
<td>-.20*</td>
<td>.05</td>
<td>-.05</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Agreeableness</td>
<td>41.42</td>
<td>5.07</td>
<td>.12</td>
<td>.14</td>
<td>.23**</td>
<td>.25**</td>
<td>.03</td>
<td>(.80)</td>
<td></td>
</tr>
<tr>
<td>7 Conscientiousness</td>
<td>37.96</td>
<td>5.52</td>
<td>.16*</td>
<td>.14</td>
<td>.06</td>
<td>.13</td>
<td>-.08</td>
<td>.04</td>
<td>(.80)</td>
</tr>
</tbody>
</table>

*Note. N = 165. **p < .01, *p < .05.
Table 2

*Condition Means and Standard Deviations*

<table>
<thead>
<tr>
<th>Variables</th>
<th>Low Interactional Justice</th>
<th>Low Procedural Justice</th>
<th>High Justice</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>1. Time In Task</td>
<td>1247.48</td>
<td>336.43</td>
<td>1239.41</td>
</tr>
<tr>
<td>2. X boxes</td>
<td>203.09</td>
<td>76.48</td>
<td>200.98</td>
</tr>
<tr>
<td>3. Interactional Justice</td>
<td>4.46</td>
<td>0.54</td>
<td>4.49</td>
</tr>
<tr>
<td>4. Procedural Justice</td>
<td>3.50</td>
<td>0.91</td>
<td>3.58</td>
</tr>
<tr>
<td>5. Quit</td>
<td>0.02</td>
<td>0.13</td>
<td>0.02</td>
</tr>
<tr>
<td>6. Agreeableness</td>
<td>40.67</td>
<td>5.24</td>
<td>40.66</td>
</tr>
<tr>
<td>7. Conscientiousness</td>
<td>37.91</td>
<td>4.96</td>
<td>38.15</td>
</tr>
</tbody>
</table>

*Note. N = 165. **p < .01, *p < .05.*

A closer inspection of Table 2 reveals that the low procedural and low interactional justice conditions have a lower mean rating for procedural justice than the high justice condition. However, these means were not significantly different.

To further investigate the differences in interactional justice ratings among the conditions, three Fisher’s LSD comparisons were conducted. The first comparison tested for differences between the high justice and low interactional justice conditions for differences in how participants rated the supervisor. As speculated, participants in the high justice condition rated the supervisor higher than did the participants in the low interactional justice condition (MD = .27, p < .01). The second comparison tested for differences between the high justice condition and the low procedural justice condition. Again, participants in the high justice condition gave the supervisor higher ratings than
participants in the low procedural justice condition (MD = .24, p < .05). However, participants in the low procedural and low interactional justice conditions did not significantly differ on supervisor ratings (MD = .03, P = .74).

**Hypothesis 1 and 2**

Hypothesis 1 stated that participants in the high justice condition, who complete the task, will work longer on the task than participants in the low justice conditions. Additionally, hypothesis 2 stated that participants in the high justice condition, who completed the task, would miss fewer boxes than participants in the low justice conditions. However, a closer inspection of Table 1 shows that time in task and the number of boxes removed are almost perfectly correlated (r = .99, p < .01). Such an extremely high correlation indicates these measures are capturing the same variability. Therefore, I decided to utilize the number of boxes correctly removed as the measure of sabotage. With this change, the most appropriate statistic for the test of hypothesis 2 is an analysis of variance (ANOVA).

To conduct these analyses, all participants who quit during the task were excluded (n = 3), resulting in a sample of 162. As hypothesized, there was a significant ANOVA for the number of boxes removed among the conditions (F(2, 159) = 4.61, p < .01).

**Hypothesis 2 Planned Comparison**

To further investigate the relationships from hypotheses 2, three Fisher’s LSD planned comparisons were performed. These comparisons tested for differences among the participants on the performance criterion for hypothesis 2. That is, these comparisons tested how many boxes participants in the three conditions correctly removed. I
hypothesized that participants in the high justice condition would remove more boxes than either the participants in the low procedural or the low interactional justice conditions. As expected, the first and second comparisons show that participants in the high justice condition removed significantly more correct boxes than did the participants in both the low procedural justice condition (MD = 40.48, p < .01) and the low interactional justice condition (MD = 38.37, p < .01). For the third comparison, I speculated that participants in the low procedural and low interactional justice conditions would not differ on the number of boxes removed. In fact, participants in the low procedural and low interactional justice conditions did not significantly differ on the number of correctly removed boxes (MD = 2.10, p = .88).

**Hypothesis 3**

For this hypothesis, I predicted that participants in the high justice condition would be less likely to refuse to complete the task than would participants in the low justice conditions. This was operationalized by whether or not participants selected the quit button during any point in the work task. A Logistic Regression was conducted to test the impact of participant condition on the binary dependent variable Quit. However, there were only three participants, one in each condition, in the study who selected the quit option. With such a low frequency and random quitting across the conditions, the results of the Logistic regression were not significant ($G^2 = .03$, p > .05).

**Research Question**

To test the research question that conscientiousness or agreeableness influenced the engagement in sabotage behaviors, I utilized a hierarchical multiple regression. In this
procedure, I controlled for condition by entering it into the first step. In the second step I entered agreeableness and conscientiousness. In the third step I entered the agreeableness by conscientiousness interaction. As seen in table 3, these regressions were not significant, indicating that neither agreeableness nor conscientiousness were significant predictors of sabotage behavior.

Table 3

<table>
<thead>
<tr>
<th>Results of Hierarchical Regression Analysis Predicting Sabotage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variables</td>
</tr>
<tr>
<td>-----------</td>
</tr>
<tr>
<td>Step 1</td>
</tr>
<tr>
<td>Dummy IJ</td>
</tr>
<tr>
<td>Dummy PJ</td>
</tr>
<tr>
<td>Step 2</td>
</tr>
<tr>
<td>Agreeableness</td>
</tr>
<tr>
<td>Conscientiousness</td>
</tr>
<tr>
<td>Step 3</td>
</tr>
<tr>
<td>Agreeableness x Conscientiousness</td>
</tr>
</tbody>
</table>

*Note. N = 165. **p < .01, *p < .05.*
Discussion

The purpose of this study was to investigate the relationships between organizational justice and the employee retaliation form of counterproductive work behavior. Specifically, I tested the occurrence of sabotage behaviors by manipulating procedural and interactional justice. The results of this study partially supported the proposed hypotheses. Participants in the high justice condition did work on the task longer and removed more boxes in a Toy Shipping Inspector task, than did those participants in the low procedural or low interactional justice conditions. Also, participants in the high justice condition were more likely to complete a task that could be considered boring and mundane, than were participants in either of the low justice conditions. The findings of this study provide some information about the role of perceived organizational justice in job performance. However, as discussed below, there are still issues to be dealt with on this topic.

Retaliatory Sabotage and Organizational Justice

The primary objective of this study was to test perceptions of injustice influence employee’s engagement in sabotage behaviors. Using organizational justice as an antecedent to negative work behaviors has provided fruitful research on determining why individuals engage in these behaviors (e.g. Robinson & Bennett, 1997). Organizational justice is conceptualized as the perceived fairness of organizational occurrences and situations. In this approach, individuals formulate perceptions of situations, outcomes, or procedures in their environment. Then, based on these perceptions, individuals choose some course of action. When applied to deviant behavior research, negative perceptions
of organizational occurrences can lead to negative thoughts or behaviors. For example, if an employee receives a pay cut that is given to no one else (i.e., a potential act of distributive injustice), he or she could perceive this outcome negatively (form a perception), and subsequently engage in counterproductive work behavior (CWB), such as leaving work early everyday without permission (Greenberg, 1990).

More specifically, sabotage researchers have provided initial support for organizational justice as an antecedent to a more specific form of CWBs, sabotage behaviors (e.g. Ambrose et al., 2002). There have been several experimental studies of restoration equity sabotage behaviors. Restoration equity studies generally involve some form of unfair compensation or unfair distribution of rewards and a subsequent measure of theft. Despite several investigations of this nature, there have been no experimental studies of retaliatory sabotage, and this has limited our understanding of the organizational justice and sabotage relationship. Another limitation has been that even research on retaliation has utilized only self-report or peer-report methodologies. In the current study it was possible to individually manipulate procedural and interactional justice in a more controlled setting. Also, with this methodology and design, multiple objective measures of sabotage were utilized, potentially creating more accurate sources of information.

The nature of this experimental methodology and design allows for causal statements to be drawn. In this experiment, it was possible to control the order in which the variables were presented and their frequency. In this design, participants were first exposed to the just or unjust situation and then provided the opportunity to engage in
sabotage behaviors. Therefore, it is possible to support the conclusion that the manipulation of injustice influenced participants to engage in sabotage behaviors in this situation. The capability of this design is to support such a causal statement, extends and exemplifies what other researchers have found.

This study also augments previous research by controlling the dynamic nature of organizational justice and limiting this variable to one occurrence. This addresses another limitation of the self-report sabotage research, in which other studies cannot identify if the engagement in sabotage or other CWBs is the result of one type of organizational injustice. Additionally, those researchers cannot clarify if the engagement of these behaviors is the result of one occurrence of injustice or multiple occurrences at one time, or multiple occurrences over time. Within the current study, it was possible to control these factors, and it was found that one occurrence of organizational injustice was strong enough to influence individuals to engage in sabotage behaviors.

**Organization Justice and Supervisor Trust**

As for the different forms of justice (procedural and interactional), a significant ANOVA indicated differences for the measure of interactional justice, but not for the procedural justice measure. These results for the low interactional justice measure are supportive of group-value model and other interpersonal theories (Lind & Tyler, 1988; Cook & Wall, 1980). The group-values model and research on trust could explain why participants in the Low Procedural Justice condition reported lower supervisor ratings than did individuals in the High Justice condition. In the group-value model, group members are concerned about long term relationships with other group members or
policy holders (Lind & Tyler, 1988). In the current experiment, participants were under the assumption that the supervisor had the final decision over the procedures of the task. Therefore, participants could have perceived the supervisor as a group member, experienced an injustice from this group member and reported that they could not trust this supervisor because they were mistreated. Other research and literature on supervisor and organizational trust could also explain these findings. For example, Cook and Wall (1980) describe trust between individuals and groups within an organization as “a highly important ingredient in the long-term stability of the organization and the well-being of its members” (p. 39). Tan and Tan (2000) describe key factors that influence trust in supervisors and organizations. These factors include credentials, job performance, perceived skills, competence, benevolence and integrity. Specifically, those authors consider a supervisor to have integrity if “he or she is perceived to be consistent and credible, with a strong sense of justice regarding actions that are congruent with words” (p. 244). Applying these theories to the current results would suggest participants perceived the supervisor to be unfair, but the manipulations of the procedures were not salient enough. That is, the message that manipulated procedural justice was more effective at altering perceptions of the supervisor than altering perceptions of the procedures used to make decisions about the work load of the task.

Despite the findings of past research, a model with personality failed to achieve significance. These results differ from other research (e.g. Skarlicki et al., 1999), which found significant effects for agreeableness and conscientiousness. Additionally, Colbert and colleagues (2004) found employees who were conscientious and agreeable were less
likely to engage in deviant work behaviors. The findings of the current study could be attributed to one of the limitations of using this research methodology. The nature of the “work setting” implemented in this program may not have the same conditions as an actual work setting. Therefore, personality could be a factor that is only salient when employees are continuously (e.g., daily, over a period of time) forming justice perceptions and are presented with multiple opportunities to engage in sabotage behaviors. An empirical question to test is the role of personality in the engagement of sabotage behaviors, when exposure to antecedents (e.g. organizational justice) varies. Evaluation of the current literature would suggest personality could play a role in the engagement of sabotage behaviors under prolonged exposure to antecedents and opportunities to engage in such behavior. However, the results of this study indicate that under restricted conditions, (i.e., one occurrence of an antecedent to sabotage), personality does not appear to play a critical role in the engagement of sabotage behaviors.

There were some issues with testing Hypothesis 3, which stated that participants in the high justice condition would be less likely to quit working on the task than participants in the low justice conditions. This was implemented into the program with a button on the task-screen labeled “Quit”. As noted before, with such low frequency (N=3), it was not possible to fully test if a single manipulation of injustice would cause participants to quit working on the task. Despite this limitation, the amount of time participants in the various conditions spent working on the task could provide some partial support for this hypothesis. As mentioned above, participants in the High Justice
condition worked significantly longer on the task than did individuals in either of the low justice conditions. Even though participants did not select the option to quit, it was apparent from the significant results of Hypothesis 1 that participants in the low justice conditions were spending a significantly less amount of time working on the task, than participants in the high justice condition.

I offer two potential reasons for the failure to find variability in the decision to quit that are issues involved with using undergraduate research participants. First, participants for this study were enrolled in a psychology undergraduate course and were participating in this experiment for course credit. Even though at the beginning of the experiment, participants were ensured there would be no penalty for selecting the option to quit, I speculate that participants were still concerned that they would not receive participation credit if they selected the quit option. Second, participants may have participated in other studies that did not have a salient quit option. I would speculate that many participants simply worked until the end of the task because they did not realize a quit option was available to them in this experiment.

Future Research

For this study, a program was created to place participants in a work environment, which allowed for the manipulation of interactional and procedural justice. The advancement of technology and computer software has made it is possible to record every aspect of how a user interacts with a computer program. That is, with the Toy Shipping Inspector (TSI) program, it was possible to collect various sources of potential sabotage behavior.
This program is a tool that can be used to assess other potential antecedents to the engagement of sabotage behaviors. This program could be modified to provide participants with different manipulations to gauge their reactions. This program allowed for controlled and calculated “human” interaction with participants through supervisor messages. With this implementation, the participant received some form of message, which was used to manipulate the variable of interest (i.e. organizational justice). This same protocol could be implemented with other potential antecedents of sabotage.

Another future direction for research in this area would be to test distributive justice using this program. Future research could address the current study’s loss of information on how participants in this design would react to manipulations of distributive justice. If the financial funding is available, future research could implement a formal reward system and attempt to manipulate distributive justice perceptions by altering the allocation of rewards. However, using the current design, I speculate that the potential rewards structure would not be strong enough to have an impact on participants in such a short period of time. To test this hypothesis, it would be necessary to create a formal reward structure in this design that would allow for further investigation of the effects of distributive justice on sabotage behaviors.

Although this study provided a new methodology for assessing sabotage, it is not without limitations. It must be noted that the operationalization of sabotage was severely constrained in this design. However, I could create a situation in which participants could engage in deviant behaviors such as sabotage, and I could collect information that would allow for measures of this behavior. In this sense, the current study was capable of
achieving these goals. However, in doing so, the definition of sabotage must be taken into consideration. Sabotage is purposeful behavior that is intended to damage or disrupt organizational operations (Crino, 1994). In this study, the operationalization of sabotage was modeled from this definition and derived from the list of potential sabotage behaviors created by Skarlicki and Folger (1997). Despite this procedure, it would not be possible, through IRB restrictions or the researcher’s moral obligations, to encourage individuals to engage in actual and potentially illegal sabotage behaviors. Therefore, in this design, it was not possible to capture every sabotage behavior in existence. However, it was possible to allow participants to engage in several forms of sabotage behavior.

**Conclusions**

This study provides an initial attempt to experimentally control occurrences of procedural and interactional justice to investigate their respective roles in the engagement of sabotage behaviors. I found that individuals exposed to either procedural or interactional injustice were more likely to engage in sabotage behaviors than those who were exposed to fair procedures and interactions. Specifically, I found that participants in a procedurally fair condition, with fair treatment from their supervisor, would work longer on and perform better on a trivial work task than would participants who were exposed to unfair procedures or received unfair supervisor treatment. This illustrates the role organizational justice can play in understanding employee behavior. When employees perceive they have been mistreated or injustice has been enacted upon them, some may engage in some form of negative action. Therefore, organizations and management should take into consideration potential employee reactions when
management is interacting with employees and implementing procedures that could be perceived by employees as unjust. Failure to make these considerations could influence employees to engage in CWBs, including sabotage behaviors.
References


Appendix A: Skarlicki and Folger’s (1997) Sabotage Behaviors

On purpose, damaged equipment or work process

Took supplies home without permission

Wasted company materials

Called in sick when not ill

Spoke poorly about the company to others

Refused to work weekends or overtime when asked

Left a mess unnecessarily (did not clean up)

Disobeyed a supervisor's instructions

"Talked back" to his or her boss

Gossiped about his or her boss

Spread rumors about coworkers

Gave a coworker a "silent treatment"

Failed to give coworker required information

 Tried to look busy while wasting time

Took an extended coffee or lunch break

Intentionally worked slower

Spent time on personal matters while at work
Appendix B: Toy Shipping Instructor Instructions

Page 1: Welcome to Eco Toyz Inc. Here at Eco Toyz it is our goal to make, distribute and sell the finest quality toys and games with a continued commitment to the Earth and the Environment. We have developed a tracking machine that indicates if a box of toys contains any harmful chemicals. This machine automatically generates labels on our packages to indicate if it meets official standards. Today, you are being trained as a Toy Shipping Inspector. Your job as a Toy Shipping Inspector is to track and remove certain suspicious boxes of toys as they proceed down a series of factory lines. As the inspector, it is your job to remove boxes that do not meet official standards. Click the “next” button to continue.

Page 2: The boxes of toys have already been marked for you by our Chemical Detection Scanner (CDS). The boxes will start on the right side of the screen labeled “packing” and will progress to the left side of the screen labeled “shipping”. The CDS will label a box with an X if it does not meet official standards and needs to be removed from the factory line. A box marked with a circle, triangle, or square are boxes that do meet company standards and do not need to be removed. Click the “next” button to continue.

Page 3: The number of boxes that you need to process is displayed at the top of the screen. Once a box moves from packing to shipping it will be recorded and the total number of boxes to inspect will be reduced. Once this number researches zero, you will be done working. Click the “next” button to continue.
Page 4: Because you are responsible for inspecting all of the boxes for this particular part of the factory line, you will be able to control the rate at which boxes pass down the conveyor belts. The dial in the lower right hand corner of the screen allows you to increase the speed at which the boxes move down the conveyor belt. This will allow you to process boxes faster or slower. Click the “next” button to continue.

Page 5: As the inspector, you have the option to take a break or stop working at any time you choose. If you would like to take a break from inspecting boxes to check your email click the “Take a Break” button. Additionally, if you do not want to do this job you can click the “Quit” button to end the task. There will be no penalty if you decide to quit. However, if you do quit this will disrupt the training process and make it difficult for the supervisor to collect data, and make him run more trainees. Click the “Next” button to continue.

Page 6: Now you are going to do a practice trial to make sure you see how the CDS labels boxes and what exactly is required of a Toy Shipping Inspector. Once you click the “Practice” button the boxes will move across the conveyors belts from right to left. When you see a box marked with an X, left-click the mouse over top of that box to remove it from the conveyor belt. This practice trial will have ten boxes and three will be marked with X’s. Once the practice trial ends you will be prompted to begin working for real. Click the “Practice” button to continue.

Page 7: Now that you have seen a sample of what you will be doing you should be ready for the real thing. If you feel you do not understand this task or what you are
suppose to do, please ask the experimenter for further explanation. Remember, you will use the dial to adjust the speed of the boxes and you have the options to take a break or quit working without receiving a penalty. Click the “Go to Work” button to begin working for real.
Appendix C: Supervisor Messages

Specifically, in the low procedural justice condition, the supervisor message said:

Hey.

I need you to inspect more boxes than originally planned. The standard procedure is to have a trainee complete 500 boxes. However, some other people did not show up, so you are going to process twice as many boxes as other trainees. Because you showed up for training today, you are going to process 1,000 boxes. Click the “Return” button to continue working.

In the low interactional justice condition, the supervisor statement said:

Hey!

Look, you need to inspect more boxes. I usually only have trainees process 500 boxes, but I am going to make you process more than everyone else. You are going to process 1,000 boxes. At this point, you should understand that you will be doing more boxes. I would like to think that someone at your level would notice the flashing numbers on the screen, but I better be clear. THERE WILL BE 1,000 BOXES INSTEAD OF 500. Now click the “Return” button and go back to work.

In the high justice condition, the procedures were consistent and the supervisor was be polite and respectful by saying:

Hello.

At this point in the training program we will start phase 2. For phase 2, all trainees have to process 1,000 boxes. You will notice that the display of the number of boxes to
complete has increased and this is standard procedure for this training system. Please click the “Return” button to continue working.