7-1-2014

Organizational Interventions for Restoring Justice in the Workplace

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ORGANIZATIONAL INTERVENTIONS FOR RESTORING JUSTICE IN THE WORKPLACE

by

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A DISSERTATION

Submitted to the Graduate School of the

UNIVERSITY OF MISSOURI - ST. LOUIS

In Partial Fulfillment of the Requirements for the Degree

DOCTOR OF PHILOSOPHY

in

PSYCHOLOGY

with an emphasis in Industrial and Organizational

June 2014

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Acknowledgments

I would like to thank the people who have helped me throughout graduate school:

- My advisor, Dr. Stephanie Merritt, whose advice and patient guidance made a difficult process easier and so rewarding.

- My committee members, Dr. Therese Macan, Dr. James Breaugh, and Dr. Milton Blood- your feedback was invaluable and this dissertation is better for it.

- All the I/O faculty members who have so generously shared their time and knowledge over the years.

- My cohort members, Graham and Angela- thank you for your support, advice, and pushing me to work harder. I remember how scary it was starting graduate school in a new city and your friendship helped make St. Louis feel like home. I could not have asked for better people with whom to share this experience.

- Kim, David, AJ, and Maria, who encouraged me and commiserated with me. This process was hard work, but you provided so much fun and laughter along the way.

- Melody, who always had time to lend an ear and crack a joke- thank you for your loyalty and friendship all these years, it means the world to me.

- Gus and Rex, for their company, their unconditional love, and their furriness.

- The Lai family, who have been so kind in opening their hearts to me and welcoming me into their family.

- Andrew and Andrea, whose youthful joy never fails to me make smile. You remind me of all the wonderful things yet to come and how much potential lies within each of us.

- My parents, whose hard work and sacrifices over the years have given me so many wonderful opportunities. Thank you for instilling in me the value of a good education and teaching me the importance of hard work through word and by example. I am so grateful for your love and support both in school and in life.

- James, whose unwavering faith in me has been a constant through all the different stages of our lives. We've been through so much together and I am so excited to see what the future holds.

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Abstract

This study examined the impact of organizational interventions in the aftermath of a workplace injustice. Using restorative justice theory, I explored how four different interventions may differentially impact a victim's levels of forgiveness, reconciliation, revenge motivation, and avoidance motivation. It was found that not acknowledging an injustice had taken place could lead to increased revenge motivation or avoidance behaviors, which could be potentially counterproductive in a work environment. On the other hand, results indicated that an important element of minimizing undesirable responses and increasing the potential for positive responses could be extending a sincere apology for the transgression. Forgiveness was found to be associated with increased justice recovery. Justice recovery, in turn, was associated with heightened organizational satisfaction. Individual difference characteristics did not demonstrate any significant relationships with forgiveness, reconciliation, revenge motivation, or avoidance motivation. In general, results suggest that justice recovery is possible in certain situations. Practical implications and recommendations for future research are also discussed.

Organizational Interventions for Restoring Justice in the Workplace

The study of organizational justice, which deals with the role of fairness in the workplace, has proliferated through the years. Early justice studies focused primarily on the fairness of outcome distributions or allocations and the procedures used to determine those outcome distributions (Colquitt, Conlon, Wesson, Porter, & Ng, 2001; Leventhal, Karuza & Fry, 1980). Despite the plethora of justice literature, there has been noticeably less attention devoted to how organizations should handle a situation in which an injustice has already occurred. However, a recent call for research on restorative justice, which focuses on how healing occurs following an injustice, has brought this issue to the forefront (Goodstein & Aquino, 2010).

The goal of the present study is to examine a model of restorative justice that highlights the actions an organization can take after an unfair event occurs. The possibility of recovering justice perceptions is important because although both research and practice acknowledge the impact of organizational fairness (Colquitt et al., 2001), there is less information on if and how organizations can make amends after injustice has occurred.

Despite the abundance of literature highlighting the importance of maintaining fairness in the workplace, individuals still do experience unfairness (Barclay & Skarlicki, 2009). Bezrukova, Spell, and Perry (2010) recently pointed out the link between injustice and psychological distress, which can manifest into various mental health issues that are estimated to cost U.S. businesses $193 billion each year. While not all victims of workplace injustice suffer mental health issues, injustice can lead to negative consequences such as desire for revenge, counterproductive work behaviors, and turnover

(Tripp & Bies, 2010). Given the seriousness of these responses to injustice, it becomes important to explore what organizations can do to mitigate the damage after an injustice has occurred.

I will begin by providing an overview of the relevant justice literature, which will focus heavily on the concept of restorative justice. I will then discuss potential victim responses to injustice (Aquino, Tripp, & Bies, 2006). Four organizational interventions are presented, followed by an examination of how these interventions are hypothesized to influence the victim's response to injustice. I will also explore the role of individual differences in determining such responses. I discuss the idea of justice recovery, how it relates to the restorative justice theory, and how forgiveness, reconciliation, revenge motivation, and avoidance motivation relate to justice recovery. Finally, I explore how justice recovery impacts positive organizational outcomes; specifically, organizational satisfaction.

Organizational Justice

The broad concept of organizational justice focuses on the role of fairness in the workplace (Greenberg, 1990). Research has established that there are four related but distinct types of justice: distributive (concerned with the fairness of the outcomes), procedural (fairness of the procedures used to make decisions), interpersonal (treatment people receive), and informational justice (explanations that are provided) (Holtz & Harold, 2009; Colquitt, Conlon, Wesson, Porter, & Ng, 2001; Greenberg, 1990). High levels of these types of justice have been linked to positive outcomes (e.g. organizational commitment, job satisfaction, organizational citizenship behaviors) and low levels of justice are associated with negative outcomes (e.g. stress, turnover intentions,

counterproductive work behaviors) (De Cremer, 2006; Riolli & Savicki, 2006; Colquitt, et al., 2001). It is due to its association with such crucial workplace outcomes that organizational justice has received so much attention.

Although much of the justice research has focused on the four individual types of justice, recent work has highlighted the need to assess organizational justice as a whole (Ambrose & Arnaud, 2005; Lind & Van den Bos, 2002; Bobocel, 2013). While the study of specific types of justice is undoubtedly informative, Lind (2001) pointed out that behavior tends to be driven by an individual's overall perception of fairness. Although people are able to differentiate between the sources of their justice experiences when asked, impressions of justice are generally holistic judgments (Greenberg & Cropanzano, 2001). Recent research also suggests that overall justice perceptions can serve as a mediator of the relationship between specific justice perceptions and corresponding attitudes and behavior (Ambrose & Schminke, 2009). These researchers found that overall justice fully mediated the relationship between distributive, procedural, and interactional justice with outcomes including job satisfaction, commitment, and turnover intentions. Because of these findings, this study will focus on overall justice perceptions rather than the four different subtypes.

Fairness Heuristic Theory

Fairness Heuristic Theory lends itself particularly well to the study of justice perceptions over time. Fairness Heuristic Theory suggests that individuals are particularly concerned with fairness when they are entering a new situation and are uncertain how they will be treated (Lind, 2001). In times like these, people will attempt to assuage these

feelings of uncertainty by relying on fairness heuristics to help them make sense of the situation (Van den Bos & Miedema, 2000; Van den Bos et al., 1998).

A fairness heuristic is a cognitive shortcut that allows individuals to quickly form a global impression of whether or not they have been treated fairly (Lind, 2001). This impression of fairness then informs interpretation of experiences and guides reactions to subsequent events (Lind, 2001). For example, individuals are likely to rely on justice heuristics in the early stages of a relationship because this can provide information about an unfamiliar situation (Jones & Skarlicki, 2005; Van den Bos & Miedema, 2000). As additional information is received, it can trigger a revision of fairness judgments (Van den Bos, et al., 2001). This is referred to as a "phase shifting event": an important or unexpected change that causes the individual to shift back to the judgment phase to reassess the validity of their fairness judgments (Colquitt, Scott, Judge, & Shaw, 2006). Lind (2001) theorizes that there are two primary triggers that could prompt a return to the judgment phase. The first trigger would be signs that the relationship in question is changing and the second trigger would be inconsistencies between new fairness-relevant information and the individual's existing impression of fairness. Both these categories of stimuli would be considered phase shifting events and push the perceiver to reconsider current justice perceptions.

Organizational interventions have been considered as phase-shifting events (Jones & Skarlicki, 2005) in that these interventions are expected to prompt changes in individuals' justice perceptions, allowing perceptions to evolve and potentially influence the interpretation of subsequent events (Choi, 2008). Building on Fairness Heuristic Theory's proposition that justice perceptions can change over time, I will now turn to

literature on restorative justice to explore whether organizational interventions can be used to restore positive justice perceptions following an instance of injustice.

Restorative Justice

A newly emerging justice perspective is that of restorative justice, which focuses on how the victim, offender, and broader community heal after experiences of injustice (Goodstein & Aquino, 2010). The idea of restorative justice stems from the criminal justice literature. The impetus for the development of restorative justice in criminal justice is the notion that, after a transgression has occurred, the injustice needs to be dealt with in a way that assuages the victim's losses, be they emotional, financial, etc. (Wenzel, Okimoto, Feather, & Platow, 2008). In contrast, the traditional approach to dealing with wrongdoing is retributive justice, an approach in which justice is served through punishment of the offender (Wenzel et al., 2008). Restorative justice was proposed as an alternative to retributive justice; it puts emphasis on healing rather than punishing and aims to rebuild a sense of justice (Christie, 1977).

In the following discussion of restorative justice, I refer to the *victim* and the *transgressor.* The victim is the individual to whom the injustice has been done. The transgressor is the party who is responsible for the injustice. In the context of organizational restorative justice, the transgressor is conceptualized as the organization itself. The source of the injustice may be an organizational policy or any individual who is viewed by the victim as a representative of the organization. It is important to keep in mind who the transgressor is (an organizational policy, a person, etc.) when considering the appropriate implementation of the organizational intervention. The counterproductive work behaviors literature has highlighted the distinction between organizationally

directed CWBs and interpersonally directed CWBs (Bennett & Robinson, 2000), suggesting that perceptions of fairness about one's supervisor explain the most unique variance in counterproductive work behaviors directed towards the supervisor, while perceptions of fairness about one's organization explain the most unique variance in organizationally directed CWBs (Jones, 2008). This same level-of-analysis logic is expected to hold true for restorative justice. If the transgressor is an individual, the intervention would ideally involve that individual. For example, Wohl and colleagues (2011) argued that apologies are perceived as more authentic and are more likely to evoke a victim's forgiveness when they are expressed by the transgressor or an in-group member as opposed to an out-group member. If the transgressor is an organizational policy, an effective intervention should include acknowledgement of the organization's role in the injustice.

I propose that restorative justice be conceptualized as a process that includes four essential elements. First, both the victim and transgressor must perceive an injustice as having occurred. In order for restoration of the relationship to occur, there must be a shared understanding that something unfair has happened. Second, the transgressor must take restorative action to intervene and initiate the restorative process. These restorative actions may take several forms, including apologizing and re-establishing the previous state of affairs. These restorative actions are a key variable in the present study and will be discussed in detail in the subsequent section. Third, the victim must demonstrate forgiveness by relinquishing negative feelings toward the transgressor. Finally, there should be reconciliation (an effort to restore the relationship) between the victim and transgressor.

Goodstein and Aquino (2010) point out that much of the justice literature has focused on the victim; research includes discussions of how the employee judges the fairness of various workplace events and how acts of injustice may be punished (e.g. counterproductive work behaviors, turnover as a result of unfair treatment). However, there is significantly less research that accounts for how the organization can make amends and what actions might help to boost previously flagging justice perceptions (Goodstein & Aquino, 2010). By focusing on restorative justice, the hope is that justice research can address how organizations can restore a sense of justice to the workplace. Through an emphasis on re-building trust, making amends, and forgiveness, the study of restorative justice in the organizational setting draws attention not simply to the transgression itself, but to how organizations can actively intervene in the aftermath of the transgression to restore justice perceptions.

In order to further the discussion of restorative justice in an organizational setting, it is necessary to first set the stage for a situation in which a transgression has occurred. From there, it becomes possible to examine the various responses to injustice and steps organizations can take to address injustice. Tripp and Bies (2010) define a sense of injustice as a response to perceived wrongdoing by another party. These researchers use violations of rules or norms as an example of an offense that would constitute an injustice. When the formal rules of a company are violated and no action is taken to address the violation, this is largely perceived as an unfair event (Tripp & Bies, 2010). Even taking the position that most organizations recognize the importance of fair policies and practices, it is possible for injustices to occur. As organizations grow and change, despite a company's best intentions, situations may still arise that are perceived as being

unfair. Tripp and Bies (2010) assert that when a person is treated unfairly, there are several coping responses that can come into play. I first discuss forgiveness and reconciliation – two responses that are desirable from a restorative justice standpoint.

Forgiveness and Reconciliation as Responses to Injustice

Forgiveness and reconciliation are conceptualized as key aspects of the restorative justice process. Both of these responses are theorized to be necessary in order to restore a sense of justice after a transgression has occurred.

Forgiveness. Forgiveness is defined as a process in which the victim's negative emotions towards the transgressor are diminished by trying to view the transgressor with compassion or understanding (Goodstein & Aquino, 2010). The assumption is that after experiencing a personal injury or injustice, the victim will experience negative affect (Bradfield & Aquino, 1999). In the aftermath of the offense, the occurrence of forgiveness involves a purposeful change in how the victim views and feels about the transgressor (Andiappan & Trevino, 2010). Tripp and Bies (2010) add that forgiveness is largely an internal act or an intrapersonal response.

It has been suggested that restorative justice cannot truly be achieved unless the victim forgives the transgressor (Tomlinson et al., 2004). Forgiveness may occur either with or without restorative action from the transgressor; however, research suggests that forgiveness is most likely to occur in situations in which the transgressor has taken steps to reduce the perceived injustice (Exline, Worthington, Hill, & McCullough, 2003). For example, researchers suggest that forgiveness is more likely when the offender apologizes (Andiappan & Trevino, 2010). Pace, Fediuk, and Botero (2010) found that, when presented with vignettes describing an unfair situation, participants were more

likely to view the offending organization favorably when the vignette specified that the organization accepted responsibility and apologized after the transgression. On the other hand, when the organization did not accept responsibility or apologize, participants were more likely to feel increased anger toward the organization (Pace et al., 2010). Based on this information, it is likely that the action taken by the transgressor after the unfair event is a crucial determinant of whether a person chooses to respond with forgiveness. Therefore, effective organizational interventions may be a key factor in promoting forgiveness after an injustice. The organizational interventions to be examined will be discussed later.

Reconciliation. Reconciliation is defined as "an effort by the victim to extend acts of goodwill toward the offender in the hope of restoring the relationship" (p. 654). Aquino and colleagues (2001) distinguished between reconciliation and forgiveness, emphasizing that reconciliation is interpersonal while forgiveness is intrapersonal. The focus of forgiveness is on the internal response of letting go of negative emotions while reconciliation is the external or behavioral expression of forgiveness (Aquino et al., 2006). Tripp and Bies (2010) explain that forgiveness and reconciliation are distinct constructs because it is theoretically possible to have forgiveness without reconciliation and vice versa. For example, a victim could let go of negative emotions without having any desire to restore a relationship with the transgressor. On the other hand, if reconciliation is in the best interests of the victim (e.g. when an employee chooses to reconcile with the supervisor because the restored relationship will be beneficial to the employee's later career development), reconciliation may occur even while the victim holds on to negative feelings (Tripp & Bies, 2010; Aquino et al., 2001).

Through reconciliation, the victim shows a desire to heal the relationship with the offender (Aquino et al., 2001). Therefore, reconciliation is a vital element of restorative justice because, once the transgressor has acknowledged the wrongdoing, the victim's willingness to also work to repair the relationship completes the restorative justice process (Wenzel & Okimoto, 2010). The discussion of reconciliation in the context of restorative justice suggests that, just as with forgiveness, the actions of the transgressor play a large role in whether or not the victim will be willing to reconcile. For example, if an employee is unfairly berated by his/ her supervisor, that individual is more likely to actively try to heal the relationship if the supervisor apologizes for the incident. Although forgiveness and reconciliation are distinct constructs, past research has found the two to be strongly correlated ($r = .51$, $p < .01$) (Aquino et al., 2006).

Theoretically, restorative justice is the ideal response to injustice for the organization because it emphasizes forgiveness and compassion and decreases a victim's desire for revenge (Goodstein & Aquino, 2010). Forgiveness and reconciliation allow the imbalance caused by the transgression to be corrected, thus restoring a sense of justice (Wenzel & Okimoto, 2010). However, past research on organizational injustice has identified several alternative responses to injustice. Two of these, revenge and avoidance, seem particularly important in that they both pose significant costs to the organization and are considered to be common forms of organizational misbehavior (Jones, 2009). Thus, not only will I examine the effects of organizational restorative interventions on the likelihood of forgiveness and reconciliation, I will also examine the extent to which they may decrease the likelihood of revenge-seeking and avoidance behaviors.

Revenge Motivation and Avoidance Motivation as Responses to Injustice

Revenge Motivation. In contrast to forgiveness and reconciliation, a desire to seek revenge can also be a potential response to injustice (Bradfield & Aquino, 1999). Revenge motivation can be defined as the desire of the victim to inflict damage, injury, or punishment on the party responsible for causing harm (Aquino et al., 2001; Jones, 2008). Bies and Tripp (1998) cite injustice as one of the primary motivators of desires for revenge. The rationale is that when people perceive an event as unfair and there is no apparent effort on the part of the transgressor to right the wrong, the victim will be motivated to take justice into his/her own hands to resolve the imbalance (Aquino et al., 2006). This notion of imbalance touches on Equity Theory, which asserts that an equitable distribution is one in which the individual's outcome (rewards) are proportional to his/her inputs (Adams, 1965). A person might use organizational policies as a comparison standard to decide if equity exists (Lambert, 2011). To the extent that there is perceived inequity, the individual may be motivated to restore equity via actions that could be harmful to the organization (Jensen, Opland, & Ryan, 2010).

One example of this was suggested by Aquino and colleagues (2006), who proposed that employees generally believe that their organization will protect them by instituting and implementing fair policies. However, if policies in the workplace are unfair, the employees will no longer believe that the organizational policies will ensure that they are treated fairly (Aquino et al., 2006). In such a situation, employees may want to seek revenge after an injustice in order to correct the imbalance themselves. The desire to pursue revenge is generally seen as an undesirable response; it is harmful to the victim and the transgressor, does not improve (and in some cases, further deteriorates) the

damaged relationship; and is thought to be psychologically and emotionally unhealthy for the revenge seeker (Bradfield & Aquino, 1999).

Just as with forgiveness and reconciliation, a person's desire to pursue revenge following an injustice is likely to be influenced by what happens after the offense. If an organization takes steps to remedy an injustice after it has occurred, this could be a sign to employees that the organization is working to restore justice and therefore, that they do not need to seek out justice themselves. This is expected to reduce the victim's desire for revenge. The hypothesized effects of organizational intervention on revenge seeking will be discussed further in a later section. However, researchers assert that revenge and forgiveness are two opposing responses; Bobocel (2013) asserts that forgiveness can be viewed as a constructive coping strategy while revenge is a destructive coping strategy. In this way, the more a person thinks about and desire revenge, the less likely that person is to embrace forgiveness. Therefore, it is hypothesized that:

H1: Revenge motivation is negatively related to forgiveness.

H2: Revenge motivation is negatively related to reconciliation.

Avoidance Motivation. Another response to injustice is avoidance, which is defined as the victim's withdrawal from the relationship with the transgressor (McCullough, Worthington, & Rachal, 1997). Research suggests that, following an injustice, individuals may be motivated to avoid personal and psychological contact with the offending party (McCullough et al., 1998). Similar to the idea of the victim desiring revenge in order to punish the transgressor, victims may attempt to dole out punishment by avoiding or cutting off interaction with the transgressor (Aquino et al., 2006). Victims may also respond with avoidance and minimize interaction with the transgressor as a way

to prevent future injustices (McCullough et al., 1998). Researchers suggest that the desire to avoid is typically motivated by low levels of concern for both the relationship and resolving the problem (Tjosvold & Sun, 2002).

When the organization is the transgressor, avoidance could manifest in a variety of ways; for example, increased absences and turnover are two possible avoidance behaviors that have been linked to organizational injustice (Colquitt et al., 2001). Both of these responses could be considered avoidance in that they increase the amount of physical separation between the victim and the organization. Although revenge motivation and avoidance motivation are distinctly different, Aquino and colleagues (2006) point out that these two negative responses are likely to be correlated. These two constructs are similar because they both represent the individual's inability to let go of or move past the offense (Gregoire, Tripp, & Legoux, 2009). As long as individuals hold on to negative responses like desire for revenge or avoidance, it is unlikely that they will demonstrate positive responses such as forgiveness or reconciliation. For this reason, I propose that:

H3: Revenge motivation is positively related to avoidance motivation.

H4: Avoidance motivation is negatively related to forgiveness.

H5: Avoidance motivation is negatively related to reconciliation.

Forgiveness, reconciliation, revenge motivation, and avoidance are all potential responses to unfair events. However, the action an organization takes after the injustice occurs is of vital importance in what response a person exhibits. For this reason, I will now present four organizational interventions that may happen after the unfair event and how these interventions relate to forgiveness, reconciliation, revenge, and avoidance.

Organizational Restorative Interventions

The values espoused in restorative justice emphasize the importance of the transgressor's role in making amends after an injustice (Goodstein & Aquino, 2010). The theory assumes that most experiences of injustice generally elicit the motivation to restore justice (Wenzel, Okimoto, Feather, & Platow, 2010); therefore, an element of restorative justice is potentially restoring an earlier state of affairs as a way of undoing harm (Wenzel et al., 2008). For example, Wenzel and colleagues propose a scenario in which an employer inadvertently uses discriminatory hiring practices, thus violating the applicant's sense of justice. A potential solution could be to re-consider the applicant's candidacy or revising the hiring procedures; in this way, a sense of justice would be restored by re-establishing a pre-offense state of affairs (Wenzel et al., 2008). In keeping with these ideas, four potential ways an organization can behave after an unfair event are discussed below: the organization can choose not to acknowledge that an injustice has taken place, the organization can take steps to undo the harm, the organization can apologize for the transgression, or the organization can both apologize and undo harm.

No Acknowledgement. There are several ways for an organization to proceed following an injustice. One possibility is that the organization does nothing to address the injustice. This type of "no acknowledgement" or "no action" scenario in the aftermath of a transgression has been used in past research (Pace et al., 2010). In Pace and colleagues' (2010) study, the researchers used a vignette in which a fictional property management company engages in a series of objectionable behaviors (refusing to return renter deposits, etc.). The participant then receives one of six possible responses from the fictional company in response to the transgressions. For the "no acknowledgment of

responsibility" manipulation, the company statement simply says that they are "still looking into the situation." In contrast, an apology manipulation includes a company statement in which the company "apologizes for the situation." The researchers found that participants viewed the organization more favorably when the company issued an apology as opposed to not acknowledging responsibility for the transgressions (Pace et al., 2010).

In the context of this study, the organization knows that an unfair event has taken place but chooses to ignore it and does not acknowledge any responsibility for the event. Some organizations may choose to ignore an injustice for fear that admitting wrongdoing could potentially opening the company up to legal action and the company wants to avoid liability. Recalling that restorative justice emphasizes acknowledging the wrongdoing as the first step towards healing the damaged relationship (Goodstein & Aquino, 2010), this tactic conflicts with the principles of restorative justice. Researchers have asserted that one of the most effective ways for organizations to react after a transgression is to accept responsibility for the incident (Pace, Fediuk, & Botero, 2009). When an organization fails to accept responsibility for its transgression, this could result in feelings of hostility or negative attitudes on the part of the victim (Pace et al., 2009). In situations in which perceptions of justice are low and the organization does not appear to be making any effort to improve the situation, employees are likely to retaliate against the organization and engage in behaviors that are potentially harmful to the company (Aquino, Tripp, & Bies, 2006; Zoghibi-Manrique-de-Lara, 2010). Aquino and colleagues (2006) found that victims are most likely to pursue revenge when they believe the organization cannot be counted on to right the wrong; in this way, revenge is viewed as a way to restore fairness.

This would suggest that, when an organization fails to acknowledge responsibility for wrongdoing, employees may be more likely to respond to the injustice with revenge motivation and desire for avoidance rather than forgiveness or reconciliation.

Undoing Harm. Another possible intervention would involve the organization undoing the harm that the unfair event may have caused. This method has strong ties with restorative justice in that the transgressor attempts to repair the relationship with the victim by re-establishing an earlier state of affairs (Wenzel & Okimoto, 2010). For example, if a job applicant encounters an unfair step of the selection process, one way for the organization to respond would be to tell the job applicant that the responses collected would be thrown out and would not be used in making a final hire/ no hire decision. One notable element of this intervention is that it does not specifically involve a formal apology. Instead, in indicating a willingness to undo any negative consequences of the injustice, the organization implicitly acknowledges the damage to the relationship and attempts to make up for the unfairness. At the same time, they do not necessarily accept responsibility for the unfairness. For example, an organization may correct the effects of a computer error without specifically accepting responsibility for the error. Since an effort to undo harm falls into line with the principles of restorative justice, it is likely that this intervention would lead to increased forgiveness and reconciliation and decreased desire for revenge and avoidance on the part of the victim.

However, simply undoing harm may not be the most effective intervention. Some trust researchers have suggested that offenders should always give explicit apologies after a transgression and that the victim is less willing to reconcile until an apology is given (Tomlinson et al., 2004). Andiappan and Trevino (2010) further assert that simply

changing the outcome without a sincere and complete apology is unlikely to be sufficient in repairing the relationship. For this reason, the next intervention addresses the apology.

Apology. After an unfair event, an organization can choose to issue an apology. An apology is defined as "a speech act in which sorrow is expressed and forgiveness is sought" (Hui, Lau, Tsang, & Pak, 2011). Gill (2000) outlined five essential elements of a complete apology. Those five elements include an acknowledgement that the incident in question occurred, that the incident was inappropriate, an acknowledgement of responsibility for the injustice, an expression of regret or remorse, and the expression of the intention to refrain from similar acts in the future (Gill, 2000). Tomlinson, Dineen, and Lewicki (2004) assert that a formal apology is considered a prerequisite for reconciling a relationship following an injustice. Researchers also stipulate that apologies are most effective when the transgressor makes an internal attribution of fault and accepts personal responsibility (Tomlinson et al., 2004). Apologies in which the offender makes excuses to reduce personal responsibility are generally seen to be less credible (Pace, Fediuk, & Botero, 2010). In a situation where a complete apology is offered, the organization shows that it is taking steps to heal the relationship (Exline et al., 2003). By accepting responsibility and expressing an intention to refrain from similar behaviors in the future, the apology may also reassure the victim that repeated injustices are unlikely. In general, research points to apology as an antecedent to forgiveness and reconciliation (Tomlinson et al., 2004; Hui et al., 2011; Kim et al., 2013). Based on this, extending a formal apology would be in line with the tenets of restorative justice and is likely to promote forgiveness and reconciliation and reduce an individual's desire for revenge and avoidance.

Apology and Undo Harm. One final organizational intervention would be to combine the apology and undoing harm to create a situation in which, after the unfair event, the organization both extends a complete apology and provides an opportunity to undo harm. In such a scenario, the organization both acknowledges wrongdoing and actively works to repair the damage. Because this combines two desirable organizational actions, this intervention is likely to have the strongest ties with forgiveness and reconciliation and the weakest ties with desire for revenge motivation and avoidance motivation.

Rather than being orthogonal, these interventions build on each other, to some extent. The lowest possible level of intervention is for the organization to not acknowledge that anything unfair took place; this scenario represents an organization's complete lack of effort to address the injustice. Another possibility is that the organization makes no explicit acknowledgment of the unfair event, but takes action to correct the consequences of the injustice, thereby implicitly indicating an awareness of the unfairness. The organization can go even further than this by explicitly acknowledging and taking responsibility for the unfair event and apologizing to the victim, which is the third possible intervention. The final intervention involves both an explicit apology and undoing the harm by taking action to minimize the consequences of the injustice (a combination of the second and third interventions). Because these interventions build upon each other, it is generally expected that, as the intervention becomes more explicit and comprehensive, forgiveness and reconciliation become increasingly likely while revenge motivation and desire for avoidance become increasingly unlikely.

H6: Of the four interventions, the no acknowledge intervention will produce the highest levels of revenge motivation and avoidance motivation and the lowest levels of forgiveness and reconciliation.

H7: The apology only intervention will produce higher levels of forgiveness and reconciliation than the undoing harm only intervention.

H8: The apology only intervention will produce lower levels of revenge motivation and avoidance motivation than the undoing harm only intervention.

H9: Of the four interventions, the apology and undo harm combination intervention will produce the highest levels of forgiveness and reconciliation and the lowest levels of revenge motivation and avoidance motivation.

Victim Individual Differences

In addition to the type of intervention influencing forgiveness, reconciliation, revenge motivation, and avoidance motivation, there may also be person predictors of these responses. Three traits that have shown strong ties with these responses are trait empathy (often associated with forgiveness and reconciliation), trait anger (often associated with revenge motivation), and conflict avoidance (often associated with avoidance motivation) (Davis & Gold, 2011; Tripp & Bies, 2010).

Trait Empathy. Dymond (1949) described trait empathy as being a person's ability to imagine being in the role of another and understand the feelings and thoughts of that person. It has both a cognitive and an affective component. The cognitive portion refers to the non-emotional awareness of another person's internal states. The affective component is described as the emotional response to the other person, usually

characterized by compassion and concern. Davis (1983) defined empathy more simply as the reactions of an individual to the observed experiences of another person. He argued that instead of being either cognitive or emotional, empathy is multidimensional and comprised of four distinct dimensions. These were: perspective taking, fantasy, empathic concern, and personal distress. Recent literature suggests that the perspective taking facet is more relevant in the discussion of justice and forgiveness (Joireman et al., 2006; Fehr et al., 2010). Perspective taking is the extent to which an individual is able to take on another person's perspective (Joireman et al., 2006). The ability to view the situation from another's point of view is thought to be related to forgiveness because it can enhance the victim's understanding of why the transgressor behaved as he/she did; this understanding could then facilitate forgiveness (Fehr et al., 2010).

Although empathy is typically discussed as interpersonal phenomenon (an individual feels empathy for another individual), the empathy-forgiveness link can be generalized to evaluating a person's likelihood of forgiving an organization for a wrong doing. Hollensbe, Khazanchi, and Masterson (2008) proposed that people assess not only individuals and events, but also social entities. These researchers define a social entity as "an object or unit that persists over time and across situations" (p. 1099) and state that an entity may be a supervisor, a coworker, or even the organization as a whole.

Empathy has been prominently featured in the forgiveness literature, which suggests that empathy can be an impetus for forgiveness after a transgression has occurred (Davis & Gold, 2011). The victim's feelings of empathy lead him/her to feel compassion for the transgressor and motivated to repair the damaged relationship, which makes forgiveness more likely. Therefore, it is hypothesized that:

H10: Trait empathy is positively related to forgiveness.

H11: Trait empathy is positively related to reconciliation.

Empathy is also linked with a decreased likelihood of negative outcomes such as rumination and revenge (McCullough, Worthington, & Rachal, 1997). In addition, McCullough and colleagues (1997) proposed that, as the victim's willingness to forgive increases, avoidance motivation decreases. Researchers suggest that this is because the forgiveness is demonstrated through a decreasing desire for estrangement from the transgressor (Aquino et al., 2006). Based on this, I expect that:

H12: Trait empathy is negatively related to revenge motivation.

H13: Trait empathy is negatively related to avoidance motivation.

Trait Anger. Anger is defined as a strong emotion of displeasure that is typically provoked by injury or insult to one's self (O'Neill, Vandenberg, DeJoy, & Wilson, 2009). The two primary categorizations of anger are state and trait anger. State anger is a temporary emotional state while trait anger reflects a longer term tendency to experience anger (Barsky & Kaplan, 2007). Theoretically, stable predispositions such as trait anger are considered to be important in predicting responses to unfairness (Skarlicki, Folger, & Tesluk, 1999). Individuals high on trait anger are likely to experience more frequent and more intense episodes of state anger (Gibson, Schweitzer, Callister, & Gray, 2009) and are more likely to feel anger in response to perceived injustice in the workplace than those low in trait anger (Domagalski and Steelman, 2007).

Tripp and Bies (2010) proposed that trait anger is often linked to an individual's motivation to pursue revenge following an injustice. Oftentimes, victims feel that they have been wronged, thus lending a "moral righteousness" to their feelings of anger over

the situation (Tripp & Bies, 2010). This often leads to a desire for revenge because the victim feels it is up to him/herself to correct the imbalance if the organization does not make an effort to right the wrong. One set of researchers found that, following an experience of injustice, individuals high in trait anger sustained their anger through the entire eight weeks of the study (Gregoire & Tripp, 2007). Because trait anger and the desire for revenge are so closely linked in the literature, it is hypothesized that:

H14: Trait anger is positively related to revenge motivation.

Furthermore, research would suggest that forgiveness and reconciliation run counter to revenge motivation. While revenge motivation is positively associated with anger, the existence of forgiveness and reconciliation necessitate, by definition, the relinquishing of negative emotions such as anger (Aquino et al., 2006). This may be harder to accomplish for individuals who are persistently higher in trait anger. Therefore, it is hypothesized that:

H15: Trait anger is negatively related to forgiveness.

H16: Trait anger is negatively related to reconciliation.

Conflict Avoidance. Goldberg (2007) asserted that conflict avoidance is a conflict resolution style and is characterized as an individual difference showing a person's tendency to respond to conflict through avoiding or withdrawing from the situation. When an individual is highly sensitive to negative outcomes, the desire to avoid unfavorable events increases (Ferris et al., 2011). In this way, individuals high in conflict avoidance are more likely to adopt avoidance as a means of responding to undesirable events.

H17: Conflict avoidance is positively related to avoidance motivation.

While the organizational intervention is a situational factor expected to influence forgiveness, reconciliation, revenge motivation, and avoidance motivation, I have presented several individual differences variables that may also impact these responses. Because there are both situational and person predictors of the aforementioned responses, the question of whether an interaction exists between the situation and person variables arises. Past research does not provide enough evidence to make specific hypotheses regarding any potential interaction, so I pose the following research question:

RQ1: Is there an interaction between organizational intervention and individual difference variables (empathy, trait anger, and conflict avoidance) in influencing forgiveness, reconciliation, revenge motivation, and avoidance motivation?

Given that forgiveness, reconciliation, revenge motivation, and avoidance motivation are meaningful responses to an unfair event, I will next discuss how these relate to justice recovery.

Justice Recovery

While restorative justice aims to re-establish a sense of justice after a transgression (Wenzel et al., 2008), the theory does not provide any practical indication of how to measure this restoration of justice. Furthermore, because restorative justice has only just begun to emerge in the organizational literature, there is little empirical research from which to draw. Justice recovery is a new term that I have coined to operationalize the effects of restorative justice and to bring it into the organizational realm. In order to fully explain justice recovery, I will first define justice recovery and outline its relationship to and differences from restorative justice, psychological contract, and justice

expectation violation. I will then examine the relationship between justice recovery and forgiveness, reconciliation, revenge motivation, and avoidance motivation.

Justice recovery is defined in this study as the positive change in a victim's organizational justice perceptions from one time point to another. Although justice recovery might result from several causes (for example, victim re-framing of the injustice), in the present study, I focus on justice recovery that results from the organizational interventions in the aftermath of an unfair event. Furthermore, the term "recovery" indicates that one or more perceived injustices have occurred from which justice perceptions can recover. Because perceptions of the organization's overall justice are affected by specific unjust events (Brown, Bemmels, & Barclay, 2010), it is expected that perceived injustices produce decreases in overall justice perceptions from which the organization might wish to recover.

Theoretically, the degree of justice recovery may vary along two dimensions. First, the *magnitude* of justice recovery refers to the absolute change in justice perceptions over time. Greater justice recovery is indicated by a more positive change (increase) in perceptions of justice over time. No justice recovery is evident when justice perceptions stay stable over time. Negative justice recovery would be evident by a decrease in justice perceptions over time, such as might occur in a workplace with a strong, unfair climate. In a situation where injustices occur repeatedly, the employee's justice perceptions might continually decrease over time. Second, the *velocity* of justice recovery refers to the slope of the changes in justice perceptions over time. A high velocity justice recovery means that the individual's justice perceptions recovered quickly with a steep positive slope. In contrast, a low-velocity recovery means that the

slope of change was less steep, taking more time to reach maximum recovery. Note that because this study primarily concerns the effects of organizational interventions on short-term justice recovery, the focus here will be predominantly on the magnitude of recovery.

In the following sections, I discuss justice recovery as it relates to three similar constructs: trust, psychological contract violation, and justice expectation violation.

Justice Recovery & Trust

Trust is defined as "an individual's willingness to accept vulnerability to another party based upon positive expectations about the intentions and behavior of that party" (Jones & Martens, 2009; p.1029). In this definition, vulnerability refers to a person performing or acting under risk or uncertainty (Schweitzer et al., 2006; Andiappan & Trevino, 2010). Research acknowledges that trust and justice are distinct constructs and has sought to explore the relationship between the two. Cohen-Charash and Spector (2001) reported moderate to strong correlations between justice and trust in their meta-analysis (*r* ranged from .33 - .65). In general, researchers assert that as justice perceptions increase, so too does an employee's trust (Colquitt & Rodell, 2011). Colquitt and Rodell's (2011) study found that justice predicted trust and that managers who adhered to justice rules were perceived to be more trustworthy. Another study supported this relationship when it found that procedural, interpersonal, and distributive justice were each significantly related to trust (Colquitt, LePine, Piccolo, Zapata, & Rich, 2012).

Although justice and trust are separate constructs, there are some similarities. Like justice, trust is a dynamic construct that responds to the individual's perceptions of workplace events (Schweitzer, Hershey, & Bradlow, 2006). Traditional models of trust suggest that lost trust can take a long time to rebuild and, in some cases, might never be

restored following a breach (Lewicki & Bunker, 1996). However, Schweitzer and colleagues (2006) found evidence to suggest that trust may not be as fragile and difficult to repair as was once thought. These researchers found that for both long term and initial trust recovery, subsequent trustworthy actions helped to promote re-establishment of trust. Applied to a justice setting, this could imply that a violation of justice might not irrevocably damage a person's justice perceptions. Instead, it is possible that subsequent actions could help the individual "recover" from unfairness and improve justice perceptions. Thus the trust literature is an important building block of justice recovery because it provides evidence that, after a transgression has occurred, it is possible for the parties involved to overcome the negative event. However, because trust and justice been established as separate constructs in past research, it follows that trust recovery and justice recovery are likely to be separate (although possibly related) phenomena.

Justice Recovery & Psychological Contract

Rousseau (1995) defined psychological contract as individuals' beliefs regarding what they owe their organization and what their organization owes them. Psychological contracts are important because they are a means through which employees interpret workplace events, and violations of the psychological contract can jeopardize the relationship between employee and employer (Rousseau, 1995). Because psychological contracts are not written agreements with terms approved by both parties, the expectations associated with these contracts are often subjective. Parks, Kidder, and Gallagher (1998) asserted that a psychological contract is "an idiosyncratic set of reciprocal expectations held by employees concerning their obligations and their entitlements" (p. 698). A breach of the psychological contract occurs when the employees

perceive that the organization has failed to deliver on its promises (Rousseau, 1995). The promises that the employee views as unmet can be intentionally or unintentionally conveyed by the organization through interviews, performance appraisals, or organizational policies (Restubog, Hornsey, Bordia, & Esposo, 2008). As such, a breach of psychological contract can encompass any number of offenses and be linked to a wide variety of outcomes (e.g. trust, performance, commitment, satisfaction, etc) (Restubog, Bordia, & Bordia, 2009).

Researchers assert that psychological contract's emphasis on promised obligations (the idea that the organization has made either implied or explicit promises to employees) is what sets it apart conceptually from organizational justice (Rosen, Chang, Johnson, & Levy, 2009). Rosen and colleagues (2009) argue that fair treatment represents an employee's general expectation of how he/she will be treated, while specific implied or explicit promises from the organization are unique to the psychological contract. Research into the relationship between organizational justice and psychological contract suggests that justice perceptions can serve as an antecedent to evaluations of psychological contract breach; if the employee has favorable justice perceptions, they are less likely to believe the psychological contract has been breached (Chen, 2010; Rosen et al., 2009; Restubog et al., 2009). Some studies have also found that, when perceptions of justice are high, the negative consequences resulting from psychological contract breach as lessened (Restubog et al., 2009; Kickul, Lester, & Finkl, 2002). This is because individuals are thought to go through a cognitive assessment of the organizational context of the breach, with justice being an aspect of that context (Kickul et al., 2002). When the employee can identify instances of unfairness that led to the breach in psychological

contract, this can intensify the negative attitudinal and behavioral effects of the breach (Kickul et al., 2002). In this way, organizational justice and psychological contract are related, but distinct.

Just as organizational justice itself is different from psychological contract, so too is justice recovery from psychological contract. Justice recovery and recovery from psychological contract breach differ in that psychological contract, by definition, emphasizes a person's beliefs and expectations about the employer-employee relationship (Rousseau, 1995). In contrast, justice recovery does not address beliefs held prior to the injustice; it focuses on what happens *after* the injustice has occurred. Recall that justice recovery is based on restorative justice, which highlights the importance of healing a relationship once it has been damaged (Wenzel & Okimoto, 2010). Justice recovery, then, is a means of measuring increases in justice perceptions from one time point to the other in order to examine the extent to which the victim believes that justice has been restored. It represents a quantitative look at the theory of restorative justice and does not account for any beliefs held by the victim prior to the injustice. This difference represents an important distinction between psychological contract and justice recovery.

Another distinction between psychological contract breach and justice recovery is that psychological contract breach is closely linked with the idea of trust (Montes & Irving, 2008). Psychological contract violations can damage the trust between the two parties and when trust is lost, this can lead to undesirable outcomes such as decreased organizational commitment, turnover, or counter-productive work behaviors (Chao, Cheung, & Wu, 2011). In this way, trust is a key element in psychological contract breach (Montes & Irving, 2008; Atkinson, 2006). In contrast, this study asserts that

forgiveness and reconciliation are the vehicles through which justice recovery occurs, with organizational interventions triggering forgiveness and reconciliation responses to increase the likelihood of justice recovery. Thus, justice recovery focuses on how improvements in justice perceptions are possible through a victim's forgiveness and reconciliation while psychological contract breach emphasizes the loss of trust based on an employee's expectations of organizational behavior. As discussed previously, trust and justice are related, but separate, constructs.

Justice Recovery & Justice Expectation Violation

Justice expectations can be defined as beliefs about a future state of affairs regarding fairness (Bell, Wiechmann, & Ryan, 2006). In contrast to psychological contract, which deals generally with the beliefs an individual holds about the employer-employee relationship (Rousseau, 1995), justice expectations deal more specifically with an individual's beliefs of how fair a future state of affairs is likely to be (Bell et al., 2004). Researchers have recently pointed out that it is not only the actual event that affects justice perceptions; rather, perceptions of situation-based justice also depend on what the person brings to the situation- specifically, the person's expectations of what will happen (Shapiro & Kirkman, 2001). Individuals confront experiences with a set of justice expectations which influence ultimate justice perceptions (Rodell & Colquitt, 2009). Individuals typically generate these expectations by using past experiences and knowledge to predict what will happen in the future (Bell, Ryan, & Wiechmann, 2004). Initial justice expectations are formed prior to entering the new situation; these expectations do not stem from information obtained early on in the interaction but are instead often rooted in past experiences (Bell et al., 2004).

Violations of justice expectations can have similar ramifications as a breach of the psychological contract; for example, one consequence of expectations that are not met is decreased job satisfaction and organizational commitment (Brown, Venkatesh, Kuruzovich, & Massey, 2008). Just as the psychological contract is a set of idiosyncratic beliefs, so too are justice expectations; individuals have different expectations of justice that they bring into a situation that influence how they perceive organizational events (Bell et al., 2004). Justice recovery deals with the positive change in justice perceptions from one time point to another; justice expectations are a unique set of beliefs that an individual carries with him/herself into a situation (Bell et al., 2006). Bell, Ryan, and Wiechmann (2004) assert that expectations are derived from a person's beliefs and schemas about how the world operates; in this way, justice expectations are likely to be more constant across situations than the justice perceptions that comprise the justice recovery effect. For this reason, justice expectations and justice recovery are distinct from one another. Rather, individual differences in justice expectations may be a significant predictor of justice recovery, as discussed further below.

The met expectations literature can be applied to the discussion of justice expectations. The met expectations hypothesis describes the discrepancy between what a person expects to encounter in his/her job and what that person actually experiences (Irving & Montes, 2009). Research has shown that when an employee's expectation of jobs is met, this is positively linked to organizational commitment and job satisfaction (Wanous, Poland, Premack, & Davis, 1992). Furthermore, the disconfirmation model proposes that when expectations are not met, there is a negative influence on satisfaction

and when expectations are exceeded, there is expected to be a positive impact on satisfaction (Brown, Venkatesh, Kuruzovich, & Massey, 2008; Bell et al., 2004).

Much of the met-expectations research focuses on newcomers to an organization and how their expectations affect their subsequent attitudes (most notably job satisfaction). However, some researchers have extended this theory into the justice realm. Gilliland (1994) found that when individuals had high expectations of being hired and were actually hired, their justice perceptions were significantly higher than when expectations of being hired were high but they were not hired. However, when individuals had low expectations of being hired, he found no significant difference in justice perceptions between those who were hired and those who were not. In the psychological contract literature, it has been found that exceeding expectations are associated with increased employee satisfaction (Irving & Montes, 2009). Other research has generally found that justice perceptions are highest when positive expectations are confirmed or exceeded (Bell et al., 2004). When an individual has high expectations of justice and instead encounters procedural or distributive unfairness, this is typically associated with negative outcomes (Cohen-Charash & Byrne, 2008). Extending these findings to the current discussion of recovery in selection systems, it is proposed that recovery is less likely to occur when expectations are high.

H18: Justice expectations will be negatively associated with justice recovery.

Predictors of Justice Recovery

In the context of this study, justice recovery hinges on the forgiveness and reconciliation that are associated with the organizational interventions described above. A successful organizational intervention in which the transgressor acknowledges the

wrongdoing and takes steps to right the wrong is hypothesized to provide an optimal environment for forgiveness and reconciliation (Exline et al., 2003), which can be viewed as antecedents to justice recovery. For example, Hui and colleagues (2011) found that when an apology is accepted as genuine and sincere, it is more likely to elicit forgiveness from the victim. Because forgiveness involves diminished negative affect and viewing the offender with compassion and benevolence, researchers assert that it can restore a sense of justice after an unfair event (Bradfield & Aquino, 1999). When an individual forgives the transgressor, that person willingly and deliberately forgoes opportunities for revenge or punishment (Bradfield & Aquino, 1999). The act of forgiveness has been found to increase satisfaction with and commitment to the relationship (Rusbult, Verette, Whitney, Slovik, & Lipkus, 1991). Forgiveness decreases the victim's negative feelings, reduces the victim's potential anxiety and depression, and benefits the transgressor as well because it lessens potential guilt and remorse (Andiappan & Trevino, 2010). In this way, forgiveness is thought to be crucial in rebuilding perceptions of justice because it frees the victim from negative sentiments and creates a positive setting that facilitates the effective restoration of the relationship (Andiappan & Trevino, 2010). Effective organizational intervention facilitates forgiveness and reconciliation, through which justice recovery takes place. Therefore, it is hypothesized that:

H19: Forgiveness is positively related to justice recovery.

Similarly, reconciliation, which involves extending goodwill toward the transgressor in hopes of healing the relationship, should also be positively associated with justice recovery. When the victim makes exerts effort to work with the transgressor to repair the damaged relationship, this indicates a willingness to move past the

transgression (Tomlinson et al., 2004). This willingness to work on the relationship would, like forgiveness, set the stage for justice recovery because it means that the victim is open to giving the transgressor a chance to be viewed in a more positive light.

H20: Reconciliation is positively related to justice recovery.

When an individual feels the desire to seek revenge, this indicates that the victim does not believe that sufficient effort has been made to right the wrong (Aquino et al., 2006). This belief is what leads the person to consider taking matters into his/her own hands. Bradfield and Aquino (1999) assert that the primary motive underlying most acts of revenge is the desire to restore perceived fairness. Given that high revenge motivation means that the individual does not believe the transgression has been adequately dealt with, it is unlikely that justice perceptions will improve when revenge motivation is high. Therefore, it is hypothesized that:

H21: Revenge motivation is negatively related to justice recovery.

Recall Aquino and colleagues' (2006) proposition that avoidance motivation can be viewed as a way to punish the transgressor. If victims respond to an event with a strong desire to avoid future interaction with the transgressor, this implies that forgiveness and reconciliation have not taken place. In such a situation, it is unlikely that justice perceptions will improve when avoidance motivation is high.

H22: Avoidance motivation is negatively related to justice recovery.

Organizational Satisfaction

Satisfaction is a commonly studied outcome of justice perceptions. In general, research finds a positive relationship between justice and satisfaction, asserting that perceptions of organizational justice are an important predictor of positive work attitudes

such as satisfaction and commitment (Cohen-Charash & Spector, 2001). It is believed that when perceptions of justice are high, this results in increased satisfaction in one's supervisor or organization (Colquitt et al., 2001). For example, a recent study found that distributive justice was related to satisfaction with pay level and procedural and informational justice were related to satisfaction with administration (Jawahar & Stone, 2011). Similarly, Choi (2011) reported that distributive justice, procedural justice, and interpersonal justice all exhibited positive relationships with employee job satisfaction. Because this study deals with organizational interventions and overall justice perceptions of the organization, I will focus on satisfaction with the organization as an outcome of justice recovery.

Although there is little empirical evidence that specifically addresses how satisfaction relates to justice recovery, based on the justice-outcomes literature, I hypothesize that when an experience is generally fair, it is associated with positive outcomes and when an experience is generally unfair, it is associated with negative outcomes. Recall that recovery is defined as a positive change in justice perceptions. This would imply that when recovery occurs, the individual perceives the experience as becoming more fair. Therefore, it is proposed that:

H23: Justice recovery will be positively related to organizational satisfaction.

Method

Participants

Participants were recruited through the UMSL psychology subject pool and classes in the business school. Participants earned subject pool credits commensurate with their participation. A total of 396 participants completed the Time 1 survey, 312

participants completed the Time 2 survey, and 151 participants provided responses to the Time 3 survey. Gender distribution was found to be 26% male and 74% female at Time 1. In terms of race at Time 1, 67% of participants were Caucasian, 22% were African American, 4% were Asian, 6% indicated "other" and 1% did not report their race. The mean age was 24 years, with a range of 18 to 63 years old. At Time 2, 26% of participants were male and 74% were female; 70% of participants were Caucasian, 19% were African American, 4% were Asian, and 6% identified themselves as "other." Mean age at Time 2 was 24 years old, with a range of 18 to 63. At Time 3, participants were 26% male and 74% female, which was the same as at Time 1 and Time 2. Time 3 race distribution was similar to the other two time points, with 74% Caucasians, 15% African Americans, 4% Asians, and 5% "other." Age of participants at Time 3 ranged from 18 to 63, with a mean of 26 years old. Overall, there did not appear to be differential attrition based on race, gender, or age.

Study

The present study involved three data collection times. At Time 1, demographic information, justice expectations, trait empathy, trait anger, and conflict avoidance were measured. In addition, the unfair event took place and justice ratings were assessed. At Time 2, the organizational intervention occurred and reactions to the intervention were assessed (forgiveness, reconciliation, revenge motivation, reconciliation, justice ratings, and organizational satisfaction). Finally, at Time 3, behavioral outcomes were assessed and participants were debriefed.

Unfair Event. Because the focus of this paper is what happens after an injustice, this study necessarily began with the occurrence of an unfair event. In the present study,

the basic framework for this unfair event was the administration of a personality test. Participants completed an online personality test for the research group (the research group was referred to as the Work Psychology Group). Instead of using a hypothetical company, the study instead framed the research group as the organization for which the participant completed the personality test. This was done to avoid the possibility of participants viewing the researcher as a separate entity from the hypothetical company, thereby creating two potential transgressors. In this way, the researcher and organization were presented as being the same.

Participants were told that the personality test was meant to diagnose their leadership potential and that the Work Psychology Group would use the results of the test to determine which participants would be eligible to be entered into a raffle to win one of ten $25 cash prizes. In actuality, all participants who fully completed the study were entered into the raffle for the cash prize. The cash prize was meant to serve as a motivator to ensure that participants were invested in the study and took it seriously. All participants received subject pool credit commensurate with participation.

Personality tests serve as an inexpensive way to screen individuals for skills or other job-relevant characteristics before engaging them in more costly and time-consuming activities (Ployhart, Schneider, & Schmitt, 2006). These tests are employed by organizations to assess whether individuals have the potential to be successful in certain positions, particularly in jobs that require a lot of interpersonal interaction (Scroggins, Thomas, & Morris, 2008). Because the ability to effectively interact with others is likely a relevant part of many workplace activities, personality tests are a

versatile assessment that can apply to selection, promotion, training, or a number of other situations.

However, despite the benefits of personality tests, there are some disadvantages as well. Some commonly cited complaints about personality tests are that the questions do not seem job-related (low face validity) or that the questions are perceived as intrusive (Scroggins et al., 2008). Stone and Stone (1990) found that improper questions on personality tests influenced perceptions of privacy invasion. These factors could then lead to diminished justice perceptions (Gilliland, 1993). For example, Harland, Rauzi, and Biasotto (1995) found that selection procedures involving personality tests are perceived to be less fair than selection procedures using interviews. The findings suggested that this was due to applicants' perception that the test could not accurately assess the individual's personality and that the test was not job-relevant (Harland et al., 1995). To summarize, personality tests are desirable to organizations because they are relevant the workplace and easy to administer, yet at the same time, they have the potential to trigger low justice perceptions. These characteristics made personality tests a good choice as this study's unfair event because they are used by organizations (enhancing realism of the study) and capable of producing unfavorable reactions (thereby evoking the sense of injustice).

Focus Group. In order to determine what aspects of an assessment could be considered fair or unfair, I first used a focus group consisting of ten individuals currently working in the human resources field. I asked these individuals to provide stories of their work experiences that struck them as either particularly fair or particularly unfair. Additionally, some participants included experiences of friends, coworkers, family members, etc. Some examples of stories provided by the focus group are:

- "A few years ago, I applied for a job at Target through their in-store kiosk. It asked some very personal questions relating to mental disorders, which I thought was very inappropriate."
- "A friend of mine went to interview for a job as an inventory manager at a local metal production manufacturer. All went well when she first arrived for the interview. It started on time, the people who met her were polite and helpful, and so she was pretty hopeful. However, when she met with the interviewer, he snapped a picture of her with a Polaroid camera and attached the picture to the front of her resume and application. When she asked about it, he said that it was their standard procedure to make sure that she would be a good fit with the organization. Then, during the interview, he asked her several questions that seemed highly inappropriate. For example, he asked her if she had any children or if she had intentions of having any children."
- "In high school, I applied for a cashier job at a department store. During the selection procedure, I had to take a personality test. Right before I took the test, the HR person giving it to me said, "I'm not sure why we have you take this, but here you go, you just need to fill this out." I couldn't help thinking "what's the point in taking this test if you don't know why I have to?" But I took it anyway, and kept my comments to myself."

The information I received from the focus group helped give me a better idea of some actual experiences that struck people as unfair. To build on this foundation, I next turned to work done by Gilliland (1993), who proposed ten rules as factors that would influence an individual's overall perceptions of fairness. These rules are:

- Job relatedness: the extent to which a test either appears to measure content relevant to the job or appears to be valid.

- Opportunity to perform: chance for the applicant to make a case for himself/ herself in the selection process and sufficient time for interviews.
- Opportunity for reconsideration: providing the individual in a selection context with a second chance to influence the selection decision.
- Consistency of administration: standardization of the decision-making process for all applicants involved in the selection process.
- Feedback: timeliness of feedback and informativeness of the feedback given.
- Selection information: offering various types of information to candidates at various stages of a selection process.
- Honesty: the truthfulness of the communication delivered to an individual involved in a selection process.
- Interpersonal effectiveness of administrator: the extent to which applicants are treated sympathetically.
- Two-way communication: the extent to which individuals within a selection context are given the opportunity to have their opinions considered.
- Propriety of questions: improper questioning and the use of prejudicial statements.

I used these ten rules as guidelines for my unfair workplace event. It is important to note that Gilliland (1993) also included whether or not one receives a favorable outcome as a major influence on justice perceptions. Therefore, this personality test administration will also include an unfavorable outcome, as described below.

Personality Test. The personality test consisted of 50 items (see Appendix A for items), some of which were of an inappropriately personal nature for the work setting [Gilliland, 1993: *propriety of questions*] with low face validity [Gilliland, 1993: *job relatedness*]. The instructions were:

> You are completing this survey for the Work Psychology Group at UMSL. You are about to take a 50-item personality test that is meant to assess your leadership potential. Answer each question carefully and honestly. This assessment will be timed. The results of this test will determine whether you are eligible to be entered into a raffle to win one of ten $25 cash prizes.

Then, upon completion of the first 30 items, the website showed an error message and indicated that there has been technical difficulty. The following message appeared:

> ERROR! The program has failed and all your responses have been lost. You will not receive extra time to complete this task. Please try again now.

After the error message, participants were returned to the beginning of the survey to re-enter all of their answers. This was meant to contribute to a sense of unfairness because the participant was not given ample opportunity to perform, which is one of Gilliland's (1993) rules. After starting the second time and completing 48 items, the test abruptly ended and the following message appeared:

> The allotted time for you to complete this assessment is up. The system has electronically assessed your responses to the personality test. Because you did not complete all the survey items, you are **not eligible** to be entered into the raffle for a cash prize. We will contact you if we need any further information. [Gilliland, 1993: *no two-way communication*]

Procedure

Participants were informed that the study was potentially a multi-part study. They would complete the first part (an online personality test) and then might be asked to participate in one or two additional online surveys as a follow-up. Subject pool credit was commensurate with participation; completion of each additional survey resulted in additional credit.

Participants received a link to the study; the study was conducted entirely online. Participants first completed scales for the individual difference variables: the empathy scale, trait anger scale, conflict avoidance scale, and justice expectations scale. They were then told they would be completing a personality assessment for the Work Psychology Group and that their performance on this test would determine their eligibility to be entered into a raffle for a cash prize. They then completed the personality test with various unfair elements, as described above. Upon completion of the assessment and receiving the feedback on their performance, participants completed the overall justice perception scale and provided demographic information. Manipulation checks asked participants if, based on the feedback they were given, they were eligible to be entered into the raffle for the cash prize and to what extent they felt motivated to perform well on the task. Based on the responses to the manipulation checks, some participants were excluded from the analyses; details of this are discussed later.

To create an enhanced sense of realism, there was a short time lag between the unfair event and the intervention. This was to give the illusion that the research group checked for and realized that an injustice had occurred. Although there is little empirical work to point to an ideal timing of the intervention, there is some theoretical speculation

in the forgiveness literature regarding the appropriate time lapse between the transgression and an apology. Some researchers suggest that a longer lapse would give the victim time to "cool off" while others assert that an injustice should be addressed promptly so as to give the victim less time to ruminate about the transgression (Tripp & Bies, 2010). Because empirical data is sparse, for the purposes of this study, the intervention was administered approximately 24 hours after the unfair event. The shorter time frame is more practical for this research study because the students participating in the study would be more likely to remember the offense. The intervention was in the form of an email from the Work Psychology Group to participants and was sent out the day after the personality test was completed.

Conditions

No acknowledgment. Participants in the "no acknowledgement" condition received the following email:

> Our records indicate that you recently completed a personality test for the Work Psychology Group. Please click on this link to answer some additional questions and provide feedback on your experience. If you complete these survey questions *within three days*, you will earn additional credit from your instructor.

Upon clicking on the link, participants were asked to complete the forgiveness scale, reconciliation scale, revenge motivation scale, avoidance motivation scale, organizational justice scale, and organizational satisfaction scale.

Although previous researchers (Pace et al., 2010) included the phrase that they were "still looking into the situation" as part of their "no acknowledgement of responsibility" condition, I chose not to include that sentence as part of my "no

acknowledgement" condition. This is because, in the context of the aforementioned study, the organizational response was presented as one of several possible responses in answer to direct accusations of organizational mis-handling of the situation. In my study, although an unfair event occurred, there was no direct accusation to which the group needed to respond. Indeed, mentioning that there might have been unfairness and that the group was "looking into the situation" might even have been construed as an acknowledgement of wrongdoing on the group's part. As acknowledgment of responsibility is one of the integral elements of an effective apology and was included in the "apology" condition, it would be undesirable to include this in the "no acknowledgement" condition.

Undo harm. Participants in the "undo harm" condition received the following email:

> Our records indicate that you recently completed a personality test for the Work Psychology Group. You were informed that, based on your responses, you were ineligible for the cash prize. However, upon further review, we have decided not to use this personality test in determining eligibility. Therefore, the results have been thrown out and you now **eligible** to be entered into the raffle for the cash prize. Please click on this link to answer some additional questions and provide feedback on your experience. If you complete these survey questions *within three days*, you will earn additional credit from your instructor.

Participants then clicked on the link and completed the forgiveness scale, reconciliation scale, revenge motivation scale, avoidance motivation scale, organizational justice scale, and organizational satisfaction scale.

Apology. Participants in the "apology" condition received the following email:

> Our records indicate that you recently completed a personality test for the Work Psychology Group. Upon review of our personality test, we have come to the realization that this assessment was perceived as unfair by many of our participants. We accept full responsibility for this incident and apologize for it. We recognize that many participants viewed the items as invasive. In addition, we have been made aware that technology errors occurred during the test. We regret that this happened and resolve to make sure such a situation never occurs again in the future. Please click on this link to answer some additional questions and provide feedback on your experience. If you complete these survey questions *within three days*, you will earn additional credit from your instructor.

This apology contains all five elements of a formal apology, as enumerated earlier in the paper. Participants then completed the forgiveness scale, reconciliation scale, revenge motivation scale, avoidance motivation scale, organizational justice scale, and organizational satisfaction scale.

Undo harm and apology. Participants in this condition received the following email:

> Our records indicate that you recently completed a personality test for the Work Psychology Group. Upon review of our personality test, we have come to the realization that this assessment was perceived as unfair by many of our participants. We accept full responsibility for this incident and apologize for it. We recognize that many participants viewed the items as invasive. We regret that this happened and resolve to make sure such a situation never occurs again.

> Furthermore, our research group has decided not to use this personality test in determining eligibility. Therefore, the results have been thrown out and you are now **eligible** to be entered into the raffle for the cash prize. Please click on this link to answer some additional questions and provide feedback on your experience. If you complete these survey questions *within three days*, you will earn additional credit from your instructor.

This message contains both the five essential elements of an effective apology as well as the "undo harm" component of the undo harm condition. Participants then completed the forgiveness scale, reconciliation scale, revenge motivation scale, avoidance motivation scale, organizational justice scale, and organizational satisfaction scale.

Participants also completed to manipulation checks in which they were asked to respond yes or no to the following questions:

- Based on the information you have been given, has the research group restored your eligibility?
- I received an apology from the research group.
- The results of the personality test were thrown out and will not be used.

An additional manipulation check for conditions in which an apology was given asked participants to respond on a scale of 1 (strongly disagree) to 5 (strongly agree) to the item:

- The research group's apology was sincere.

Behavioral measures. In addition to collecting self reported forgiveness, reconciliation, revenge motivation, and avoidance motivation, I also assessed some

behavioral measures of these outcomes. Once the participants received the intervention email and completed all the subsequent scales, they received an e-mail that was purportedly from my advisor/ supervisor (Stephanie Merritt). This e-mail read:

> My name is Dr. Stephanie Merritt and I am the head of the Work Psychology Group. I am conducting a review of the studies conducted by my graduate students. You recently participated in a study called "Personality" (IRB #: 434839-2), conducted by one of my students, Wanyi Lai. Please click on *the most relevant* link below to indicate your opinion of the research study. Please choose the ***one*** link you feel to be most appropriate given your experience in the study. You will not receive more credit for completing additional links, please pick only one.
>
> - If you felt the study was inappropriate or unfair, please click on the below link to lodge a complaint. [*insert URL*]
> - If you are upset about this study and would like to withdraw your name from our contact list for future studies, click here. [*insert URL*]
> - If you found the study acceptable and/or would like to provide a compliment for the researcher, click here. [*insert URL*]

This e-mail was designed to collect behavioral data from participants. Clicking on the link to lodge a complaint would be considered a revenge behavior because it can be viewed as the participant's way of punishing the transgressor by reporting perceived unfairness to the supervisor. Clicking on the link to withdraw their participation would be considered an avoidance behavior because the participant is deciding to cut off interaction with the transgressor. Clicking on the link to indicate support for the study

would indicate reconciliation because the participant is extending goodwill toward the transgressor by providing positive feedback on the study to the supervisor. In addition, study attrition rate was used as a second measure of avoidance behavior. Although students may withdraw from the study for various reasons, any significant differences in study attrition across conditions could also be meaningful.

All participants were sent a debriefing email (see Appendix B) that explained the purpose of the study. Timing of the debriefing was as follows:

- Participants who clicked on any of the links in the Time 3 e-mail immediately viewed the debriefing statement and also received an e-mail copy.
- Participants who failed to respond to the Time 3 e-mail within three days were sent a reminder. If they failed to complete the Time 3 survey within three days of the reminder e-mail, they were e-mailed the debriefing statement.
- Participants who failed to respond to the Time 2 e-mail within three days were e-mailed a reminder. If they failed to complete the Time 2 survey within three days of the reminder e-mail, they were e-mailed the debriefing statement.
- Within 2 days of sending the written debriefing statement, participants who provided a contact phone number were called to verify that they had received the debriefing statement. Participant who did not answer were left a voice mail explaining the purpose of the call and inviting them to contact the research group with any questions.

Measures

Empathy. The Interpersonal Reactivity Index developed by Davis (1983) measures perspective taking, a subscale of empathy. There are seven items to assess

perspective taking. A sample item is "I believe that there are two sides to every question and try to look at them both." Participants will respond to the seven items, which are on a 5-point scale that ranges from 1 (does not describe me well) to 5 (does describe me well). Kamdar, McAllister, and Turban (2006) reported the coefficient alpha to be .84 for perspective taking. This study found an alpha of .77 for this scale.

Anger. Spielberger's (1983) State-Trait Anger Expression Inventory (STAXI) was used. Participants responded on a scale of 1 (almost never) to 5 (almost always) to ten items. A sample item is: I am a hotheaded person. Spielberger and colleagues (1983) reported an internal consistency of .89 for this scale. This study found an alpha of .86 for this scale.

Conflict avoidance. A four item scale was used to assess conflict avoidance (Goldberg, 2007). Participants were asked "When conflict occurs at work, to what extent do you use each of the following behaviors to resolve the conflict?" Participants were then given four behaviors to rate on a scale of 1 (never) to 5 (usually). A sample behavior is "withdraw from the situation." Goldberg (2007) found the coefficient alpha for this scale to be .74. This study found an alpha of .80 for this scale.

Organizational justice expectations. Bell, Weichmann, and Ryan (2006) adapted Colquitt's (2001) organizational justice scale to measure justice expectations, and this is the commonly used scale in studying justice expectations. However, this scale measures each dimension of justice separately. Given that this study focuses on overall justice perceptions rather than the specific types of justice, this would not have been an appropriate scale to use.

As yet, there is not an established overall justice expectations scale. Just as Bell et al. (2006) adapted Colquitt's (2001) justice scale, I adapted Ambrose and Schminke's (2009) overall justice scale into an overall justice expectation scale. A sample item from Ambrose and Schminke's (2009) scale is "For the most part, this organization treats its employees fairly." This item was adapted to read "For the most part, I expect this organization will treat its employees fairly." Just as in the original scale (Ambrose & Schminke, 2009), this adapted overall justice expectations scale had six items on a 7-point scale ranging from 1 (strongly disagree) to 5 (strongly agree). I found an alpha of .81 for this adapted scale.

Organizational justice. Overall justice perceptions were measured using a four-item Perceived Overall Justice scale developed by Ambrose and Schminke (2009). A sample item is "Overall, I can count on this research group to be fair." Participants responded to the items on a 5-point scale ranging from 1 (strongly disagree) to 5 (strongly agree) in which higher ratings indicate greater perceptions of fairness. The coefficient alpha for this scale was found to be .93 (Ambrose & Schminke, 2009). This study found an alpha of .91 for this scale.

No negative feelings. To account for the possibility that the participant did not have any negative feelings as a result of the study, I included the item "I did not experience any negative feelings against the research group." This item was rated on a 5-point scale ranging from 1 (not at all accurate) to 5 (very accurate).

Forgiveness. Forgiveness was measured using a four item forgiveness scale developed by Aquino and colleagues (2006). A sample item is "I let go of the negative feelings I had against the research group." Participants responded to the items on a 5-

point scale ranging from 1 (not at all accurate) to 5 (very accurate). The coefficient alpha for this scale was found to be .81 (Aquino et al., 2006). This study found an alpha of .93 for this scale.

Reconciliation. Reconciliation was measured using a three item reconciliation scale (Wade, 1989). A sample item is "If given the chance, I would try to make amends with the research group." Participants responded to the items on a 5-point scale ranging from 1 (not at all accurate) to 5 (very accurate). The coefficient alpha for this scale was found to be .81 (Aquino et al., 2006). This study found an alpha of .89 for this scale.

Revenge motivation. Revenge motivation was measured using a four item revenge motivation scale developed by Aquino and colleagues (2001). A sample item is "If given the chance, I would get even with the research group." Participants responded to the items on a 5-point scale ranging from 1 (not at all accurate) to 5 (very accurate). The coefficient alpha for this scale was found to be .84 (Aquino et al., 2006). This study found an alpha of .88 for this scale.

Avoidance motivation. Avoidance motivation was measured using a three item avoidance motivation scale developed by Aquino and colleagues (2006). A sample item is "If given the chance, I would cut off any relationship with the research group." Participants responded to the items on a 5-point scale ranging from 1 (not at all accurate) to 5 (very accurate). The coefficient alpha for this scale was found to be .82 (Aquino et al., 2006). This study found an alpha of .91 for this scale.

Organizational satisfaction. I used the five item Satisfaction with Organization scale developed by Kimball, Shumway, Korinek, and Arredondo (2002). Participants responded on a 5-point scale in which 1 is "strongly disagree" and 5 is "strongly agree."

A sample item is "In general, I am satisfied with this research group." Kimball and colleagues reported a Cronbach's alpha of .90 for this scale. This study found an alpha of .90 for this scale.

Recovery. Recovery focuses on the changes in justice perception ratings pre-organizational intervention and post-organizational intervention. This was measured by analyzing the change in justice ratings pre- and post-intervention. Positive slope was interpreted as the existence of recovery (justice perceptions improving from one time point to the next) and negative slope indicated that justice perceptions were falling over time (thereby indicating there is no recovery).

Marker variable. To address a potential common method variance problem that could result from so many self-report scales, I included a scale that should be theoretically unrelated to at least one other scale in the study (Lindell & Whitney, 2001). Theoretically, there should be a zero correlation between this marker variable and the other scales. A substantial correlation could be an indicator of common method variance and I would control for this by partialling out the marker variable. As my marker variable, I used an activity level scale, which should not demonstrate any meaningful relationship with the other study measures. This IPIP scale (Goldberg, 1999) asks participants to respond on a 5-point scale ranging from 1 (very inaccurate) to 5 (very accurate). A sample item is: I am always on the go. Goldberg (1999) reported a coefficient alpha of .71 for this scale. This study found an alpha of .72 for this scale.

For a complete list of all scale items, refer to Appendix C.

Results

Pilot Test 1

The purpose of this pilot test was to explore how participants perceived the manipulations for the main study. Since the main study seeks to explore justice recovery after an unfair event, the justice perceptions after the unfair event needed to be fairly low. The first part of this pilot test was to find out if participants viewed the individual items in the personality assessment as unfair/ inappropriate in measuring leadership potential. The second part of the pilot test described the unfair scenario as a whole and asked participants to indicate how they think they would feel if they went through such an experience. Finally, participants were shown the e-mails for each of the four study conditions and asked to provide their feedback regarding how they would feel upon the receipt of each e-mail. This was to ensure that participants were able to perceive the differences between the content in each e-mail condition. Participants in the pilot test were undergraduate psychology and business school students (N=51).

First, all items of the assessment were pilot tested individually. Participants were shown each item and then asked to respond on a scale of 1-5 (strongly disagree to strongly agree) to the following questions:

- This item is relevant to identifying my leadership potential.
- This item is inappropriate for identifying my leadership potential.
- This item is invasive/ too personal.

Of the 60 items presented, 50 were “non-leadership items” that were intended to be perceived as unrelated to leadership potential (e.g. “I am a small-sized person.”) and 10 items were “leadership items” that were meant to be perceived as directly related to

leadership potential (e.g. "I lead by example." Appendix D). T-tests were used to assess whether participants perceived those 10 items as significantly more relevant to identifying leadership than the other 50 items. For the question "this item is relevant to identifying my leadership potential," the responses for the leadership items were significantly different from the responses for the non-leadership items ($t = 9.88$, $df = 50$, $p < .01$). Specifically, participants indicated that the leadership items were more relevant to identifying leadership potential ($M = 3.92$, $SD = .44$) than personality items ($M = 3.17$, $SD = .44$; $d = 1.70$).

For the question "this item is inappropriate for identifying my leadership potential," the responses for the leadership items were also significantly different from the responses for the non-leadership items ($t = -7.71$, $df = 50$, $p < .01$). Participants indicated that they believed the personality items ($M = 2.75$, $SD = .44$) to be inappropriate for identifying leadership potential as compared to the leadership items ($M = 2.17$, $SD = .47$).

For the question of whether the items were perceived as invasive/ too personal, the responses for the leadership items were significantly different from the responses for the non-leadership items ($t = -5.76$, $df = 50$, $p < .01$). Participants indicated that the non-leadership items ($M = 2.52$, $SD = .68$) were significantly more invasive than the leadership items ($M = 2.09$, $SD = .65$). Combined, these findings show that participants were able to distinguish the leadership items from the personality items and that participants generally had more favorable reactions toward the leadership items. Results of the t-tests are shown in Table 1.

Participants were also given a chance to leave open-ended comments after evaluating each item. The comments supported the statistical finding that they were able to

distinguish between the leadership items and non-leadership items. For example, when presented with the item "I am a small-sized person", participants indicated that "my size has nothing to do with my leadership skills", "this can be considered discriminatory", and "your size should not matter in regards to leadership potential." This shows that participants did not view this particular item favorably and recognized that it did not relate to leadership potential. On the other hand, when considering the item "I inspire others with my plans for the future," participants agreed that "this is definitely important for being a good leader" and that "inspiration leads to others inspiring others and so on, which makes for a good question for a leadership potential personality test."

In this pilot test, I interspersed the leadership items with the non-leadership items in order to see if the presence of overt leadership items would highlight the unfairness of the other items, therefore leading to overall lower perceptions of fairness. Since the purpose of the study is to provoke feelings of injustice, I wanted to explore whether the contrasting effect of the non-leadership items and leadership items would be a stronger manipulation than only using non-leadership items. After assessing all the items individually, I asked participants a series of questions to gauge their feelings toward the survey as a whole. Participants were asked to respond on a scale of 1-5 (strongly disagree to strongly agree) to the following items:

- In general, the items on this personality test can accurately assess my leadership potential.
- In general, it is fair to use the items on this personality test to assess my leadership potential.

- If conclusions were drawn about my leadership potential using this personality test, I would consider these conclusions accurate.
- I would have negative feelings toward an organization that used this personality test to assess my leadership potential.
- I would react favorably toward an organization that used this personality test to assess my leadership potential.

I found that the means (see Table 2) of these items assessing overall impression of the assessment consistently fell between the means for leadership items alone or non-leadership items alone. This suggests that the leadership items actually lend credibility to the test and that participants rated the overall assessment as more fair than they otherwise might have if there were only personality items. Since it does not appear that the "contrast" effect highlights the unfairness of the assessment, for Pilot Test 2, I decided to leave out the leadership items and use an assessment containing only non-leadership items.

Looking through the comments that participants left regarding their overall feelings toward having this personality test assess their leadership potential, many comments indicated that participants were not comfortable with conclusions that might be drawn from the assessment. Some sample comments were:

- I would be irritated that such meaningless items would affect my score.
- I would be nervous that this may not accurately rate my leadership potential.
- I feel like some questions asked do not reflect if someone shows leadership.
- I feel like it was asking me about my personal life [rather] than my work qualities I can portray for the job.

- I would be upset because I feel that a lot of these items are not good for assessing leadership. Many of these questions seemed like "loaded questions" and the questions about how someone looks were quite inappropriate.

In addition to assessing participants' overall reactions to the assessment, I also asked participants how offended, hurt, and angry they believed they would feel if they were given this survey to assess leadership potential (see Table 3). The purpose of these questions was to gauge to what extent the survey provoked negative feelings in the participants. On a scale of 1-4, with 1 representing "not at all", 2 representing "a little", 3 representing "some", and 4 representing "substantial", participants indicated that they would not feel particularly offended, hurt, or angry (M=1.68, SD=.91; M=1.27, SD=.53; M=1.38, SD=.80, respectively). The relative lack of negative feelings toward the overall assessment was another reason why I decided to eliminate the leadership items. Since the leadership items actually served to increase overall fairness impressions of the assessment and negative feelings toward the test were low, I thought the manipulation might be stronger if the leadership items were not used.

The next part of the pilot test was aimed at finding out how participants would anticipate reacting to the situation as a whole. Participants were asked to imagine the following scenario:

You are asked to complete an online survey as part of a research project. You are told the test has 50 items that are meant to measure your leadership potential. Based on your performance on the test, you have the opportunity to be entered into a raffle to win a cash prize. The questions on the test are the personality items you assessed earlier. These questions do not appear to accurately assess your leadership potential. Furthermore, due to a computer error, you need to start the test over and are unable to finish the test. Although you still receive extra credit for participating, as a result of not completing the test, you are told you are no longer eligible to be entered into the raffle for the cash prize.

From this description, participants indicated that, on a scale of 1-5 (very unfair to very fair), they felt the situation was relatively unfair (*M*=2.37, *SD*=1.04). Additionally, on a scale of 1 to 4 (1=not at all to 4= substantial), participants indicated that they would be a little offended, hurt, and angry by the situation (*M*=1.98, *SD*=.92; *M*=1.63, *SD*=.87; *M*=2.04, *SD*=1.02, respectively). When asked to provide open-ended responses regarding how they would feel if the described scenario happened to them, responses were mixed. Some participants wrote that the experience would be "just a part of life, but slightly unfair" and that while the situation is "a little unjust because it was the computer's fault, I would still have to accept what happened." On the other hand, other participants said that "I would feel like it was unfair and that they should make it to where I was able to retake the test at a later date so I can get an equal chance to win the prize," "I would be angry because the questions are not sufficient to determine my leadership skills and a computer error should not determine my eligibility," and "I would probably be a bit angry and offended and probably very frustrated."

Although it was promising that the situation was viewed moderately negatively by many participants, these results (Table 4) indicate that the manipulation is not extremely strong. When asked how offended, hurt, and angered they were, participants' responses generally fell a little below the 2-point mark on a 4-point scale. The 2 represents the response "a little," which seems to indicate that the negative sentiment was not particularly strong. One possible explanation for the reaction not being very intense could be the use of the vignette. It has been pointed out that vignettes rely on a participant's imaginative abilities and that participants may not be able to accurately predict their own reactions (Cornelis, Van Hiel, & DeCremer, 2006). For the main study, a stronger

reaction from the participants would provide a better opportunity to study recovery. Therefore, I wanted to explore whether it was the situation itself or the use of vignettes to predict reactions that was causing the lack of stronger negative feelings. To do this, I conducted a second pilot test in which participants actually experienced the injustice manipulation, which will be described later.

The final part of this pilot test was to find out if the e-mail intervention manipulations were effective. Participants were asked to read the e-mails from each manipulation, then indicate to what extent each e-mail would influence them to forgive the injustice, believe that the research group is sorry for the injustice, and if the e-mail would make the participant feel more favorably toward the research group. I used ANOVAs to examine differences in ratings between the four e-mail conditions. For the question of whether the e-mail made the participant want to forgive the research group for the injustice, findings were significant ($F(3, 198) = 15.26$, $p<.01$). There were also significant differences between groups regarding whether the e-mail indicated the research group was sorry for the injustice ($F(3, 199) = 11.92$, $p<.01$). The question of whether the e-mail made the participant feel more favorably toward the research group also yielded significant differences ($F(3, 200) = 11.82$, $p<.01$). Tukey HSD post hoc analyses showed significant mean differences between the no acknowledgement condition and all other conditions, with participants indicating they would be less likely to forgive, less likely to believe the research group was sorry, and less likely to feel favorably toward the research group in this condition. Significant mean differences were also found between the undo harm condition and the undo harm + apology condition. An examination of the graphs (see Figures 1, 2 and 3) shows that the general pattern of

responses for the e-mail conditions is in keeping with what was expected based on the hypotheses (i.e. the ratings become more favorable as emails acknowledge, take action, and apologize for the injustice). Means, standard deviations, correlations, and ANOVA results are provided in Tables 5-9.

In the open-ended section, participants indicated that the no acknowledgment e-mail would likely make them feel "annoyed" and lead them to believe that the research group "did not address my concerns at all" and "didn't care about my feelings." For the undo harm condition, participants wrote that the e-mail would make them "less angry toward the research group", make them feel "like [the research group] cared," and that "I would be upset that they had to throw out my answers but happy that I was eligible for the money." The apology e-mail led participants to say that they would "feel less angry about the error that was made," that they would "feel a lot better that the group is trying to fix their assessment," and that the e-mail "would make me feel good that they acknowledged what happened and are taking responsibility." Similarly positive statements were made about the undo harm + apology condition (e.g. I would feel happy and relieved that the research group recognized their mistakes and made everyone else that wasn't eligible for the raffle eligible now.). These comments seem to mirror the findings of the data analysis. Given the results of this pilot test, I decided to make a few changes to the stimuli (delete the leadership items) and run a second pilot test to re-assess participant reactions.

Pilot Test 2

For the second pilot test, I set up the survey as it would actually happen in the main study (recall that the first pilot test presented the events of the study in vignette

form). Participants were undergraduate psychology students (*N*=41). The purpose of this pilot test was specifically to assess to what extent experiencing the stimuli would provoke negative feelings. The intent was to make sure feelings toward the injustice were strong enough to study any effects that might result, but not so strong that the study might be considered inappropriately harmful to participants. It is important to note here that, although the survey was set up to be as similar to the main study as possible and included mention of the cash prize, there was no actual cash prize being offered for participation in the pilot test. Participants were told in the informed consent that there would not actually be a cash prize but to imagine that there was and to respond accordingly.

Participants were told that they would be taking an assessment with 50 items meant to measure their leadership potential. (Based on the results of the first pilot test, actual leadership items were not used. Only items perceived as unrelated to actual leadership potential ("non-leadership items") were used.) Upon completing 30 of the items, participants received an error message saying that the program had failed and their responses had been lost. They were told that they would have to start the assessment again from the beginning, but would not be given any extra time to complete the task. Upon re-doing the assessment, participants were again not allowed to finish, receiving a message near the end of the assessment stating that the allotted time for the assessment was up and that, because the participant did not complete all the survey items, they would not be eligible to be entered into the raffle for the cash prize.

I then asked participants to indicate how fair they felt the experience to be. On a five point scale, participants indicated that they felt the experience to be relatively unfair (*M*=2.05, *SD*=1.12), that they did not think it would be appropriate to use this test as a

measure of their leadership potential (*M*=2.32, *SD*=.82), and that if the test were used to draw conclusions about their leadership potential, they would not consider those conclusions accurate (*M*=2.29, *SD*=1.06). When asked whether they would have negative feelings toward an organization that used such a personality test to assess leadership potential, participants leaned slightly toward saying they would have negative feelings (*M*=3.17, *SD*=1.05). Based on these results (Table 10), it seems that participants generally recognized that the situation was not fair and that the test questions/ situation under which the test took place were not an effective measure of leadership potential.

I also asked participants to provide ratings of their emotional responses to the assessment on a scale of 1 (none) to 4 (very much). Participants responded that they felt offended (*M*=2.56, *SD*=.84), hurt (*M*=1.39, *SD*=.59), angry (*M*=2.98, *SD*=.88), and unfairly treated (*M*=3.24, *SD*=.77). Overall, these ratings are higher than they were in the first pilot test when a vignette was used. This would suggest that a closer approximation of the actual study was able to evoke stronger emotional reactions. Based on this second pilot test, it appears that the participants recognized the experience as unfair, perceived it to be somewhat anger-inducing and offensive, but did not find the experience to be very hurtful.

As a final evaluation of the effectiveness of the stimuli, I read through the open-ended responses that participants provided at the end of the pilot test. These comments generally reflected what was seen in the analysis of the data. Some sample participant comments are:

- I was upset when I came across the screen that my answers could not be used… I was upset because I felt as if I had wasted my time trying to help with the survey and my answers weren't even going to be used.
- This was unfair that I had no chance to win because of an error in your system. It is not my fault the system doesn't operate up to par and should not disqualify me from having an opportunity to win the cash prize.
- I was angry that I wasted my time taking the survey and would not receive any credit for the time I spent answering the questions before the error occurred.
- Many of the questions made me feel belittled or judged based on the wording.
- I was worried about not being "compensated" because of an error out of my control.

The combination of participant comments and their ratings of the experience suggest that the stimuli worked as intended. Participants truly believed the error message that appeared, felt the questions were inappropriate, and were frustrated by the errors and unfair results of the survey. I chose not to try to further strengthen the stimuli to produce an even stronger response because I did not want to cause undue stress on the participants. Taking into consideration my desire to protect the participants from unnecessary risk, I decided the results of my pilot test struck a balance between a manipulation strong enough to produce negative emotion but not so strong as to unduly hurt the participants. Therefore, I decided to use this stimuli in moving forward with the main study.

Data Cleaning and Preparation

In analyzing the main study data, I first looked at the missing data. Since the study was longitudinal, it was expected that attrition would occur between time points. The dataset had an *N* of 396 at Time 1, *N*=312 at Time 2, and *N*=151 at Time 3. From Time 1 to Time 2, 21% of the participants were lost. Another 52% of participants were lost from Time 2 to Time 3. Despite attrition between time points, within each time point, there was little missing data, with percentages ranging from 0% to 1.3%. Running a missing values analysis showed that Little's MCAR test was not significant, χ^2 (1363, N= 396) = 870.50, p =1.00, which suggests that the missing data were not systematic. Because the missing data were largely a result of attrition between time points, I felt it was not appropriate to impute any data between time points. At the same time, there was so little missing data within time points, I did not feel it was necessary to impute within times.

I identified three univariate outlier cases and two multivariate outliers. The univariate outliers were defined as falling at least four standard deviations from the mean. Multivariate outliers were identified using Mahalanobis's extreme D^2. In cases where deletion of these outliers did not significantly change the results, I chose to leave the cases in the dataset. In situations in which deletion of outliers did change the results, the differences are discussed in the analyses. Reliability analyses were run on all the scales and found to be acceptable (above .70).

I then assessed participant responses to the manipulation checks. Of the 396 respondents to the Time 1 survey, 38 people believed they were still eligible for the raffle even though they were told that they were no longer eligible. This indicates the

participants did not pay attention to an important part of the injustice manipulation. I chose to delete these cases for all hypotheses. Of the 312 participants who responded to the Time 2 survey, 13 people did not believe their eligibility for the raffle had been restored even though they had been in conditions in which eligibility was restored. Additionally, 4 people who had been in a condition involving an apology indicated that they had not received an apology. I deleted these cases because the participants had missed a crucial element of the e-mail intervention. After these deletions, $N = 341$ for Time 1, $N = 269$ for Time 2, and $N = 131$ for Time 3. I also checked participants' response to the question "to what extent did you feel motivated to perform well on this task" to see how seriously participants took the study. Participants indicated that they were generally motivated to perform the task well (M=3.73, SD=.91). Participants who were in a condition involving an apology also tended to perceive the apology as sincere (M=3.95, SD=.96).

Variables were next checked for skewness. Most of the variables were not substantially skewed, with skewness statistics ranging from -.55 to .29. However, three variables were found to be notably skewed: justice expectations (skewness statistic = -1.11), revenge motivation (skewness statistic = 2.01), and avoidance motivation (skewness statistic = 1.15). Specifically, justice expectations were skewed such that expectations tended to be relatively high (M=4.37, SD= .57) and revenge motivation and avoidance motivation were generally low (M=1.28, SD= .51 and M=1.76, SD= .87, respectively). A closer look at the variables shows that the range of responses for revenge motivation goes from 1 to 4, which means none of the participants gave the strongest possible response for revenge motivation. Histograms for these three variables are

provided in Figures 4, 5, and 6. Although these variables do show substantial skew, I chose not to transform any of the variables because variables that have been transformed are not readily interpretable. In the analyses described below, I was able to find significant relationships, indicating that even with the skew, relationships were strong enough for effects to be detected. Means, standard deviations, and correlations for the scales are provided in Table 11.

The last part of data preparation involved looking at the marker variable (activity level). This variable had been included to investigate potential common method variance and should be theoretically unrelated to most scales in the study (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Looking at the relationships between activity level and the other variables, I found that activity level did not demonstrate significant correlations with 9 out of the 12 other variables. Lindell and Whitney (2001) asserted that the lowest observed correlation should be the best estimate of common method variance. In this study, the lowest observed correlation was -.03 (relationship between activity level and avoidance motivation). As a further check of common method variance, Lindell and Whitney (2001) argued that it is also important to look at the second lowest observed correlation in order to avoid capitalizing on chance. The second lowest observed correlation was -.04 (relationship between activity level and anger). Because these correlations are so low, it seems safe to assume that common method variance was not playing a substantial role in the relationships between the variables. Activity level did show significant correlations with justice expectations ($r = .18$, $p < .01$), conflict avoidance ($r = -.17$, $p < .01$), and not having any negative feelings toward the organization ($r = .14$, $p < .05$). However, these significant correlations are generally

between activity level and individual trait variables rather than the dependent variables. For these reasons, I concluded that common method variance was not likely to be a problematic aspect of the data.

Hypothesis Testing

The first five hypotheses dealt with the relationships between forgiveness, reconciliation, revenge motivation, and avoidance motivation. These measures were all taken at Time 2, after the injustice had occurred in Time 1 and immediately after participants received their e-mail intervention follow-up. I found a significant negative correlation between revenge motivation and forgiveness (r = -.27, p < .01), which supports Hypothesis 1 that revenge motivation is negatively related to forgiveness. Similarly, I found a significant negative correlation between revenge motivation and reconciliation (r = -.18, p < .01), supporting Hypothesis 2 which proposed that revenge motivation is negatively related to reconciliation. Although these hypotheses were supported, the correlations were smaller than might have been expected. From a statistical standpoint, the reason for this might be linked to the skewed nature of the revenge motivation responses mentioned earlier. Recalling that, although it was on a 1 to 5 scale, the maximum participant response for revenge motivation was 4 and that the mean for this scale was 1.28 (SD=.51, skewness statistic = 2.01), it is possible that the lower correlation could be due in part to range restriction on revenge motivation. Despite this, the relationships between variables were still strong enough to be detected and support the hypotheses. A significant positive correlation between revenge motivation and avoidance motivation (r = .40, p < .01) provided support for Hypothesis 3 that revenge motivation is positively related to avoidance motivation. The fact that this

correlation is stronger than the previous two could be an indication that the weaker correlations between revenge motivation and forgiveness and reconciliation are not a result of non-normality, but could instead have a theoretical explanation. This possibility will be addressed in further analyses and the discussion. Hypothesis 4 proposed that there would be a significant negative correlation between avoidance motivation and forgiveness; although the relationship is in the hypothesized direction, it was not found to be significant (r = -.11, p = .08). A significant negative correlation was found between avoidance motivation and reconciliation (r = -.24, p < .01), supporting Hypothesis 5 which suggested that avoidance motivation was negatively related to desire for reconciliation. Correlations are displayed in Table 11.

The next set of hypotheses dealt with the effects of the various interventions. Hypotheses 6, 7, 8, and 9 proposed that the different e-mail conditions would produce significantly different levels of forgiveness, reconciliation, revenge motivation, and avoidance motivation. Conditions were expected to associate with forgiveness and reconciliation in the following order (low to high): no acknowledgement, undo harm, apology, undo harm + apology. They were expected to associate with avoidance and revenge motivation in the opposite order. I used ANOVA to test these hypotheses. Running the analyses using all data (including outliers), results did not support the proposal that participants in different e-mail conditions demonstrated significantly different ratings of forgiveness (F(3, 265) = 1.90, p = .13), reconciliation (F(3, 265) = 2.07, p = .10), or avoidance motivation (F(3, 265) = .64, p = .59). However, findings were significant (F(3, 265) = 2.74, p < .05) for revenge motivation, suggesting that there

are indeed significant differences between the e-mail conditions in ratings of revenge motivation. The direction of the differences will be discussed further below.

It is important to note here that the test for homogeneity of variances for revenge motivation was significant (Levene's statistic = 7.01, $p < .01$). Levene's test was not significant for forgiveness, reconciliation, or avoidance motivation. This means that the assumption of homogeneity of variance was violated for revenge motivation. While this is not ideal for ANOVA, Howell (2007) stated that a violation of this assumption does not necessarily mean the results are invalid; he proposed that if "the largest variance is no more than four times the smallest, the analysis of variance is most likely to be valid" (p. 316). By this standard, when comparing variances for revenge motivation across conditions, the largest standard deviation (*SD*=.64) compared to the smallest (*SD*=.42) would suggest that the ANOVA results are likely still reliable.

I ran planned contrasts comparing revenge motivation in each of the e-mail interventions and did not assume equal variances. The contrast tests found significant differences in revenge motivation between the no acknowledgment condition and the two conditions involving apology (undo harm + apology condition: $t = 2.49$, $df = 125.59$, $p < .01$; apology condition: $t = 1.95$, $df = 127.61$, $p < .05$). Meanwhile, differences between the undo harm condition and the undo harm + apology condition were approaching significance (t=1.74, df =126.64, p=.09). All differences were in the hypothesized directions, with revenge motivation being significantly higher in the no acknowledgment condition ($M = 1.40$, $SD = .64$) than in the other conditions (undo harm + apology condition: $M = 1.17$, $SD = .42$; apology condition: $M = 1.22$, $SD = .44$). Therefore, further

contrast analyses supported the results of the ANOVA, finding significant differences in revenge motivation between e-mail conditions.

Although there was only partial support for Hypotheses 6-9 found in the ANOVA analyses, an examination of the means (see Table 12) and graphs (see Figures 7, 8, 9, & 10) supports the predicted direction of participant responses, with a modest upward trend in forgiveness and reconciliation from no acknowledgment to undo harm to apology to undo harm + apology and a small downward trend in revenge motivation and avoidance motivation between these conditions. The undo harm + apology and apology only conditions demonstrated higher means for forgiveness and reconciliation and lower means for revenge motivation and avoidance motivation than the other two conditions. The no acknowledgement and undo harm only conditions showed higher levels of revenge motivation and avoidance motivation and lower levels of forgiveness and reconciliation than the other two conditions. ANOVA results are provided in Table 13.

This pattern of results could indicate that the apology could be a key factor in influencing revenge motivation. To explore this, I compared the conditions with an apology component (apology condition and undo harm + apology condition) with the conditions that did not have an apology component (no acknowledgment condition and undo harm condition). I found there was indeed a significant difference between conditions with an apology component and conditions without an apology component (t=-2.61, df=248.01, p<.01). Specifically, participants indicated significantly lower levels of revenge motivation when they received an apology compared to when they did not (without apology: M = 1.36, SD = .57; with apology: M = 1.20, SD=.43). In contrast, when I compared conditions with an undo harm component (undo harm condition and

undo harm + apology condition) against conditions without an undo harm component (no acknowledgement and apology conditions), there was not a significant difference (t = -1.18, df = 248.01, p = .24). This supports the idea that the apology is driving the differences in revenge motivation between groups.

For Hypotheses 6-9, I re-ran the analyses with the univariate and multivariate outliers taken out to see if there would be a difference in findings. One of the outliers included an unusually high response on the revenge motivation scale, so I deleted all the outliers to find out if this would change the results. Means, standard deviations, and ANOVA results for these analyses with outliers deleted are provided in Table 12 and Table 14. While the trends for the graphs and means did not change, taking out the outliers did affect significance testing: the previously found significant difference between conditions in revenge motivation became non-significant (F(3, 260) = 2.34, p=.07). Based on this, it would appear that when outliers were deleted, Hypotheses 6, 7, 8, and 9 are not supported as there were no significant differences between conditions regarding participants' forgiveness, reconciliation, revenge motivation, and avoidance motivation. Even with outliers deleted, the Levene's statistic was again found to be significant for revenge motivation (Levene's statistic = 5.75, p< .01). Looking at the planned contrasts comparing the conditions and not assuming equal variances, the results showed significant differences in revenge motivation between the no acknowledgment and undo harm + apology conditions (t = 2.31, df = 128.05, p < .05). Similar to the findings using the data with outliers included, differences between the no acknowledgment and apology conditions and the undo harm and undo harm + apology conditions were approaching significance (t = 1.83, df = 129.64, p = .07; t = 1.69, df =

125.30, $p = .09$, respectively). As with the dataset including outliers, the pattern of responses between conditions, based on the graphical evidence, is as predicted: the no acknowledgement condition and undo harm condition generally yielded higher levels of negative outcomes and lower levels of positive outcomes while the undo harm + apology condition and the apology only condition trended towards higher levels of positive outcomes and lower levels of negative outcomes. From this, it appears that while significance might vary slightly, the general pattern of results are the same when outliers are used in the analyses and when they are taken out. Checking the differences in revenge motivation between conditions with an apology component versus those without an apology, I again found significant differences ($t = -2.49$, $df = 253.59$, $p < .01$). There were no significant differences in revenge motivation between conditions with an undo harm component versus conditions without undo harm ($t = -.91$, $df = 253.59$, $p = .64$).

In summary, there was partial support for Hypotheses 6-9 in that there were significant mean differences in revenge motivation between the no acknowledgment and undo harm + apology conditions as well as differences in revenge motivation between the no acknowledgement and apology condition. Additional analyses suggested that the apology component of the interventions played a key role in differences between groups for revenge motivation. The remaining pieces of the hypotheses regarding differences in forgiveness, reconciliation, and avoidance motivation between the four e-mail conditions were not supported through significance testing.

Before continuing with the rest of the hypotheses, I ran analyses to find out if the apology component also influenced differences in forgiveness, reconciliation, and avoidance motivation. Recall that, when exploring differences in outcomes between the

four conditions, only revenge motivation was found to differ between groups. However, the revenge motivation results suggested that the apology component could be the key factor driving the differences between groups. Therefore, I wanted to find out if this was also the case with the other variables. Since these results did not significantly differ regardless of whether outliers were included or taken out, the results are presented with outliers included. Comparing apology vs. no apology groups, I found significant differences in reconciliation (t = -2.18, df = 267, $p < .01$; without apology: M = 3.55, SD = .76; with apology: M = 3.76, SD = .84) and differences in forgiveness were approaching significance (t = -1.74, df = 267, p = .08; without apology: M = 3.82, SD = .83; with apology: M = 4.00, SD = .82). There were no significant differences in avoidance motivation between the two groups. I also compared differences between conditions with an undo harm component and conditions without an undo harm component; as with the earlier analyses, the undo harm component did not yield any significant differences in any of the outcomes variables. Therefore, it would appear that the apology component is the primary driver of differences between groups in forgiveness, reconciliation, and revenge motivation. However, it is necessary to note that the effect sizes of apology were small, with Cohen's d ranging from .21 to .27.

For the next set of hypotheses (H10-H17), there were no significant differences in results when analyses were run with and without outliers; therefore, the results presented are run with all data, including outliers. These hypotheses dealt with the relationships between the individual difference variables (trait empathy, trait anger, and conflict avoidance) and forgiveness, reconciliation, revenge motivation, and avoidance motivation. Later analyses will address whether these relationships were influenced by e-

mail condition. Hypothesis 10 and 11 posited that trait empathy is positively related to forgiveness and reconciliation. These hypotheses were not supported for either forgiveness or reconciliation (r = .00, p = .97 and r = .04, p = .52*,* respectively). Hypothesis 12 and 13 proposed that trait empathy is negatively related to revenge motivation and avoidance motivation; both these relationships were found to be not significant (revenge motivation: r = -.11, p = .08*;* avoidance motivation: r = -.09, p = .13). In Hypothesis 14, it was expected that trait anger would be positively related to revenge motivation; a significant relationship was not found (r = .05, p = .41). It was hypothesized in Hypothesis 15 and 16 that trait anger would be negatively related to forgiveness and reconciliation, but these were not supported (forgiveness: r = .10, p = .10*;* reconciliation: r = .09, p = .15). Finally, Hypothesis 17 proposed that conflict avoidance would be positively related to avoidance motivation. This hypothesis was not supported (r = .04, p = .47). In summary, the hypotheses proposing relationships between individual difference variables and forgiveness, reconciliation, revenge motivation, and avoidance motivation were not supported. Although significant relationships were not found, the relationships between variables were generally in the expected directions. Two exceptions to this were the relationships between trait anger and forgiveness and trait anger and reconciliation. It had been expected that these relationships would be negative, with higher levels of trait anger leading to lower levels of forgiveness and reconciliation. The results do not support the hypothesized direction; instead, the relationship between trait anger and forgiveness was in the positive direction and approaching significance (p = .10). I also found a significant positive relationship found between trait anger and

avoidance motivation (r = .12, p<.05), a relationship for which there had not been a hypothesis. For the full table of correlations, refer to Table 11.

The above hypotheses were largely not supported. It is possible that the nature of these relationships was masked by the different conditions to which the participants were assigned. To explore this possibility, I turned to the research question that was posed regarding potential interactions between individual difference variables (trait empathy, trait anger, and conflict avoidance) and organizational intervention in influencing forgiveness, reconciliation, revenge motivation, and avoidance motivation. In order to find out if individual differences variables differentially impacted outcome variables depending on the condition, I ran a series of regressions (see Tables 15, 16, and 17).

Since the findings were generally the same regardless of whether outliers were included or not, results presented use the full dataset including outliers unless otherwise specified. No significant interactions were found between conflict avoidance and e-mail condition on any of the outcome variables (forgiveness: $F(3, 265) = .72$, $p = .54$; reconciliation: $F(3, 265) = 1.63$, $p = .18$; revenge motivation: $F(3, 265) = 3.33$, $p < .05$; avoidance motivation: $F(3, 265) = .83$, $p = .48$). Although the model was significant for revenge motivation, this is due to a main effect of e-mail condition, not a significant interaction term. Similarly, no significant interactions were found between trait anger and e-mail condition on the outcome variables (forgiveness: $F(3, 265) = 1.33$, $p = .27$; reconciliation: $F(3, 265) = 2.31$, $p = .08$; revenge motivation: $F(3, 265) = 3.04$, $p < .05$; avoidance motivation: $F(3, 265) = 1.99$, $p = .12$). Although the model involving revenge motivation was significant and the model with reconciliation was approaching significance, this is again due to a main effect of e-mail condition rather than a significant

interaction term. When outliers are deleted, the model with reconciliation was significant rather than simply approaching significance ($F(3, 260) = 2.62$, $p < .05$), but the interaction term remained not significant ($t(260) = -.02$, $p = .98$).

An analysis of potential interaction between trait empathy and e-mail condition on the outcome variables demonstrated no significant interactions for forgiveness ($F(3, 265) = .32$, $p = .81$, $t(265) = -.33$, $p = .74$) or reconciliation ($F(3, 265) = 1.63$, $p = .18$, $t(265) = .03$, $p = .98$). For the revenge motivation outcome, the interaction term between trait empathy and intervention was found to be significant, explaining a small but significant increase in variance in revenge motivation (adjusted $R^2 = .04$, $\Delta R^2 = .01$, $F(3, 265) = 4.84$, $p < .01$, $t(265) = 1.94$, $p < .05$). The f^2 for this interaction was .01. In addition to a significant interaction term, there was also a significant main effect of trait empathy (adjusted $R^2 = .01$, $t(265) = -2.43$, $p < .05$) and e-mail condition (adjusted $R^2 = .03$, $t(265) = -2.76$, $p < .01$). Because the interaction was significant, I graphed the data in order to determine the nature of the interaction (see Figure 11). From this graph, the steepest slope is that of the no acknowledgment condition, indicating that the relationship between trait empathy and revenge motivation is strongest for this condition. Specifically, the graph suggests that the higher a person's trait empathy, the lower the revenge motivation. The other conditions did not demonstrate as strong a change in the relationship between empathy and revenge motivation, as was reflected in their relatively flat slopes in the graph. An inspection of the relationship between empathy and revenge motivation in each of the conditions individually shows that only the no acknowledgment condition demonstrated a significant relationship between empathy and revenge motivation ($r = -.28$, $p < .05$).

The model involving trait empathy and e-mail condition effects on avoidance motivation was found to be approaching significance and the interaction term was significant (adjusted R^2 = .02, ΔR^2 = .01, $F(3, 265) = 2.48$, $p = .06$, $t(265) = 1.95$, $p < .05$). The f^2 for this interaction was .01. A look at the graph for this interaction (Figure 12) shows that, similar to revenge motivation, higher trait empathy was associated with lower avoidance motivation in the no acknowledgment condition. The no acknowledgment condition had the steepest slope and was the only condition in which trait empathy demonstrated a significant relationship with avoidance motivation (r = -.23, $p < .05$).

As a follow-up to the analyses described above, I then ran the same analyses using apology vs. no apology as the moderator instead of e-mail condition. Since it was previously found that the apology component appeared to be a crucial factor in influencing outcomes, I wanted to see if this held true for interactions with individual difference variables. For conflict avoidance and trait anger, the results using apology component mirrored the results found when e-mail condition was used. As with e-mail condition, there were also no significant interactions found between trait empathy and apology component on forgiveness or reconciliation. There was a difference in results for trait empathy and apology component on revenge motivation. When using e-mail condition, a significant interaction was found; however, when using apology component, there was a main effect of apology ($F(3, 265) = 3.43$, $p<.05$, $t(265) = -2.43$, $p<.05$) but the interaction term was not significant ($t(265) = 1.15$, $p = .25$). Similarly, the previously found significant interaction of trait empathy and e-mail condition on avoidance motivation disappeared when apology component was used ($F(3, 265) = 1.88$, $p = .13$,

$t(265) = 1.68$, $p = .10$). In general, it appears that when apology component is used instead of e-mail condition, the interaction effects are diminished. Recalling the larger effects of the no acknowledgment condition compared to the other conditions, these results indicate that combining the no acknowledgment condition and the undo harm condition to create an overall no apology condition could mask the interaction effects. Table 18 provides more details on the regression analyses involving trait empathy, apology component, and the four outcomes.

I also ran the same analyses using the undo harm component vs. no undo harm component as the moderator. These analyses showed no significant interactions of conflict avoidance and undo harm on any of the outcome variables; trait anger and the undo harm component also had no significant interaction effects on outcomes. As with the apology component analyses, no significant interactions were found between trait empathy and undo harm component for forgiveness, reconciliation, or avoidance motivation. This implies that the four separate e-mail conditions are crucial in determining interaction effects with trait empathy on avoidance motivation because this was the only model that had a significant interaction term. When looking at the effects of trait empathy and undo harm component on revenge motivation, the interaction term was found to be significant (adjusted $R^2 = .03$, $\Delta R^2 = .02$, $F(3, 265) = 3.31$, $p < .05$, $t(265) = 2.27$, $p < .05$). The f^2 for this interaction was .02, which is slightly larger than when e-mail condition was used ($f^2 = .01$). I graphed the interaction (see Figure 13) and found that the relationship between trait empathy and revenge motivation is stronger when there is no undo harm component than when there is an undo harm component. Specifically, when there is not an undo harm component, higher levels of empathy are associated with

lower levels of revenge motivation. This reflects the same relationship between empathy and revenge motivation seen in the no acknowledgment condition described in earlier analyses. When there is an undo harm component, the relationship between empathy and revenge motivation is not very strong, as evidenced by its relatively flat slope. An inspection of the relationship between empathy and revenge motivation in each condition individually shows that there is only a significant relationship between empathy and revenge motivation when there does not exist an undo harm component (r = -.22, p<.01). Refer to Table 19 for details on the regressions.

Justice recovery in this study was derived from the difference in justice perceptions from Time 1 to Time 2. Research indicates that a multilevel approach is useful in this kind of study because longitudinal data "can be viewed as multilevel data with repeated measures nested within persons" (Gleibs, Mummendey, & Noack, 2008; p. 1101). For this reason, I used hierarchical linear modeling for the next set of hypotheses. This method accounted for the fact that participants were assessed repeatedly over time, which created an inherent non-independence in responses (Bleise & Ployhart, 2002). In these analyses, within-person changes in justice perceptions were at level 1 and between-person differences (forgiveness, reconciliation, revenge motivation, avoidance motivation, and justice expectations) were at level 2 (Snijders & Bosker, 1999). Although 341 participants responded at Time 1, there was attrition at Time 2. Since the analyses required that there be no missing data at Level 2, only participants who responded at both Time 1 and Time 2 were included in the analyses (N=269). Differential attrition will be discussed later in this paper. Analyses were conducted using the HLM 7 program (Raudenbush, Bryk, & Congdon, 2010).

Before testing the hypotheses, a null model was created in order to calculate the intraclass correlation coefficient and to verify that there was enough between-subjects variance in justice rating to justify using HLM. For this model, the outcome was justice rating and no other predictors were added (regression equation: Level 1: Justice = β_0 + e). In the estimation of fixed effects, the mean justice rating was 3.37. The results indicated that the variance component for the intercept was significant (variance component = .18, p<.01) and the ICC was calculated to be .47, p<.01, which suggests that there was enough variance in the justice perceptions to merit further investigation at a higher level. The deviance value for the null model was 948.12, which was used later when comparing the null model against other models.

Having established that multilevel modeling was appropriate, I then ran a random coefficients regression model. In this model, I added in the Level 1 Time variable and no Level 2 predictors (regression equation: Level 1: Justice = $\beta_0 + \beta_{1\ \text{Time}}$ + e). This model was meant to assess the variance in justice perceptions over time and to see if, when time was added into the model, it would be significantly better than the null model. The final estimation of variance components for this model was found to be significant (variance component= .19, p<.01) and the ICC was calculated to be .49, p<.01. When comparing this model against the null model, the deviance dropped from 948.12 in the null model to 941.17. However, the likelihood ratio test indicated that the change in degrees of freedom was zero, so it was not appropriate to draw conclusions from the chi square test. In the below HLM analyses, all the models tested suffered from this same degrees of freedom issue. Because there was insufficient degree of freedom, the HLM results presented focus on each model's fixed effects, which assume the effects were equivalent for everyone.

For the random coefficients model with only time, an examination of the fixed effects showed that time was a significant predictor of justice ratings ($\beta_1 = .14$, $p < .01$). The coefficient for time was positive, indicating that on average, justice ratings significantly increased between Time 1 and Time 2. This indicates that overall, justice recovery did occur. The ICC for this model showed that 49% of the variance was explained by this model as opposed to 47% explained by the null model. Although the comparison of deviance was inconclusive due to insufficient degrees of freedom, the results suggest that there is a slight improvement in the model when time is added. See Tables 20 and 21 for details on the null model and the random coefficients model (RC model).

I next moved on to hypothesis testing. The level 2 variables used in the hypothesis testing (justice expectations, forgiveness, reconciliation, revenge motivation, and avoidance motivation) were grand mean centered, which means the intercept is equal to the expected value of the outcome for an individual with an "average" level of that variable (Hofmann & Gavin, 1998).

Hypothesis 18 predicted that justice expectations would be negatively associated with justice recovery. Time was the Level 1 variable and the Level 2 variable of justice expectations was expected to significantly predict the slope of justice perceptions over time such that higher justice expectations would be related to lower recovery. The regression equations for this hypothesis were:

Level 1: $\text{Justice} = \beta_0 + \beta_{1\ \text{Time}} + e$

Level 2: $\beta_0 = \gamma_{00} + \gamma_{01\ \text{Justice expectations}} + \mu$

$\beta_1 = \gamma_{10} + \gamma_{11\ \text{Justice expectations}}$

The fixed effects showed that the Level 2 predictor justice expectations had a significant positive effect on Time 1 justice rating ($\gamma_{01} = .18$, $p < .01$). This means that participants tended to make justice ratings in a direction consistent with their expectations; if expectations were higher, justice rating was likely to also be higher and vice versa. The cross level interaction of justice expectations on the slope of justice was not significant ($\gamma_{11} = -.08$, $p = .23$), indicating that slope of recovery was not significantly associated with justice expectations; therefore, Hypothesis 18 was not supported. The graph (see Figure 14) reflected the finding that Time 1 justice ratings were higher when justice expectations are high. The slopes depicted on the graph were not significantly different depending on the level of justice expectations (high justice expectations slope = .06; low justice expectations slope = .22). See Table 22 for more details.

Hypotheses 19 predicted that forgiveness would be positively related to justice recovery. Forgiveness was expected to significantly predict the slope of justice perceptions over time. The regression equations were:

Level 1: $\text{Justice} = \beta_0 + \beta_{1\ \text{Time}} + e$

Level 2: $\beta_0 = \gamma_{00} + \gamma_{01\ \text{Forgiveness}} + \mu$

$\beta_1 = \gamma_{10} + \gamma_{11\ \text{Forgiveness}}$

The fixed effects showed that forgiveness did not have a significant relationship with Time 1 justice rating ($\gamma_{01} = -.02$, $p = .60$) (see Table 23). This indicates that there was no significant relationship between forgiveness and Time 1 justice ratings, which makes sense because the intervention had not yet occurred at Time 1. A significant association between forgiveness and recovery was found ($\gamma_{11} = .12$, $p < .01$), providing support for Hypothesis 19. From Figure 15, it appears that the intercepts are not

significantly different. However, the slopes of the lines indicate that forgiveness does appear to have an impact on justice recovery. Participants high in forgiveness had a steeper slope (high forgiveness slope = .26) while participants low in forgiveness demonstrated a relatively flat slope (low forgiveness slope = .02).

The next hypothesis predicted that reconciliation would be positively related to justice recovery such that higher reconciliation would be related to stronger justice recovery. The regression equations were:

Level 1: $\text{Justice} = \beta_0 + \beta_{1\ \text{Time}} + e$

Level 2: $\beta_0 = \gamma_{00} + \gamma_{01\ \text{Reconciliation}} + \mu$

$\beta_1 = \gamma_{10} + \gamma_{11\ \text{Reconciliation}}$

The fixed effects showed that reconciliation had a significant positive association with Time 1 justice rating ($\gamma_{01} = .12$, $p < .01$), indicating that individuals who perceived the Time 1 task as less unfair were more likely to report reconciliation. The cross level interaction of reconciliation on the slope of justice was not significant ($\gamma_{11} = .07$, $p = .13$). This suggests that there was no significant recovery effect; therefore, Hypothesis 20 was not supported. The graph for reconciliation (Figure 16) reflected the finding that participants high in reconciliation gave higher justice ratings at Time 1. The slopes for low reconciliation and high reconciliation were not found to be significantly different (low reconciliation slope = .07; high reconciliation slope = .21), but the graph shows that the direction of the relationships is in the expected direction, with individuals higher in reconciliation demonstrating slightly steeper recovery. See Table 24 for more details.

Hypothesis 21 proposed that revenge motivation would predict the slope of justice perceptions over time. Specifically, it was expected that the recovery effect would be

stronger when revenge motivation was low than when revenge motivation was high. The regression equations were:

Level 1: Justice = $\beta_0 + \beta_{1\ \text{Time}} + e$

Level 2: $\beta_0 = \gamma_{00} + \gamma_{01\ \text{Revenge motivation}} + \mu$

$\beta_1 = \gamma_{10} + \gamma_{11\ \text{Revenge motivation}}$

Fixed effects showed that there was no significant association of revenge motivation and Time 1 justice ratings ($\gamma_{01} = -.05$, $p = .52$). There was also no significant interaction ($\gamma_{11} = -.12$, $p = .10$), so Hypothesis 21 is not supported. The graph in Figure 17 shows that participants did not significantly differ in Time 1 justice ratings. Although not found to be significant, the graph suggests that there was a slightly stronger recovery effect for individuals low in revenge motivation (slope = .27) while the slope for individuals high in revenge motivation was relatively flat (slope = .02). This trend is in line with the expected direction of the relationships. Table 25 provides more details.

Hypothesis 22 predicted that the recovery effect would be stronger for participants low in avoidance motivation than participants high in avoidance motivation. The regression equations were:

Level 1: Justice = $\beta_0 + \beta_{1\ \text{Time}} + e$

Level 2: $\beta_0 = \gamma_{00} + \gamma_{01\ \text{Avoidance motivation}} + \mu$

$\beta_1 = \gamma_{10} + \gamma_{11\ \text{Avoidance motivation}}$

Fixed effects showed that there was a significant relationship between avoidance motivation and Time 1 justice ratings ($\gamma_{01} = -.23$, $p < .01$). Specifically, participants who gave higher Time 1 justice ratings tended to be lower in avoidance motivation. This could be because participants who viewed the Time 1 experience as less unfair had less reason

for wanting to avoid the research group at later time points. A significant recovery effect was not found (γ_{11} = -.05, p = .29), so Hypothesis 22 is not supported. Figure 18 reflected these results, showing a higher initial justice rating for individuals low in avoidance motivation and similar slopes for participants low in avoidance motivation (slope = .19) and those high in avoidance motivation (slope = .09). Refer to Table 26 for more details.

Before testing the last hypothesis, I explored some additional models relating to justice recovery. First, forgiveness, reconciliation, revenge motivation, and avoidance motivation were all put into the same model:

Level 1: Justice = $\beta_0 + \beta_{1\ \text{Time}} + e$

Level 2:

$\beta_0 = \gamma_{00} + \gamma_{01\ \text{Forgiveness}} + \gamma_{02\ \text{Reconciliation}} + \gamma_{03\ \text{Revenge Motivation}} + \gamma_{04\ \text{Avoidance Motivation}} + \mu$

$\beta_1 = \gamma_{10} + \gamma_{11\ \text{Forgiveness}} + \gamma_{12\ \text{Reconciliation}} + \gamma_{13\ \text{Revenge Motivation}} + \gamma_{14\ \text{Avoidance Motivation}}$

An inspection of the fixed effects found that when the four predictors were included together, reconciliation and avoidance motivation continued to have significant direct associations with Time 1 justice ratings (γ_{02} = .13, p < .05; γ_{04} = -.24, p < .01). Thus, participants with higher justice ratings tended to have higher reconciliation, and participants with lower justice ratings tended to have higher avoidance motivation. Additionally, the intercept for forgiveness became significant (γ_{01} = -.10, p = .05), suggesting that participants with higher initial justice ratings were likely to demonstrate lower levels of forgiveness. When all the variables were included together, forgiveness continued to be the only one to show significant recovery effects (γ_{11} = .11, p = .05). Specifically, low forgiveness was associated with weaker justice recovery and high forgiveness was associated with stronger justice recovery. The t-ratio of forgiveness, in

absolute terms, was also found to be much higher than that of the other variables (see Table 27), which is another indicator that forgiveness had a greater effect on the slope of justice ratings than the other three predictors.

Further analyses checked to see if there was an effect of e-mail condition on justice recovery. The no acknowledgment condition was used as the reference condition and the three other e-mail conditions were dummy coded:

Level 1: Justice = $\beta_0 + \beta_{1\ Time} + e$

Level 2:

$\beta_0 = \gamma_{00} + \gamma_{01\ Dummy1\ (Undo\ Harm)} + \gamma_{02\ Dummy2\ (Apology)} + \gamma_{03\ Dummy3\ (Undo\ Harm\ \&\ Apology)} + \mu$

$\beta_1 = \gamma_{10} + \gamma_{11\ Dummy1\ (Undo\ Harm)} + \gamma_{12 Dummy2\ (Apology)} + \gamma_{13\ Dummy3\ (Undo\ Harm\ \&\ Apology)}$

None of the e-mail conditions were found to have significant relationships with Time 1 justice ratings, as was expected given that the e-mails were randomly assigned and sent following the measurement of Time 1 justice ($\gamma_{01} = -.06$, $p = .54$; $\gamma_{02} = .12$, $p = .25$; $\gamma_{03} = .15$, $p = .15$). Also, the associations with justice recovery slope were not significant ($\gamma_{11} = .13$, $p = .21$; $\gamma_{12} = .01$, $p = .93$; $\gamma_{13} = -.01$, $p = .89$). When conditions were split into conditions with an apology component vs. no apology component, there was a significant association found with intercept ($\gamma_{01} = .17$, $p = .03$) but not with slope ($\gamma_{11} = -.06$, $p = .40$). Conditions with an undo harm component vs. no undo harm component did not yield any significant effects ($\gamma_{01} = -.01$, $p = .84$; $\gamma_{11} = .06$, $p = .46$). Further exploration showed that e-mail condition, apology component, and undo harm component did not have any significant associations with Time 2 justice ($r = .10$, $p = .10$; $r = .09$, $p = .12$; $r = .04$, $p = .53$, respectively). See Tables 28, 29, and 30 for more details.

Hypothesis 23 predicted that recovery was significantly associated with organizational satisfaction. Because the predictor consisted of a combination of two individual measures (change in justice ratings over time), I used polynomial regression to test this hypothesis. Polynomial regression examines how agreement between two predictor variables relates to an outcome and the degree to which differences between the two predictors impacts the outcome (Shanock, Baran, Gentry, Pattison, & Heggestad, 2010; Edwards & Parry, 1993). In this study, recovery was defined as the mis-match of justice perceptions from Time 1 to Time 2. Therefore, the two predictors in the polynomial regression were the participants' perceived justice before the intervention and perceived justice after the intervention. In this case, greater recovery would be indicated by a greater positive discrepancy between the two. Thus, contrary to past work on congruence which proposes that congruence will be associated with outcomes, in the present study I hypothesized that *incongruence* (i.e., increase) between the two would be associated with outcomes. It was expected that when the experience was generally thought of as fair (at both Time 1 and Time 2), organizational satisfaction would be high. When the experience was generally perceived as unfair at both time points, organizational satisfaction would be low. Finally, when recovery occurred, organizational satisfaction would be high.

As a precursor to running the analyses, I first evaluated the discrepancies between the predictors to verify that there was enough discrepancy to merit the use of polynomial regression. The scores for Time 1 and Time 2 justice ratings were standardized and participants with a standardized score on one predictor that was half a standard deviation above or below the standardized score on the other predictor were considered have

discrepant values (Shanock et al., 2010). Table 31 shows that 42.8% of participants were classified as "in agreement" while the other 57.2% of participants had discrepant values of Time 1 and Time 2 justice ratings. This suggests that there was indeed enough discrepancy between justice ratings to justify polynomial regression analyses.

To prepare the data for analysis and reduce potential multicolinearity concerns, I centered the two predictor variables. Time 1 and Time 2 justice ratings were centered around the midpoint of the scale; since justice rating was on a 5-point scale, I subtracted three from each score (Shanock et al., 2010; Edwards, 1994). Next, I created a squared X term using the centered Time 1 justice rating, a squared Y term using the centered Time 2 justice rating, and a cross-product term (XY). Using these variables, I ran a hierarchical regression in which organizational satisfaction was the outcome and the centered X and Y were added to the first block and the squared X, squared Y, and cross-product term were added to the second block. The first model was found to be significant, suggesting that 64% of the variance was accounted for (R^2 =.53, $F(2, 266) = 151.52$, $p < .01$), but the second model with the added X-squared, Y-squared, and XY cross-product term was not significant ($\Delta R^2 = .01$, $F(3, 263) = 2.39$, $p = .07$). Because there was no significant change in R^2 when the second block of variables was added, this indicates that the relationship between the variables was a linear one and not a quadratic one. Refer to Table 32 for more details.

I then evaluated the surface test values a_1, a_2, a_3, and a_4. Figure 19 provides a three-dimensional surface plot of the data. The a_1 value represents the slope of the line of perfect agreement; in this case, it was the perfect agreement between Time 1 and Time 2 justice rating as related to organizational satisfaction. This slope was found to be

significant ($a_1 = 1.11$, $p < .01$). The positive direction of the slope indicates that when Time 1 and Time 2 justice ratings were in agreement, as justice ratings went up, so too did ratings of organizational satisfaction, supporting the portion of the hypothesis related to agreement.

In contrast, the a_3 value represented the slope of the line of incongruence between Time 1 and Time 2 justice rating as related to organizational satisfaction. This slope was of particular interest since incongruence represented the recovery effect. The slope of the line of incongruence was found to be significant ($a_3 = -.57$, $p < .01$) and in the negative direction. This suggests that when justice recovery was greater, organizational satisfaction was greater. However, when the Time 1 and Time 2 justice ratings were discrepant in the other direction (ratings becoming lower over time), organizational satisfaction was lower. Thus, justice recovery was found to be significantly positively associated with organizational satisfaction, providing support for Hypothesis 23.

Further exploration found that the slope of the line when X (Time 1 justice rating) equaled zero was .45 as compared to a slope of .19 when Y (Time 2 justice rating) equaled zero (see Figure 20). Although zero was not in the range of values, because this relationship was found to be linear, the slope of X = 0 and Y = 0 should hold true for any value of X or Y. Therefore, this difference in slope suggests that, of the two predictor variables, the Time 2 justice rating played a larger role in influencing organizational satisfaction. This finding was supported by the standardized beta weights found in the regression (T1 justice rating $\beta = .24$, $p < .01$; T2 justice rating $\beta = .58$, $p < .01$).

Since the relationship was found to be linear, it was not expected that either a_2 or a_4 would be significant because these values assessed the curvature along the line of

perfect agreement and the curvature along the line of incongruence. Indeed, when a_2 and a_4 were evaluated, they were found to be not significant (a_2 = -.01, p = .88; a_4 = -.27, p = .22) (see Table 33).

Supplemental Analyses

In addition to the Time 1 and Time 2 data, a Time 3 behavioral measure was also collected. This was meant to assess if participants' actual revenge, avoidance, and reconciliation behaviors were significantly associated with their self reported revenge motivation, avoidance motivation, and desire for reconciliation. First, I ran a logistic regression to test if revenge motivation would be significantly related to revenge behavior such that higher levels of revenge motivation would be associated with occurrence of revenge behavior. In general, there was a low occurrence of revenge behavior; of the 269 participants who participated in Time 2, 131 of them provided a Time 3 behavior (the rest were classified in the dataset as "no response" behavior). Of these 131, only eight (6.1%) participants demonstrated the revenge behavior of filing a complaint against the research group. This revenge model was not found to be significant (χ^2 (1, N=269) = .68, p = .41) (see Tables 34 and 35).

Next, I assessed whether avoidance motivation was significantly related to avoidance behavior such that higher levels of avoidance motivation would be associated with occurrence of avoidance behavior (asking to be taken off the research group's mailing list). Of the participants who provided a Time 3 behavior, 31 people chose the avoidance behavior. Analyses found the relationship between avoidance motivation and avoidance behavior to be not significant, (χ^2 (1, N=269) = 1.75, p = .19). See Tables 36 and 37 for more details. The relationship between reconciliation and reconciliatory

behavior (providing a compliment on the study) was also assessed and found to be not significant (χ^2 (1, N=269) = .61, p = .44). See Tables 38 and 39 for details. Since reconciliatory behavior was not significantly related to self-reported reconciliation, I checked to see if the reconciliatory behavior might map back to self-reported forgiveness. This did not yield any significant findings (χ^2 (1, N=269) = 2.19, p = .14) (see Tables 40 and 41). Overall, none of the relationships between self-reported motivations and demonstrated behaviors were found to be significant.

The final Time 3 outcome I analyzed was the "no response" behavior. Assuming that a lack of response at Time 3 could be a meaningful action rather than simply attrition, I used the 'no response' behavior as the outcome and included forgiveness, reconciliation, revenge motivation, and avoidance motivation into the model as potential predictors. This model was found to be significant (χ^2 (1, N=269) = 16.01, p<.01), indicating that this set of variables did significantly predict non-response. The Cox & Snell R^2 for this model was .06 and the Nagelkerke R^2 was .08, suggesting that the variables account for an estimated 8% of the variance. The overall percentage of correctly predicted responses was 59.5%. An inspection of the Wald values for the individual variables showed that forgiveness (Wald χ^2 (1, N=269) = 7.12, p < .01) and revenge motivation (Wald χ^2 (1, N=269) = 7.68, p < .01) were significant predictors while reconciliation (Wald χ^2 (1, N=269) = .21, p = .65) and avoidance motivation (Wald χ^2 (1, N=269) = .20, p = .65) were not (see Tables 42 and 43). The unstandardized beta weights for both forgiveness (B = .51) and revenge motivation (B = .83) were positive, indicating that increased forgiveness and increased revenge motivation were both associated with greater probability of non-response behavior. This finding is surprising given that

forgiveness and revenge motivation are negatively related to each other (r = -.27, p<.01). Thus it appears that while non-response is a meaningful behavior, the reason behind the behavior could be very different depending on the individual. The odds ratio for forgiveness (odds ratio=1.66) and revenge motivation (odds ratio=2.30) suggests that revenge motivation was a more influential predictor of non-response than forgiveness. When forgiveness was run in a model as the only predictor of the "no response" behavior, the odds ratio was 1.36, suggesting that for every one unit increase in forgiveness, there was a 1.36 times greater likelihood of the "no response" behavior. When revenge motivation was used as the only predictor of non-response, the odds ratio indicated that for every one unit increase in revenge motivation, the likelihood of a non-response was 1.93 times greater.

Additional logistic regression analysis explored whether e-mail condition demonstrated an effect on behavior. The relationships between e-mail condition and revenge behavior (χ^2 (3, N=269) = 1.23, p = .75), avoidance behavior (χ^2 (3, N=269) = 2.91, p = .41), reconciliation behavior (χ^2 (3, N=269) = .34, p = .95), and no response behavior (χ^2 (3, N=269) = 1.99, p = .57) were all found to be not significant. Similarly, relationships between apology component and behavior were found to be not significant (revenge behavior: χ^2 (1, N=269) = .01, p = .92; avoidance behavior: χ^2 (1, N=269) = 2.37, p = .12; reconciliation behavior: χ^2 (1, N=269) = .16, p = .69; no response behavior: χ^2 (1, N=269) = 1.93, p = .17). The no harm component also did not yield any significant relationships with behavior (revenge behavior: χ^2 (1, N=269) = .70, p = .40; avoidance behavior: χ^2 (1, N=269) = .51, p = .48; reconciliation behavior: χ^2 (1, N=269) = .05, p = .82; no response behavior: χ^2 (1, N=269) = .00, p = .97).

Further exploratory analyses were run to find out if there was a link between trait individual difference variables (justice expectations, trait empathy, trait anger, conflict avoidance) and behaviors. Conflict avoidance was found to be significantly associated with avoidance behavior (χ^2 (1, N=269) = 5.09, $p < .05$). The Cox & Snell R^2 for this model was .02 and the Nagelkerke R^2 was .04, suggesting that conflict avoidance accounts for an estimated 4% of the variance in avoidance behavior. The overall percentage of correctly predicted responses was 88.5%. Results suggested that as conflict avoidance increased, so too did likelihood of avoidance behavior. See Tables 44 and 45 for details. Trait anger was found to have a significant relationship with non-response behavior (χ^2 (1, N=269) = 6.47, $p < .01$). The Cox & Snell R^2 for this model was .02 and the Nagelkerke R^2 was .03. The overall percentage of correctly predicted responses was 58.4%. This suggests that higher trait anger was associated with higher likelihood of not responding at Time 3. See Tables 46 and 47 for details.

Finally, I ran an additional HLM analysis to find out the potential effects of a participant not having any negative feelings in regards to the study. The no negative feelings item was a continuous variable in which participants indicated on a scale of 1 (not at all accurate) to 5 (very accurate) how true they found the following statement to be: I did not experience any negative feelings against the research group. The regression equations were:

Level 1: $\text{Justice} = \beta_0 + \beta_{1\ \text{Time}} + e$

Level 2: $\beta_0 = \gamma_{00} + \gamma_{01\ \text{No Negative Feelings}} + \mu$

$\beta_1 = \gamma_{10} + \gamma_{11\ \text{No Negative Feelings}}$

The fixed effects showed that not having negative feelings did have a significant and positive effect on Time 1 justice rating ($\gamma_{01} = .30$, $p < .01$) (see Table 48). A significant association between negative feelings and recovery was also found ($\gamma_{11} = -.11$, $p < .01$). From Figure 21, it can be seen that participants who had less negative feelings gave significantly higher Time 1 justice ratings. Participants who indicated that they did not have any negative feelings had a generally flat slope (slope = .03), indicating that there was very little recovery while participants who did have negative feelings had a steeper slope (slope = .25).

Discussion

This study sought to explore individual difference traits, organizational interventions, and other variables that could either directly or indirectly influence justice recovery. There were five broad findings of this study. The first pertained to the relationships between possible responses to injustice (forgiveness, reconciliation, revenge motivation, and avoidance motivation). The second finding involved the role of organizational intervention after an injustice and how this could influence the aforementioned responses. The third was an exploration of how individual difference traits might influence forgiveness, reconciliation, revenge motivation, and avoidance motivation. The next finding was regarding how these responses would influence justice recovery and the last hypothesis sought to link justice recovery to a positive organizational outcome (specifically, organizational satisfaction).

The first purpose of this study was to establish that relationships between forgiveness, reconciliation, revenge motivation, and avoidance motivation existed, and in the directions expected. These were identified as possible responses to injustice, with

forgiveness and reconciliation viewed as positive reactions and revenge motivation and avoidance motivation viewed as negative responses. The hypothesized relationships were largely supported, with forgiveness and reconciliation demonstrating positive relationships with each other and negative relationships with revenge motivation and avoidance motivation. These findings were in line with past research (Aquino et al., 2006; Bobocel, 2013). Similarly, revenge motivation and avoidance motivation were positively related to each other and negatively related to forgiveness and reconciliation, which also supports what researchers have proposed in the literature (Aquino et al., 2006; Gregoire et al., 2009). Having found support for these relationships, the next step assessed how different organizational interventions following an injustice would differentially impact these desirable and undesirable responses.

The study found that e-mail intervention only significantly influenced participants' revenge motivation; specifically, revenge motivation was significantly higher in the no acknowledgment condition than the apology condition and the undo harm + apology condition. This supports previous research which has found that individuals tend to hold negative views when the transgressor does not acknowledge responsibility for wrongdoing (Pace et al., 2010).

Additional analyses suggested that apology could be a key component of the intervention; when the intervention included an apology, reconciliation increased significantly and revenge motivation decreased significantly than when the intervention did not include an apology. Forgiveness was also found to be approaching significance such that there was increased forgiveness when an apology was offered. This finding is supported by past research which asserts that an apology could be an important step in

beginning to mend a fractured relationship and can be a way of reassuring the victim that future injustice is unlikely (Exline et al., 2003). Because the apology stated that "we resolve to make sure such a situation never occurs again", this might have reduced revenge motivation such that participants felt that another injustice would not be a threat against which they would have to protect themselves. Since the participants in this study generally rated the apology as sincere (M = 3.95, SD = .96), the apology appears to have been successful in decreasing the likelihood of negative responses because participants believed the research group was sorry, paving the way for letting go of negative feelings and repairing the relationship. Past research supports the importance of an apology; Kim and colleagues (2013) found that when a transgressor denied culpability and did not apologize, participants were significantly less likely to trust the transgressor.

Although apology was found to be an important element in reconciliation, revenge motivation, and forgiveness, effect sizes were small (Cohen's d from .21 to .27). However, this does seem to be consistent with past research; for example, Pace and colleagues (2010) found effect sizes of roughly .30 when examining the effect of apology on participants' positive perceptions of the reputation of an organization. Similarly, another study found that while apology did significantly predict a participants' willingness to reconcile, other factors such as timeliness of the restorative action, perceived sincerity, nature of the past relationship, and probability of future violation were all weighted more heavily (Tomlinson et al., 2004). In this study, the extent to which the apology was perceived to be sincere was found to be significantly positively correlated with forgiveness (r = .31, p < .01) and reconciliation (r = .38, p < .01) and significantly negatively correlated with revenge motivation (r = -.33, p < .01) and

avoidance motivation (r = -.37, p < .01). Note that, because there were two conditions that included an apology and two conditions that did not, the question of sincerity of apology was only relevant in the two conditions in which an apology was offered. In contrast, when looking simply at whether participants were offered an apology or not, significant correlations were found between apology and reconciliation (r = .13, p < .05) and apology and revenge motivation (r = -.16, p < .01), with the correlation between apology and forgiveness approaching significance (r = .11, p = .08). This supports the findings from Tomlinson and colleagues, suggesting that the impact of apology on participant responses are not based merely on the apology itself, but the perception of how sincere it is. One additional possibility as to why effect sizes are small in this study and others could be due to the use of vignettes (and in this case, a lab study) to investigate justice phenomena (Tomlinson et al., 2004; Pace et al., 2010; Hui et al., 2011). It is possible that, in the absence of a real-life situation, it is hard to simulate a scenario convincing enough to evoke stronger responses from the participants.

The undo harm component of the intervention was not found to significantly influence any of the responses. This is surprising because repairing the relationship through the re-establishment of an earlier state of affairs (in the case of this study, restoring eligibility to enter the raffle) is thought to be an important element of restorative justice (Wenzel & Okimoto, 2010). There are at least two possibilities as to why the undo harm component did not demonstrate the hypothesized effect of increasing forgiveness and reconciliation and decreasing revenge motivation and avoidance motivation. The first is that the undo harm component was not explicit enough for participants. Although the research group offered to undo the harm, there was no explicit acknowledgment of the

injustice. In this way, the condition could have been perceived in a similar manner as the no acknowledgment condition because the organization did not accept responsibility for its actions. It is possible that the implicit acknowledgement of wrongdoing (as demonstrated by undoing a previous action) was not clear to the participants or not deemed sufficient.

Additionally, past research theorized that an explicit apology could be essential after a transgression and that the victim is unlikely to be willing to reconcile until an apology is received (Tomlinson et al., 2004). The findings of this study would suggest that this is true: participants seemed unmoved by the action of undoing harm; rather, a sincere apology served as a more effective method of influencing individuals following an injustice. Another possible explanation for the finding that undoing harm did not significantly influence reactions is that the raffle was not a sufficient motivator for the participants. Although a manipulation check showed that participants rated themselves as generally motivated to perform the task well ($M = 3.73$, $SD = .91$), it is possible that the motivation did not stem from the allure of the raffle. If participants were motivated to perform well simply because it was a task for which they would receive subject pool credit, then they would have already received the reward they had been seeking. Having received the reward they valued, the raffle eligibility could have been perceived as secondary or inconsequential. Therefore, even if participants viewed the overall experience at Time 1 to be unfair, they might have viewed renewed eligibility as either unimportant or insufficient in addressing the unfair elements of the task (the lost time, having to start over, etc.). For individuals who were frustrated and viewed the situation as unfair on principle, it seems understandable that an explicit apology from the research

group would carry more weight than restoring eligibility in a raffle that may or may not have been perceived as important.

The third set of hypotheses sought to establish relationships between individual difference variables and forgiveness, reconciliation, revenge motivation, and avoidance motivation. These hypotheses were generally not supported; trait empathy, trait anger, and conflict avoidance did not demonstrate any significant relationships with forgiveness, reconciliation, revenge motivation, or avoidance motivation. This might suggest that these motivations were driven more by situational factors than traits. For example, it was found that revenge motivation differed significantly depending on the e-mail intervention and whether or not an apology was offered influenced reconciliation. One possible explanation for this could be that the e-mail interventions were clear as to what action was being taken (e.g. offering an apology). Since an unambiguous situation can only be interpreted in one way, different people are likely to draw the same conclusions because there is little room for alternate interpretation (Mor Barak, 1998). In this study, it's possible that the situational factors played a larger role in determining responses, thus not allowing much room for traits to come into play. This idea is supported by later analyses that explored possible interactions between individual differences and e-mail conditions on the outcome variables. The models generally found a significant main effect of the e-mail condition, but few main effects of individual difference variables or interaction effects were detected. The only significant interaction of intervention and personality was the interaction between trait empathy and e-mail condition in explaining revenge motivation. Significant main effects of trait empathy and e-mail condition were found in addition to the significant interaction. Specifically, it was found that trait empathy was

negatively associated with revenge motivation only in the no acknowledgement condition. However, the change in R^2 for the interaction term was .01, which is quite small. This suggests that although the interaction is statistically significant, it does not play as large a role as the main effects. The finding that empathy and the no acknowledgment condition play a meaningful part in influencing revenge motivation could also be seen as support for the idea that strength of the situation may be a factor. The no acknowledgment condition could be considered the most ambiguous of the four conditions because it provided the least amount of information and no clear apology or offer of undoing harm. Because the situational factors may not have been as strong or as clearly defined in this condition, it could have left the door open for trait empathy to play a role in impacting revenge motivation.

In exploring individual difference traits, a previously unhypothesized significant relationship emerged between trait anger and avoidance motivation, in which participants higher in trait anger were also more likely to indicate higher avoidance motivation. While it had been hypothesized that trait anger would be linked to revenge motivation, this was not found to be the case. One explanation for this could be that anger and revenge seeking might be viewed as socially unacceptable. As a result, instead of trait anger manifesting in revenge motivation, which could be construed as a hostile reaction, high trait anger manifested as avoidance motivation. Thus, individuals might be suppressing the urge to react in a more overtly aggressive way (revenge motivation). A quick check to see if there might be differences in trait anger or avoidance motivation by gender or race showed no significant differences.

Lok, Bond, and Tse (2009) suggested that non-cooperative behaviors could be an alternative way to express aggression. This could have been the case in this study; the desire to cut off interaction with the research group could have been a way for those high in trait anger to express their aggression in a more passive way. Some support for the idea that revenge might be seen as socially unacceptable was found in the analyses that attempted to map non-response to intentions. While revenge motivation did not demonstrate a significant relationship with revenge behavior, individuals higher in revenge motivation were more likely to demonstrate non-response behavior. This suggests that instead of engaging in revenge behavior, participants chose to avoid the research group entirely.

To further explore this idea, I ran additional analyses to see if any individual difference traits would be linked to any of the behaviors. A significant relationship between trait anger and non-response was found, indicating that higher trait anger was associated with an increased likelihood of non-response behavior. This finding supports the idea that trait anger and explicitly stated revenge motivation could be seen as socially unacceptable. As a result, participants high in trait anger and high in revenge motivation opted for non-response as a more passive outlet to express their dissatisfaction. A related finding was that the relationship between trait anger and forgiveness was not negative, as expected. Rather, the relationship was in the positive direction and approaching significance. Again, this could point to trait anger being viewed as socially unacceptable and individuals perhaps trying to compensate by expressing forgiveness instead of revenge motivation or avoidance motivation because they feel forgiveness is the more

socially desirable reaction. No significant differences in behavior were found between male and female participants, nor were there any differences based on race.

A significant relationship between conflict avoidance and avoidance behavior was also found, indicating that individuals high in conflict avoidance were more likely to exhibit avoidance behavior. This finding is interesting in that conflict avoidance was not found to be significantly associated with self-reported avoidance motivation ($r = .04$, $p = .47$), but it did demonstrate a significant relationship with overt avoidance behavior. If explicitly stating an intent to avoid the research group was perceived as socially unacceptable in the same way revenge motivation could be been seen as unacceptable, it is possible that participants high in conflict avoidance chose the option of "withdrawing their name from future studies" rather than explicitly stating that they did not want further contact with the research group. It is also possible that, since the e-mail soliciting the behavior was sent from a third party (the supervisor of the research group rather than the researcher herself), participants felt more comfortable in expressing their desire to avoid the research group.

In discussing the relationship between revenge motivation and non-response, it is important to mention that forgiveness was also found to have a significant relationship with non-response behavior. Although the odds ratio suggested that revenge motivation was a more influential predictor of non-response, forgiveness was also a meaningful predictor of non-response behavior. A possible explanation for this is that these participants were not interested in further interaction with the research group and chose not to respond even though they no longer held any animosity toward the group.

The fourth set of analyses explored what variables might be associated with justice recovery. Forgiveness was found to be the only variable that demonstrated a significant relationship with justice recovery; reconciliation, revenge motivation, and avoidance motivation were not associated with the slope of justice over time. Because forgiveness is an indication of diminished negative affect and is thought to create a more positive outlook (Andiappan & Trevino, 2010), it makes sense that increased forgiveness would be related to increased justice perceptions.

On the other hand, revenge motivation and avoidance motivation were expected to be negatively related to justice recovery, but this was not found to be the case. One possible reason that these effects are not strong enough to be statistically significant could be that the means for revenge motivation and avoidance motivation tended to be low ($M = 1.28$, $SD = .51$; $M = 1.76$, $SD = .87$, respectively). In general, participants were not inclined to demonstrate extremely high levels of revenge motivation or avoidance motivation. Thus, participants classified as "high" in revenge motivation and avoidance motivation likely were high compared to the rest of the sample rather than high in these responses in an absolute sense. Because of this, the full impact of these variables on justice recovery could be harder to detect. However, the graphs for revenge motivation and avoidance motivation indicate that the relationships with recovery are in the expected direction, with participants low in revenge motivation and avoidance motivation showing a slightly stronger recovery effect. In contrast, participants high in revenge motivation and avoidance motivation had relatively flat slopes in terms of recovery. A significant relationship was found between avoidance motivation and justice such that participants who gave higher Time 1 justice ratings tended to be lower in avoidance motivation. This

could imply that people who gave high justice ratings at Time 1 were less likely to express a desire for avoidance because they did not perceive the situation as so unfair that they would feel the need to cut off interaction with the research group.

Reconciliation was expected to be positively related to justice recovery, but this relationship was found to be not significant. A possible clue as to why this was the case is that reconciliation was also found to be significantly correlated with participants having no negative feelings against the research group ($r = .13$, $p < .05$). This suggests that the less negative feelings an individual had, the more likely they were to be open to reconciliation. It was also found that people high in reconciliation had given significantly higher Time 1 justice ratings. Together, this information could mean that increased desire for reconciliation was related to a perception that the Time 1 event was not very unfair. Having experienced little negative affect from the Time 1 experience, participants would then be less likely to recover justice perceptions because they did not have anything from which to recover. This could suggest that perceived severity of the transgression could be a factor in the relationship between reconciliation and recovery.

Two additional analyses regarding the relationship between no negative feelings and justice recovery supported this theory. First, participants who indicated having little to no negative feelings tended to give significantly higher the Time 1 justice ratings- this makes sense because if the situation did not evoke any negative reactions, there would be no reason to give low justice ratings. Second, there was a significant association with slope of justice ratings in which participants were less likely to show recovery when they did not have any negative feelings. Again, this is not surprising because these individuals had nothing from which to recover. Therefore, it is possible that reconciliation might be

related to recovery but that the relationship was not detected due to reconciliation's correlation with a lack of negative feelings in this study. Forgiveness was not significantly correlated with no negative feelings ($r = .04$, $p = .54$) and was found to be related to justice recovery.

Additional findings regarding recovery were that while justice expectations did not influence recovery, participants did tend to make justice ratings in a direction consistent with their expectations. This could be a result of confirmation bias, defined as the tendency for humans to interpret and seek evidence that confirms their beliefs or expectations (Austerweil & Griffiths, 2011). If this is indeed the mechanism at play, it could also help to explain why justice expectations did not have a significant relationship with justice recovery. Participants may have been interpreting the events in a biased way and selectively seeing either fair or unfair elements of the scenario depending on their expectations. As a result, there would be no radical shift in justice ratings over time because the individuals would see only what they expected to see.

The final finding was that justice recovery was positively associated with organizational satisfaction. It was found that when the overall experience was generally perceived as fair across time, this was associated with a positive outcome. Similarly, organizational satisfaction was lowest when Time 1 and Time 2 justice were both low. This is supported by past research, which has found that high levels of justice tend to be associated with positive outcomes while low levels of justice are linked to undesirable outcomes (Colquitt et al., 2001; Choi, 2011).

When justice ratings were low at Time 1 and high at Time 2, organizational satisfaction tended to also be high. This suggests that lower initial justice perceptions do

not necessarily mean that the organization cannot make amends. In fact, the results showed that Time 2 justice ratings played a larger role in influencing organizational satisfaction than Time 1 justice ratings. It is possible that a recency effect might be one reason this is the case- perhaps participants tended to give more weight to the experience they had most recently had when evaluating overall organizational satisfaction. Finally, although there had been no prior hypothesis for it, it was found that when justice ratings at Time 1 were higher than the justice ratings at Time 2 (which can be thought of as the opposite of recovery), organizational satisfaction tended to be low. About 26% of the participants gave justice ratings that were lower at Time 2 than at Time 1. Of these participants, it did not appear that the e-mail condition to which they had been assigned played a role in their ratings (24% were in the no acknowledgment condition, 23% were in the undo harm condition, 27% were in the apology condition, 26% were in the undo harm + apology condition). However, the organizational satisfaction in this situation was still not quite as low as when both Time 1 and Time 2 had been low, which could suggest that a one-time loss in justice ratings might not be as damaging as a continuous, overall negative experience.

Conclusion

Overall, the results of this study suggest that when an organization does not acknowledge wrongdoing after an injustice, this could potentially lead to negative responses such as increased revenge motivation. This in turn may be associated with undesirable behaviors, such as avoidance or non-response, which could be counterproductive in a work environment. Interestingly, although situational factors were linked with increased revenge motivation, it seemed that participants were generally

reluctant to act on the desire for revenge. Rather, increased revenge motivation was associated with increased non-response behavior. It is possible that overtly aggressive behaviors such as pursuing revenge were perceived as socially unacceptable, so participants instead chose a more passive way to express their dissatisfaction. While incidence of revenge behavior in this study was low, it is possible that participants could have taken other actions to "punish" the research group, such as discussing the study with others to warn them of the unfairness. Although there is no way to know whether such discussions occurred and led potential participants to choose not to participate in the study, participants who completed the Time 1 survey were asked whether they had heard anything about the study. Of the 396 participants in Time 1, only three participants indicated that they had heard something about the study. Specifically, these participants wrote they that they had heard that the survey had "broken" and a section had to be redone. Another possibility for the lack of revenge behavior could be that participants, while frustrated by the experience, assumed the unfairness was not intentional and therefore were cautious about taking damaging actions against the research group.

One way to minimize the chances of undesirable responses following an injustice could be acknowledging the transgression and offering a sincere apology. The results of this study suggest that an apology could significantly reduce an individual's revenge motivation and potentially increase forgiveness and reconciliation. This finding is supported by past research emphasizing the importance of an apology in repairing a relationship (Kim et al., 2013). Surprisingly, the undo harm component of the interventions was not found to be as influential as the apology in this particular study. Possible reasons could be that the undo harm component did not include

acknowledgment of wrongdoing, so participants did not deem it to be sufficient in the wake of the injustice or that reinstating eligibility in the raffle was not perceived as an effective way of undoing the harm.

Furthermore, this study found that forgiveness could play a meaningful role in the recovery of justice. Taking steps to maximize the chances of forgiveness could be useful because justice recovery was in turn found to be associated with increased organizational satisfaction, which is a desirable outcome for organizations. Forgiveness, in and of itself, was not significantly linked to organizational satisfaction. However, just because forgiveness occurs does not necessarily mean reconciliation will follow. Past research has theorized that just because individuals indicate a willingness to forgive does not necessarily mean that they are ready to continue forging ahead with the relationship (Tripp & Bies, 2010). Rather, it is possible that these people could choose to cut off or limit interaction with the offending party, which could manifest in a similar type of non-cooperative or avoidance behavior that revenge motivation provokes.

Practical Implications

The finding that the apology component of the interventions in this study were particularly meaningful while the undo harm component did not appear to significantly influence responses would suggest that even if an organization recognizes an injustice and takes action to correct the mistake, it may be important to also extend an explicit acknowledgment of the transgression and to apologize for it. An organization should not assume that an apology is implicit in the action of undoing harm. Of course, this is not to say that organizations should simply apologize for injustices while taking no action to right the wrong. Recalling that trust involves the willingness of an individual to be

vulnerable to the actions of the other party, repeated breaks in that trust would likely be damaging to the relationship (Aryee, Budhwar, & Chen, 2002), even if an apology is extended each time. This would also relate to Gill's (2000) stipulation that a good apology includes the intention of refraining from doing the same thing in the future. However, it is important to note that there might be times when offering a full apology or undoing harm are not possible. For example, promises to refrain from similar acts in the future may not be realistic in situations when the circumstances of the injustice are beyond the control of the transgressor. If organizations do choose to undo harm, it is important that the "undoing harm" action is commensurate with the transgression. For example, it is possible that this element was not necessarily effective in this study: if individuals were upset over the unfair experience, then simply restoring eligibility in a raffle may not have been viewed as sufficient. Although undoing harm was not found to be effective in influencing responses in this study, it is possible that under different conditions, it could indeed be an important step for organizations to take.

The finding that justice recovery is sometimes possible provides some ideas for how organizations could manage a situation after an injustice has occurred. This study would suggest that, following an injustice, acknowledging the mistake and offering a sincere apology could reduce revenge motivation and increase forgiveness and reconciliation. Higher levels of forgiveness were found to be linked to justice recovery which was, in turn, associated with heightened organizational satisfaction. Although this study suggests that justice recovery can be possible and that it can lead to positive outcomes, there are likely to be a number of other factors that influence whether it will occur (e.g. frequency of injustice, severity of the transgression). As a further measure, it

could be beneficial for organizations to regularly monitor justice perceptions so that appropriate action can be taken to remedy any injustices that may occur. This type of action might be particularly useful during a time of organizational change when justice perceptions may be more fluid.

With an abundance of research linking organizational justice to numerous desirable organizational outcomes (e.g. low turnover, high satisfaction, high commitment, OCBs), organizations are understandably concerned with managing justice perceptions (Colquitt et al., 2001). Many organizations make a concentrated effort to maintain a fair workplace; however, even the most well-intentioned organization can still suffer from justice-related problems (Greenberg, 2009). This study's findings offer the encouraging news that, even in the event of unfairness, all is not lost. Provided that the organization takes action through an effective organizational intervention, this study suggests that a single unfair event might not irrevocably damage an individual's perception of organizational fairness.

Limitations and Suggestions for Future Research

A limitation in this study was the finding that reconciliation was correlated with not having any negative feelings toward the research group. Reconciliation was conceptualized as offering goodwill to the offending party and moving towards repairing the relationship. In this study, reconciliation appears to be partially influenced by how severely the participant felt transgressed against. Future research could more closely examine the association between perceived severity of the transgression and desire to reconcile. Perceptions of whether or not a transgression was intentional could also play a role; in this study, it is possible that participants may have viewed the computer error as

accidental, thus leading them to not have strong negative feelings. Future research could explore how reactions might be different if participants found themselves in a situation where they felt personally targeted or purposely taken advantage of.

This study provides insight into an applicant's changing justice perceptions and explored trait anger, trait empathy, and conflict avoidance as variables that could potentially influence responses to an injustice. Although these relationships were generally not found to be significant, these characteristics are only a small sampling of variables that could be relevant. For example, Barnes, Carvallo, Brown, and Osterman (2010) suggest that individuals with a strong need to belong might be more inclined to forgive wrongdoings. Additionally, if an applicant reacts with feelings of guilt or shame in the face of an unfair event, this could lead to very different outcomes than when an applicant reacts with anger (Goodstein & Aquino, 2010). On the other end of the spectrum, feelings of happiness or joy could also be relevant (Cohen-Charash & Byrne, 2008). Future studies should identify which emotions or individual differences are most relevant to a specific setting and explore their impact on justice perceptions. The finding in this study that occurrence of actual revenge behaviors was low also points to the necessity of exploring what other variables or situational factors might be at play in determining exactly what pushes individuals into overt acts such as pursuing revenge.

In addition to individual difference traits, future research should also assess how severity or frequency of injustice might play a role. It stands to reason that the more severe the injustice, the more difficult it would be for recovery to take place, even if there is an organizational intervention. In this vein, repeated injustices may also lead to a point at which recovery becomes less likely. For example, the results of this study found that

when justice ratings decreased over time, this led to low organizational satisfaction. However, satisfaction was still not as low as when justice perceptions were low at Time 1 and Time 2. In an organization where there are many meaningful points in time, it is likely that if there are numerous instances of injustice, the situation would be assessed as just generally low all the time, leading to consistently low organizational satisfaction. Bobocel (2013) proposes that in a workplace that is perceived as being overall unfair, employees are less able to respond in ways that could repair the relationship with the transgressor. This could lead to decreased forgiveness and could increase the likelihood of responding in ways that could further damage the relationship (e.g. pursuing revenge). In this vein, the finding that the Time 2 justice rating was more influential in predicting satisfaction than the Time 1 justice rating might not necessarily hold true outside the lab. In a workplace with continued experiences, recency effect is likely to play a smaller role since individuals have more context for their justice evaluations.

This study focused primarily on what organizational interventions are most effective in a situation where both the victim and the transgressor agree that an injustice occurred. However, organizations may not always know when an unfair event has occurred, thereby further complicating the process of forgiveness, reconciliation, and justice recovery. Future research should explore how an organization can realize that something unfair has occurred.

Another potential limitation is that this study was conducted as a lab study using a student population rather than employees in a specific organization. It is possible that the student participants were not as invested in the study as employees in a workplace. This study sought to address this issue by offering a cash prize intended to encourage

participants to take the study more seriously, but this raffle may not have been an effective enough inducement. A manipulation check was included to verify that participants were motivated to perform to the best of their ability, but the exact source of the motivation (subject pool credit, entering the raffle) was not clear. It is also possible that participants did not make the association between the technical error in the survey and unfair treatment. Additionally, experimental designs are limited by ethical considerations. Future studies should attempt to replicate this study's findings in a field setting to ensure that the proposed organizational interventions are indeed effective with employees in the workplace. A final limitation is that there were many analyses conducted, which could increase the risk of Type 1 error. Future research should seek to replicate the results found in this study.

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Appendices

Appendix A
IPIP Personality Test Items (Goldberg, 1992)

Using the options listed below, indicate how accurate the statements are as a description of you:

1= Very Inaccurate
2= Moderately Inaccurate
3= Neither Accurate Nor Inaccurate
4= Moderately Accurate
5= Very Accurate

1. Am the life of the party.
2. Leave my belongings around.
3. Am relaxed most of the time.
4. Am a small-sized person.
5. Often feel depressed.
6. Feel that I am just as good as other people.
7. Have crying spells.
8. Have thoughts about death.
9. Have thought that my life has been a failure.
10. Confuse fantasies with real memories.
11. Am not interested in abstract ideas.
12. Cry during movies.
13. Talk out loud to myself.
14. Have felt that people disliked me.
15. Often feel lonely.
16. Am easily disturbed.
17. Have a soft heart.
18. Often forget to put things back in their proper place.
19. Talk to a lot of different people at parties.
20. Don't mind being the center of attention.
21. Am indifferent to the feelings of others.
22. Have frequent mood swings.
23. Often feel blue.
24. Don't talk a lot.
25. Get angry easily.
26. Know how to captivate people.
27. Love children.
28. Bottle up my feelings.
29. Get overwhelmed by emotions.
30. Am a very private person.
31. Leave a mess in my room.
32. Have few artistic interests.
33. Am sophisticated in art, music, and literature.

34. Value artistic, aesthetic experiences.
35. Cherish mementos.
36. Am a large-sized person.
37. Let people push me around to help them feel important.
38. Can take a joke.
39. Like to attract attention.
40. Consider myself good looking.
41. Expect things to fail.
42. Have bad things happen to me for no reason.
43. Know how to get around the rules.
44. Pay my bills on time.
45. Would not regret my behavior if I were to take advantage of someone impulsively.
46. Would enjoy campaigning for political office.
47. Am a naturally good dancer.
48. Quickly lose interest in the tasks I start.
49. React strongly to criticism.
50. Act like people younger than me.

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Appendix B

Debriefing

Thank you for your participation in the study "Personality" (IRB #: 434839-2). This study is aimed at exploring how people and organizations can forgive and reconcile after an unfair event occurs.

This study involved some deception. You may recall that the personality test you took was to measure "leadership potential." You might have noticed that some of the items didn't seem to be very related to leadership potential – this was intentional. You also encountered a "technical error" which made you unable to complete the test, thereby making you ineligible for the cash prize raffle. In reality, these elements were all planned – we created an event that people might think was unfair because wanted to study how people would react when the organization responded to the unfair event in one of four ways.

Deception was necessary in this study because it was important for participants to believe that they had an experience that could be considered unfair. In order to examine how forgiveness takes place after an unfair event, participants needed to experience the emotional reactions associated with being treated unfairly. To ensure the best interests of the participants, all the stimuli were pilot tested before the study to establish that people thought that there was something to forgive, but that they didn't get too upset.

You were randomly assigned to one of four "organizational response" conditions. The e-mail you received the day after the personality test varied depending on which condition you were in. The four conditions were:

- No acknowledgment: These participants received an email that made no mention of the technical difficulty or the fact that the task might be perceived as unfair. It is hypothesized that people in this condition are the least likely to forgive the research group for the injustice and will continue to rate the experience as unfair.

- Undo result: This condition sought to undo the result by reinstating eligibility to participate in the raffle. These participants received an email that said the research group reconsidered the use of the personality test in determining eligibility, decided to throw out the results, and that the participant is again eligible to be entered into the raffle. It is expected that participants in this condition will be more willing to forgive the research group and will have improved justice ratings.

- Apology: In this condition, participants received a formal apology from the research group. The research group acknowledges the injustice, expresses regret and accepts responsibility for the incident, and resolves to make sure a similar situation never occurs again. This condition is

hypothesized to also inspire participant forgiveness and improve justice ratings.

- Undo result + apology: Participants in this condition received an email with both a formal apology and the offer to reinstate eligibility in the raffle (a combination of the undo result and apology conditions). It is expected that participants in this condition will be the most likely to experience forgiveness and will show the greatest increase in justice ratings.

Participants were then sent a third email from the head of the research group. This email asked you to either lodge a complaint, withdraw your name from our future studies, or sign up for our future studies with this research group. This email was also intentionally a part of the study. The data collected from that email served as a way to gauge each participant's behavior in the aftermath of the unfair event and subsequent intervention. We think that overall, people will be more likely to continue their relationship with the research group in the "apology + undo result" condition and more likely to file a complaint in the "no acknowledgement" condition.

We would like to emphasize that **ALL** participants **WILL** be entered into the raffle for the cash prize. Regardless of what condition you were in or your performance on the personality test, **ALL** participants are eligible to win the cash prize. This raffle will be held after data collection is over (in other words, once we reach our goal of 150-200 participants). If you are chosen as a winner, we will get in touch with you via the contact information you provided.

All the information collected in this study is confidential. Your participation is greatly appreciated. Now that you have learned more about the study, you have the opportunity to withdraw your data. If you want us to discard your data and not use it in our analyses, please contact Wanyi Lai at wm4xf@umsl.edu *using your UMSL email account* and provide a written request that your data be discarded.

We ask that you not discuss the nature of the study with others who may later participate because it would compromise our study and affect the validity of our results.

If you have any further questions or concerns, you can contact the principal researcher Wanyi Lai by emailing her at wm4xf@umsl.edu. Thanks again for your time and participation.

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Appendix C

Scale Items

Organizational justice

Please rate on a 5 point scale ranging from 1 (strongly disagree) to 5 (strongly agree):

1. Overall, I am treated fairly by this research group.
2. In general, I can count on this research group to be fair.
3. In general, the treatment I receive in this research group is fair.
4. The way things have worked in this research group is not fair. (r)

Justice expectations

Please rate on a 5 point scale ranging from 1 (strongly disagree) to 5 (strongly agree):

1. Overall, I expect to be treated fairly by this research group.
2. In general, I expect that I can count on this research group to be fair.
3. In general, I expect that the treatment I receive from this research group will be fair.
4. I expect that, usually, the way things work in this research group will be fair.
5. I expect that, for the most part, this research group treats people fairly.
6. I expect that most of the people who work with this research group would say they are often treated unfairly. (r)

No negative feelings

Please rate on a 5 point scale ranging from 1 (not at all accurate) to 5 (very accurate):

1. I did not experience any negative feelings against the research group.

Forgiveness

Please rate on a 5 point scale ranging from 1 (not at all accurate) to 5 (very accurate):

1. I let go of the negative feelings I had against the research group.
2. I let go of my hate and desire for vengeance toward the research group.
3. I let go of my hurt and pain that the research group caused.
4. I let go of the resentment I felt toward the research group.

Reconciliation

Please rate on a 5 point scale ranging from 1 (not at all accurate) to 5 (very accurate):

1. If given the chance, I would make an effort to be more friendly and concerned toward the research group.
2. If given the chance, I would try to make amends with the research group.
3. If given the chance, I would give the research group a new start, a renewed relationship.

Revenge motivation

Please rate on a 5 point scale ranging from 1 (not at all accurate) to 5 (very accurate):

1. If given the chance, I would try to hurt the research group.
2. If given the chance, I would try to make something bad happen to the research group.
3. If given the chance, I would do something to make the research group get what it deserves.
4. If given the chance, I would get even with the research group.

Avoidance motivation

Please rate on a 5 point scale ranging from 1 (not at all accurate) to 5 (very accurate):

1. If given the chance, I would withdraw from the research group.

2. If given the chance, I would cut off any relationship with the research group.
3. If given the chance, I would avoid the research group in the future.

Empathy

Please rate on a 5 point scale ranging from 1 (does not describe me well) to 5 (does describe me well):

1. I believe that there are two sides to every question and try to look at them both.
2. When I'm upset at someone, I usually try to "put myself in their shoes" for a while.
3. I sometimes try to understand my friends better by imagining how things look from their perspective.
4. If I'm sure I'm right about something, I don't waste much time listening to other people's arguments. (r)
5. I sometimes find it difficult to see things from the "other person's" point of view. (r)
6. I try to look at everybody's side of a disagreement before I make a decision.
7. Before criticizing somebody, I try to imagine how I would feel if I were in their place.

Anger

Please rate on a 5 point scale ranging from 1 (almost never) to 5 (almost always):

1. I have a fiery temper.
2. I am a hotheaded person.
3. I am quick tempered.
4. When mad, I say nasty things.
5. I fly off the handle.
6. I get angry when I am slowed down by others' mistakes.
7. When I get frustrated, I feel like hitting someone.

8. I feel infuriated when I do a good job and get a poor evaluation.

9. I get annoyed when I am not given recognition for doing good work.

10. It makes me furious when I am criticized in front of others.

Conflict Avoidance

Please rate on a scale of 1 (never) to 5 (usually). When conflict occurs at work, to what extent do you use the following behavior:

1. Refrain from argument.

2. Try not to get involved.

3. Withdraw from the situation.

4. Ignore the conflict.

Satisfaction with Organization

Please rate on a scale of 1 (strongly disagree) to 5 (strongly agree):

1. In most ways, this research group is close to my ideal.

2. This research group is excellent.

3. In general, I am satisfied with this research group.

4. So far I have received the important things I want from this research group.

5. I would change almost nothing about this research group.

Activity Level

Please rate on a scale of 1 (very inaccurate) to 5 (very accurate):

1. I am always busy.

2. I am always on the go

3. I do a lot in my spare time.

4. I can manage things at the same time.

5. I react quickly.

6. I like to take it easy. (r)

7. I like to take my time. (r)

8. I like a leisurely lifestyle. (r)

9. I let things proceed at their own pace. (r)

10. I react slowly. (r)

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Appendix D

Leadership Potential Items

Using the options listed below, indicate how accurate the statements are as a description of you:

1= Very Inaccurate
2= Moderately Inaccurate
3= Neither Accurate Nor Inaccurate
4= Moderately Accurate
5= Very Accurate

1. I lead by "doing" rather than simply by "telling."
2. I provide a good model to follow.
3. I lead by example.
4. I insist on only the best performance.
5. I will not settle for second best.
6. I stimulate others to think about old problems in new ways.
7. I expect a lot from others.
8. I inspire others with my plans for the future.
9. I am able to get others committed to my dream of the future.
10. I encourage others to be team players.

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Tables

Table 1

T-tests for Leadership vs Non-Leadership Items (Pilot Test 1)

		Personality Items		*Leadership Items*		
		M	*SD*	*M*	*SD*	*t (50)*
1	This item is relevant to identifying my leadership potential.	3.17	.44	3.92	.44	9.88**
2	This item is inappropriate for identifying my leadership potential.	2.75	.44	2.17	.47	-7.71**
3	This item is invasive/ too personal.	2.52	.68	2.09	.65	-5.76**

*$p < .05$.
**$p < .01$.

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Table 2
Means, Standard Deviations, and Correlations for Overall Assessment Ratings (Pilot Test 1)

		M	*SD*	*N*	*1*	*2*	*3*	*4*	*5*
1	Accurately assesses leadership potential	3.34	.85	50	--				
2	Fair to use to assess leadership potential	3.31	.92	49	.67**	--			
3	Conclusions drawn would be accurate	2.96	.92	50	.51**	.56**	--		
4	Negative feelings if assessment is used	2.98	1.03	49	-.49**	-.62**	-.73**	--	
5	Favorable reaction if assessment is used	2.90	.90	49	.47**	.67**	.50**	-.72**	--

*p< .05.
**p< .01.

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Table 3
Means, Standard Deviations, and Correlations for Emotional Reaction Ratings (Pilot Test 1)

		M	*SD*	*N*	*1*	*2*	*3*
1	I would be offended if assessment is used	1.68	.91	50	--		
2	I would be hurt if assessment is used	1.27	.53	49	.51**	--	
3	I would be angry if assessment is used	1.38	.80	50	.59**	.53**	--

*p< .05.
**p< .01.

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Table 4
Means, Standard Deviations, and Correlations for Scenario Description Ratings (Pilot Test 1)

		M	*SD*	*N*	*1*	*2*	*3*	*4*
1	This scenario is fair	2.37	1.04	51	--			
2	I would be offended by this situation	1.98	.92	49	-.60**	--		
3	I would be hurt by this situation	1.63	.87	51	-.24	.54**	--	
4	I would be angered by this situation	2.04	1.02	51	-.54**	.78**	.56**	--

*p< .05.
**p< .01.

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Table 5
Means, Standard Deviations, and Correlations for E-mail 1: No Acknowledgment (Pilot Test 1)

		M	*SD*	*N*	*1*	*2*	*3*
1	This e-mail makes me want to forgive the research group for the injustice.	2.67	1.01	51	--		
2	This e-mail indicates to me that the research group is sorry for the injustice.	2.78	1.11	50	.62**	--	
3	This e-mail makes me feel more favorably toward the research group.	2.67	.91	51	.68**	.69**	--

*p< .05.
**p< .01.

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Table 6
Means, Standard Deviations, and Correlations for E-mail 2: Undo Harm (Pilot Test 1)

		M	*SD*	*N*	*1*	*2*	*3*
1	This e-mail makes me want to forgive the research group for the injustice.	3.60	1.07	50	--		
2	This e-mail indicates to me that the research group is sorry for the injustice.	3.43	.98	51	.75**	--	
3	This e-mail makes me feel more favorably toward the research group.	3.33	1.11	51	.73**	.73**	--

*$p < .05$.
**$p < .01$.

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Table 7
Means, Standard Deviations, and Correlations for E-mail 3: Apology (Pilot Test 1)

		M	*SD*	*N*	*1*	*2*	*3*
1	This e-mail makes me want to forgive the research group for the injustice.	3.63	1.00	51	--		
2	This e-mail indicates to me that the research group is sorry for the injustice.	3.82	.95	51	.81**	--	
3	This e-mail makes me feel more favorably toward the research group.	3.59	.98	51	.78**	.69**	--

*$p < .05$.
**$p < .01$.

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Table 8
Means, Standard Deviations, and Correlations for E-mail 4: Undo Harm + Apology (Pilot Test 1)

		M	*SD*	*N*	*1*	*2*	*3*
1	This e-mail makes me want to forgive the research group for the injustice.	3.92	.88	50	--		
2	This e-mail indicates to me that the research group is sorry for the injustice.	3.82	.99	51	.83**	--	
3	This e-mail makes me feel more favorably toward the research group.	3.76	.97	51	.77**	.79**	--

*$p < .05$.
**$p < .01$.

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Table 9
ANOVA Test for Significant Differences Among E-mail Conditions (Pilot Test 1)

Source	*df*	*SS*	*MS*	*F*	η^2
This e-mail makes me want to forgive the research group.					.19
Between Groups	3	45.07	15.02	15.26**	
Within Groups	198	194.94	.99		
This e-mail indicates to me that the research group is sorry for the injustice.					.15
Between Groups	3	36.63	12.21	11.92**	
Within Groups	199	203.91	1.03		
This e-mail makes me feel more favorably toward the research group.					.15
Between Groups	3	35.47	11.82	11.93**	
Within Groups	200	198.20	.99		

*$p < .05$.
**$p < .01$

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Table 10
Means and Standard Deviations for Pilot Test 2

		M	*SD*	*N*	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*
1	How fair do you feel this experience was?	2.05	1.12	41	--							
2	In general, is it fair to use this test to assess your leadership potential?	2.32	.82	41	.67**	--						
3	If conclusions were drawn about my leadership potential through this experience, I would consider those conclusions accurate.	2.29	1.06	41	.69**	.50**	--					
4	I would have negative feelings toward an organization that used this personality test to assess my leadership potential.	3.17	1.05	41	-.31	-.39*	-.36*	--				
5	Based on your experience taking this test and its result, to what extent do you feel offended?	2.56	.84	41	-.54**	-.52**	-.53**	.49**	--			
6	Based on your experience taking this test and its result, to what extent do you feel hurt?	1.39	.59	41	-.34**	-.06	-.31*	.09	.36*	--		
7	Based on your experience taking this test and its result, to what extent do you feel angry?	2.98	.88	41	-.58**	-.23	-.53**	.20	.53**	.46**	--	
8	Based on your experience taking this test and its result, to what extent do you feel unfairly treated?	3.24	.77	41	-.60**	-.48**	-.49**	.38*	.48**	.45**	.45**	--

*$p < .05$.
**$p < .01$.
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Table 11
Means and Standard Deviations for Main Study Variables

		M	*SD*	*N*	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*
1	Justice Expectations	4.37	.57	341	--												
2	Empathy	3.37	.42	341	.07	--											
3	Anger	2.52	.72	341	.03	-.15**	--										
4	Conflict Avoidance	3.13	.78	341	-.06	.02	-.07	--									
5	Activity Level	3.46	.55	341	.18**	.08	-.04	-.17**	--								
6	T1 Justice	3.30	.68	341	.14*	.03	-.02	-.07	.07	--							
7	Forgiveness	3.91	.83	269	.01	.00	.10	-.03	-.06	-.03	--						
8	Reconciliation	3.65	.81	269	.16**	.04	.09	.00	-.05	.15*	.55**	--					
9	No Negative Feelings	3.82	1.21	269	.04	.10	-.09	-.03	.14*	.52**	.04	.15*	--				
10	Revenge Motivation	1.28	.51	269	-.09	-.11	.05	-.07	-.12	-.04	-.27**	-.18**	-.27**	--			
11	Avoidance Motivation	1.76	.87	269	-.06	-.09	.12*	.04	-.03	-.30**	-.11	-.24**	-.49**	.40**	--		
12	T2 Justice	3.44	.54	269	.11	-.02	-.01	-.04	-.05	.50**	.15*	.29**	.42**	-.16**	-.45**	--	
13	Org. Satisfaction	3.30	.78	269	.15*	.06	-.01	.00	.08	.53**	.10	.33**	.53**	-.19**	-.50**	.70**	--

*p< .05.
**p< .01.

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Table 12
Means and Standard Deviations for Forgiveness, Reconciliation, Revenge Motivation, & Avoidance Motivation by E-mail Condition

		With outliers			*Without outliers*		
		M	*SD*	*N*	*M*	*SD*	*N*
	Forgiveness						
1	No acknowledgement	3.92	.87	73	3.91	.87	71
2	Undo harm	3.70	.78	66	3.72	.78	65
3	Apology	4.03	.83	67	4.02	.84	65
4	Undo harm + apology	3.96	.81	63	3.96	.81	63
	Reconciliation						
5	No acknowledgement	3.58	.73	73	3.55	.72	71
6	Undo harm	3.52	.78	66	3.53	.79	65
7	Apology	3.69	.82	67	3.68	.84	65
8	Undo harm + apology	3.85	.86	63	3.85	.86	63
	Revenge motivation						
9	No acknowledgement	1.40	.64	73	1.37	.57	71
10	Undo harm	1.31	.47	66	1.31	.47	65
11	Apology	1.22	.44	67	1.21	.43	65
12	Undo harm + apology	1.17	.42	63	1.17	.42	63
	Avoidance motivation						
13	No acknowledgement	1.83	.91	73	1.81	.88	71
14	Undo harm	1.77	.84	66	1.76	.84	65
15	Apology	1.78	.94	67	1.79	.95	65
16	Undo harm + apology	1.63	.80	63	1.63	.80	63

*$p < .05$.
**$p < .01$.
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Table 13
ANOVA Test for Significant Differences Among E-mail Conditions (includes outliers)

Source	*df*	*SS*	*MS*	*F*	η^2
Forgiveness					
Between Groups	3	3.89	1.30	1.90	.02
Within Groups	265	180.82	.68		
Reconciliation					
Between Groups	3	3.99	1.33	2.07	.02
Within Groups	265	169.97	.64		
Revenge motivation					
Between Groups	3	2.10	.70	2.74*	.03
Within Groups	265	67.86	.26		
Avoidance motivation					
Between Groups	3	1.47	.49	.64	.01
Within Groups	265	202.84	.77		

*$p < .05$.
**$p < .01$
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Table 14
ANOVA Test for Significant Differences Among E-mail Conditions (without outliers)

Source	*df*	*SS*	*MS*	*F*	η^2
Forgiveness					
Between Groups	3	3.35	1.12	1.62	.02
Within Groups	260	178.61	.69		
Reconciliation					
Between Groups	3	4.12	1.37	2.13	.02
Within Groups	260	167.35	.64		
Revenge motivation					
Between Groups	3	1.62	.54	2.34	.03
Within Groups	260	60.18	.23		
Avoidance motivation					
Between Groups	3	1.30	.43	.57	.01
Within Groups	260	196.70	.76		

*p< .05.
**p< .01
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Table 15
Effects of Conflict Avoidance x E-mail Condition on Forgiveness, Reconciliation, Revenge Motivation, and Avoidance Motivation

	B	*SEB*	*β*	*t*
Forgiveness				
Constant	3.41	.50		6.84**
Conflict Avoidance	.12	.15	.12	.82
E-mail Condition	.04	.05	.06	.95
Interaction	-.06	.06	-.16	-1.08
Reconciliation				
Constant	3.19	.48		6.64**
Conflict Avoidance	.07	.15	.07	.50
E-mail Condition	.10	.04	.13	2.18*
Interaction	-.03	.05	-.07	-.47
Revenge Motivation				
Constant	1.66	.30		5.49**
Conflict Avoidance	-.06	.09	-.09	-.64
E-mail Condition	-.08	.03	-.18	-2.94**
Interaction	.00	.03	.01	.07
Avoidance Motivation				
Constant	2.11	.52		4.04**
Conflict Avoidance	-.07	.16	-.06	-.43
E-mail Condition	-.06	.05	-.08	-1.22
Interaction	.04	.06	.11	.77

*$p < .05$.
**$p < .01$.

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Table 16
Effects of Trait Anger x E-mail Condition on Forgiveness, Reconciliation, Revenge Motivation, and Avoidance Motivation

	B	*SEB*	*β*	*t*
Forgiveness				
Constant	3.72	.44		8.56**
Anger	.03	.17	.03	.19
E-mail Condition	.05	.05	.06	.99
Interaction	.03	.06	.08	.56
Reconciliation				
Constant	3.20	.42		7.63**
Anger	.09	.16	.08	.55
E-mail Condition	.10	.04	.13	2.20*
Interaction	.01	.06	.01	.08
Revenge Motivation				
Constant	1.24	.27		4.68**
Anger	.09	.10	.13	.91
E-mail Condition	-.08	.03	-.17	-2.86**
Interaction	-.02	.04	-.09	-.64
Avoidance Motivation				
Constant	1.28	.46		2.81**
Anger	.25	.18	.21	1.40
E-mail Condition	-.06	.05	-.07	-1.21
Interaction	-.04	.06	-.09	-.62

*$p < .05$.
**$p < .01$.

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Table 17
Effects of Trait Empathy x E-mail Condition on Forgiveness, Reconciliation, Revenge Motivation, and Avoidance Motivation

	B	*SEB*	*β*	*t*
Forgiveness				
Constant	3.53	.97		3.64**
Empathy	.08	.29	.04	.29
E-mail Condition	.04	.05	.06	.92
Interaction	-.03	.10	-.05	-.33
Reconciliation				
Constant	3.26	.93		3.49**
Empathy	.05	.28	.03	.18
E-mail Condition	.09	.04	.13	2.11*
Interaction	.00	.10	.00	.03
Revenge Motivation				
Constant	2.87	.58		4.93**
Empathy	-.42	.17	-.34	-2.43**
E-mail Condition	-.08	.03	-.17	-2.76**
Interaction	.12	.06	.27	1.94*
Avoidance Motivation				
Constant	4.27	1.01		4.24**
Empathy	-.71	.30	-.34	-2.38**
E-mail Condition	-.05	.05	-.07	-1.14
Interaction	.21	.11	.28	1.95*

*$p < .05$.
**$p < .01$.

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Table 18
Effects of Trait Empathy x Apology Component on Forgiveness, Reconciliation, Revenge Motivation, and Avoidance Motivation

	B	*SEB*	*β*	*t*
Forgiveness				
Constant	3.83	.57		6.68**
Empathy	-.00	.17	-.00	-.02
Apology Component	.18	.10	.11	1.75
Interaction	-.03	.24	-.01	-.13
Reconciliation				
Constant	3.19	.56		5.75**
Empathy	.11	.17	.06	.65
Apology Component	.21	.10	.13	2.12*
Interaction	-.12	.24	-.04	-.51
Revenge Motivation				
Constant	2.00	.35		5.74**
Empathy	-.19	.10	-.16	-1.86
Apology Component	-.15	.06	-.15	-2.43*
Interaction	.17	.15	.10	1.15
Avoidance Motivation				
Constant	3.11	.60		5.18**
Empathy	-.39	.18	-.19	-2.20*
Apology Component	-.08	.11	-.04	-.73
Interaction	.43	.26	.14	1.68

*$p < .05$.
**$p < .01$.

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Table 19
Effects of Trait Empathy x Undo Harm Component on Forgiveness, Reconciliation, Revenge Motivation, and Avoidance Motivation

	B	*SEB*	*β*	*t*
Forgiveness				
Constant	3.76	.60		6.23**
Empathy	.06	.18	.03	.36
Undo Harm Component	-.14	.10	-.09	-1.40
Interaction	-.13	.24	-.05	-.53
Reconciliation				
Constant	3.82	.59		6.51**
Empathy	-.06	.17	-.03	-.32
Undo Harm Component	.05	.10	.03	.53
Interaction	.26	.24	.10	1.09
Revenge Motivation				
Constant	2.37	.37		6.47**
Empathy	-.31	.11	-.26	-2.91**
Undo Harm Component	-.08	.06	-.08	-1.31
Interaction	.34	.15	.20	2.27*
Avoidance Motivation				
Constant	3.06	.63		4.84**
Empathy	-.37	.19	-.18	-1.99*
Undo Harm Component	-.12	.11	-.07	-1.10
Interaction	.32	.26	.11	1.25

*$p < .05$.
**$p < .01$.

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Table 20
Null Model for Justice Rating in HLM Analyses

	Coefficient	*Standard Error*	*t-ratio*	*p*
Fixed Effects				
Intercept	3.37	.03	103.832	.00
	SD	*Variance Component*	χ^2	*p*
Random Effects				
Intercept	.43	.18	743.26	.00
Level 1 *e*	.45	.20		

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Table 21
Random Coefficients Model for Justice Rating over Time in HLM Analyses

	Coefficient	*Standard Error*	*t-ratio*	*p*
Fixed Effects				
Intercept	3.30	.04	87.68	.00
Intercept for Time slope	.14	.04	3.71	.00
	SD	*Variance Component*	χ^2	*P*
Random Effects				
Intercept	.43	.19	778.58	.00
Level 1 *e*	.44	.19		

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Table 22
Effect of Justice Expectations on Justice Ratings over Time

	Coefficient	*Standard Error*	*t-ratio*	*df*	*p*
Fixed Effects					
Expectations intercept γ_{01}	.18	.06	2.75	267	.01
Expectations slope γ_{11}	-.08	.07	-1.21	534	.23

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Table 23
Effect of Forgiveness on Justice Ratings over Time

	Coefficient	*Standard Error*	*t-ratio*	*df*	*p*
Fixed Effects					
Forgiveness intercept γ_{01}	-.02	.05	-.52	267	.60
Forgiveness slope γ_{11}	.12	.05	2.67	534	.01

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Table 24
Effect of Reconciliation on Justice Ratings over Time

	Coefficient	*Standard Error*	*t-ratio*	*df*	*p*
Fixed Effects					
Reconciliation intercept γ_{01}	.12	.05	2.69	267	.01
Reconciliation slope γ_{11}	.07	.05	1.53	534	.13

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Table 25
Effect of Revenge Motivation on Justice Ratings over Time

	Coefficient	*Standard Error*	*t-ratio*	*df*	*p*
Fixed Effects					
Revenge intercept γ_{01}	-.05	.07	-.64	267	.52
Revenge slope γ_{11}	-.12	.07	-1.68	534	.10

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Table 26
Effect of Avoidance Motivation on Justice Ratings over Time

	Coefficient	*Standard Error*	*t-ratio*	*df*	*p*
Fixed Effects					
Avoidance intercept γ_{01}	-.23	.04	-5.82	267	.00
Avoidance slope γ_{11}	-.05	.04	-1.06	534	.29

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Table 27
Effects of Forgiveness, Reconciliation, Revenge Motivation, and Avoidance Motivation on Justice Ratings over Time

	Coefficient	*Standard Error*	*t-ratio*	*df*	*p*
Intercepts					
Forgiveness γ_{01}	-.10	.05	-1.97	264	.05
Reconciliation γ_{02}	.13	.05	2.46	264	.02
Revenge γ_{03}	.11	.08	1.42	264	.16
Avoidance γ_{04}	-.24	.04	-5.42	264	.00
Slopes					
Forgiveness γ_{11}	.11	.06	1.95	528	.05
Reconciliation γ_{12}	.00	.06	-.05	528	.97
Revenge γ_{13}	-.06	.08	-.75	528	.45
Avoidance γ_{14}	-.02	.05	-.44	528	.66

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Table 28
Effect of E-mail Condition on Justice Ratings over Time

	Coefficient	*Standard Error*	*t-ratio*	*df*	*p*
Intercepts					
E-mail condition γ_{00}	3.25	.07	45.05	265	.00
Undo harm γ_{01}	-.06	.10	-.62	265	.54
Apology γ_{02}	.12	.10	1.14	265	.25
Undo harm & apology γ_{03}	.15	.11	1.46	265	.15
Slopes					
E-mail condition γ_{10}	.11	.07	1.50	530	.14
Undo harm γ_{11}	.13	.11	1.25	530	.21
Apology γ_{12}	.01	.11	.09	530	.93
Undo harm & apology γ_{13}	-.01	.11	-.13	530	.89

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Table 29
Effect of Apology Component on Justice Ratings over Time

	Coefficient	*Standard Error*	*t-ratio*	*df*	*p*
Fixed Effects					
Apology component intercept γ_{01}	.17	.07	2.23	267	.03
Apology component slope γ_{11}	-.06	.08	-.85	534	.40

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Table 30
Effect of Undo Harm Component on Justice Ratings over Time

	Coefficient	*Standard Error*	*t-ratio*	*df*	*p*
Fixed Effects					
Undo harm component intercept γ_{01}	-.01	.08	-.20	267	.84
Undo harm component slope γ_{11}	.06	.08	.74	534	.46

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Table 31
Polynomial Regression: Discrepancy Table

Agreement Groups	*Percentage*	*Mean T1 Justice Rating*	*Mean T2 Justice Rating*
T1 more than T2	31.2	3.54	3.07
In agreement	42.8	3.43	3.52
T2 more than T1	26.0	2.79	3.74

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Table 32
Polynomial Regression Coefficients: Effects of Time 1 and Time 2 Justice Ratings on Organizational Satisfaction

	B	*SEB*	*β*	*t*
Model 1				
Constant	2.85	.04		67.89**
Time 1 Justice Rating (Centered)	.27	.06	.24	4.90**
Time 2 Justice Rating (Centered)	.84	.07	.58	12.00**
Model 2				
Constant	2.83	.05		59.67**
Time 1 Justice Rating (Centered)	.18	.07	.16	2.40*
Time 2 Justice Rating (Centered)	1.00	.10	.69	9.59**
T1 Justice Squared	.06	.06	.06	1.09
T1 Justice x T2 Justice	.13	.12	.09	1.10
T2 Justice Squared	-.20	.10	-.16	-2.08*

*$p < .05$, **$p < .01$.
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Table 33
Polynomial Regression Surface Tests

	Org. Satisfaction
R^2	.53**
a_1	1.11**
a_2	-.01
a_3	-.57**
a_4	-.27

*$p < .05$, **$p < .01$.
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Table 34
Logistic Regression: Effect of Revenge Motivation on Revenge Behavior

	B	*SE*	*Wald*	*Odds Ratio*
Constant	-4.15	.88	22.35**	.02
Revenge Motivation	.49	.56	.78	1.64

Note: Cox & Snell R^2= .00; Nagelkerke R^2= .01
*$p < .05$.
**$p < .01$.

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Table 35
Classification Table: Revenge Motivation and Revenge Behavior

	Predicted Revenge Behavior		*Percentage Correct*
Revenge Behavior	No (0)	Yes (1)	
No (0)	261	0	100.00
Yes (1)	8	0	0.00
Overall Percentage			97.00

*$p < .05$.
**$p < .01$.

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Table 36
Logistic Regression: Effect of Avoidance Motivation on Avoidance Behavior

	B	*SE*	*Wald*	*Odds Ratio*
Constant	-2.54	.43	34.65**	.08
Avoidance Motivation	.27	.20	1.84	1.31

Note: Cox & Snell R^2= .01; Nagelkerke R^2= .01
*$p < .05$.
**$p < .01$.

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Table 37
Classification Table: Avoidance Motivation and Avoidance Behavior

	Predicted Avoidance Behavior		*Percentage Correct*
Avoidance Behavior	No (0)	Yes (1)	
No (0)	238	0	100.00
Yes (1)	31	0	0.00
Overall Percentage			88.50

*$p < .05$.
**$p < .01$.

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Table 38
Logistic Regression: Effect of Reconciliation on Reconciliation Behavior

	B	*SE*	*Wald*	*Odds Ratio*
Constant	-.20	.60	.11	.82
Reconciliation	-.13	.16	.60	.88

Note: Cox & Snell R^2= .00; Nagelkerke R^2= .00
*$p < .05$.
**$p < .01$.

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Table 39
Classification Table: Reconciliation and Reconciliation Behavior

	Predicted Reconciliation Behavior		*Percentage Correct*
Reconciliation Behavior	No (0)	Yes (1)	
No (0)	177	0	100.00
Yes (1)	92	0	0.00
Overall Percentage			65.8

*$p < .05$.
**$p < .01$.

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Table 40
Logistic Regression: Effect of Forgiveness on Reconciliation Behavior

	B	*SE*	*Wald*	*Odds Ratio*
Constant	.24	.62	.15	1.27
Forgiveness	-.23	.16	2.17	.80

Note: Cox & Snell R^2= .01; Nagelkerke R^2= .01
*$p < .05$.
**$p < .01$.

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Table 41
Classification Table: Forgiveness and Reconciliation Behavior

	Predicted Reconciliation Behavior		*Percentage Correct*
Reconciliation Behavior	No (0)	Yes (1)	
No (0)	176	1	99.40
Yes (1)	92	0	0.00
Overall Percentage			65.40

*$p < .05$.
**$p < .01$.

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Table 42
Logistic Regression: Effects of Forgiveness, Reconciliation, Revenge Motivation, & Avoidance Motivation on Non-Response Behavior

	B	*SE*	*Wald*	*Odds Ratio*
Constant	-2.80	.90	9.69**	.06
Forgiveness	.51	.19	7.12**	1.66
Reconciliation	-.09	.19	.21	.92
Revenge Motivation	.83	.30	7.68**	2.30
Avoidance Motivation	.07	.16	.20	1.08

Note: Cox & Snell R^2= .06; Nagelkerke R^2= .08
*$p < .05$.
**$p < .01$.

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Table 43
Classification Table: Non-Response Behavior

	Predicted No Response Behavior		*Percentage Correct*
No Response Behavior	No (0)	Yes (1)	
No (0)	74	57	56.50
Yes (1)	52	86	62.30
Overall Percentage			59.50

*$p < .05$.
**$p < .01$.

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Table 44
Logistic Regression: Effect of Conflict Avoidance on Avoidance Behavior

	B	*SE*	*Wald*	*Odds Ratio*
Constant	-3.76	.82	20.91**	.02
Conflict avoidance	.53	.24	5.02*	1.70

Note: Cox & Snell R^2= .02; Nagelkerke R^2= .04
*$p < .05$.
**$p < .01$.

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Table 45
Classification Table: Conflict Avoidance and Avoidance Behavior

	Predicted Avoidance Behavior		*Percentage Correct*
Avoidance Behavior	No (0)	Yes (1)	
No (0)	238	0	100.00
Yes (1)	31	0	0.00
Overall Percentage			88.50

*$p < .05$.
**$p < .01$.

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Table 46
Logistic Regression: Effect of Trait Anger on Non-Response Behavior

	B	*SE*	*Wald*	*Odds Ratio*
Constant	-1.03	.45	5.25*	.36
Conflict avoidance	.43	.17	6.23**	1.54

Note: Cox & Snell R^2= .02; Nagelkerke R^2= .03
*$p < .05$.
**$p < .01$.

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Table 47
Classification Table: Trait Anger and Non-Response Behavior

	Predicted Non-Response		*Percentage Correct*
Non-Response	No (0)	Yes (1)	
No (0)	65	66	49.60
Yes (1)	46	92	66.70
Overall Percentage			58.40

*$p < .05$.
**$p < .01$.

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Table 48
Effect of No Negative Feelings on Justice Ratings over Time

	Coefficient	*Standard Error*	*t-ratio*	*df*	*p*
Fixed Effects					
No negative feelings intercept γ_{01}	.30	.03	10.86	267	.00
No negative feelings slope γ_{11}	-.11	.03	-3.46	534	.00

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Figures

Figure 1

If I received this e-mail following an injustice, it would make me want to forgive the research group for the injustice. (Pilot Test 1)

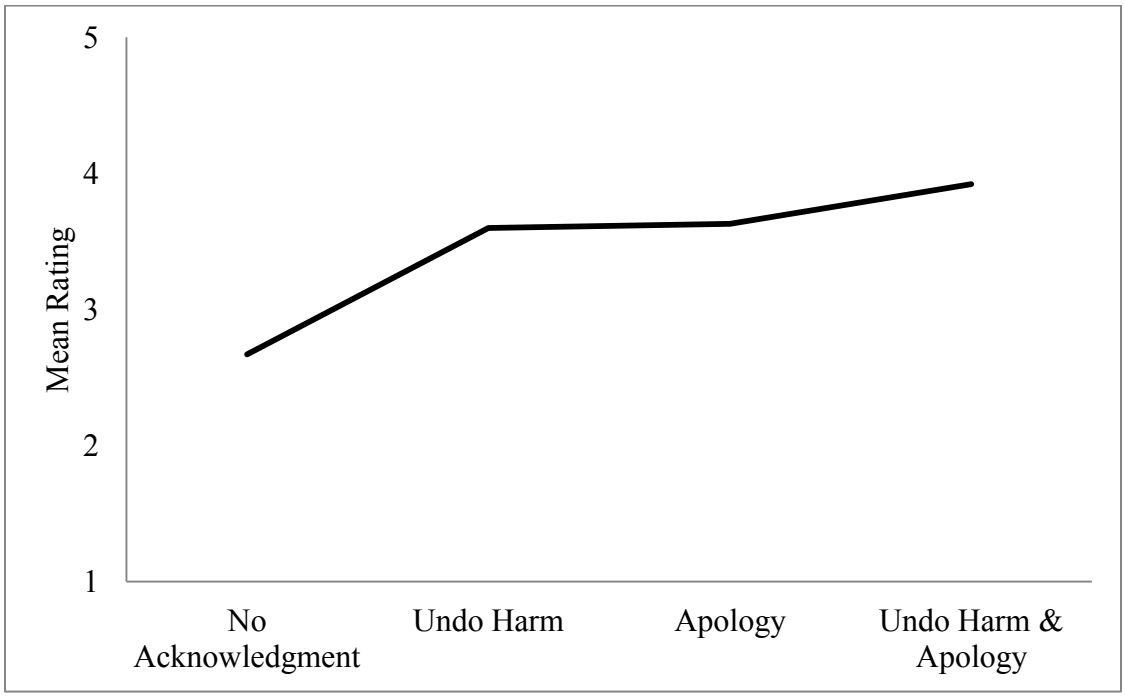

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Figure 2

If I received this e-mail following an injustice, it would indicate to me that the research group is sorry for the injustice. (Pilot Test 1)

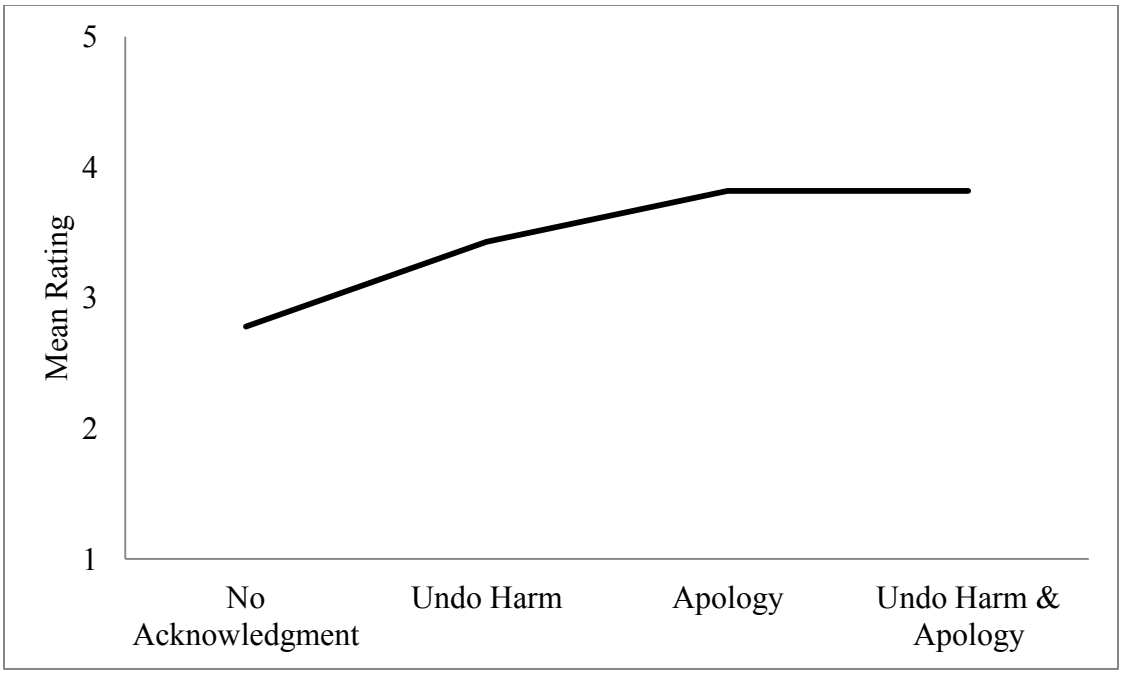

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Figure 3

If I received this e-mail following an injustice, it would make me feel more favorably toward the research group. (Pilot Test 1)

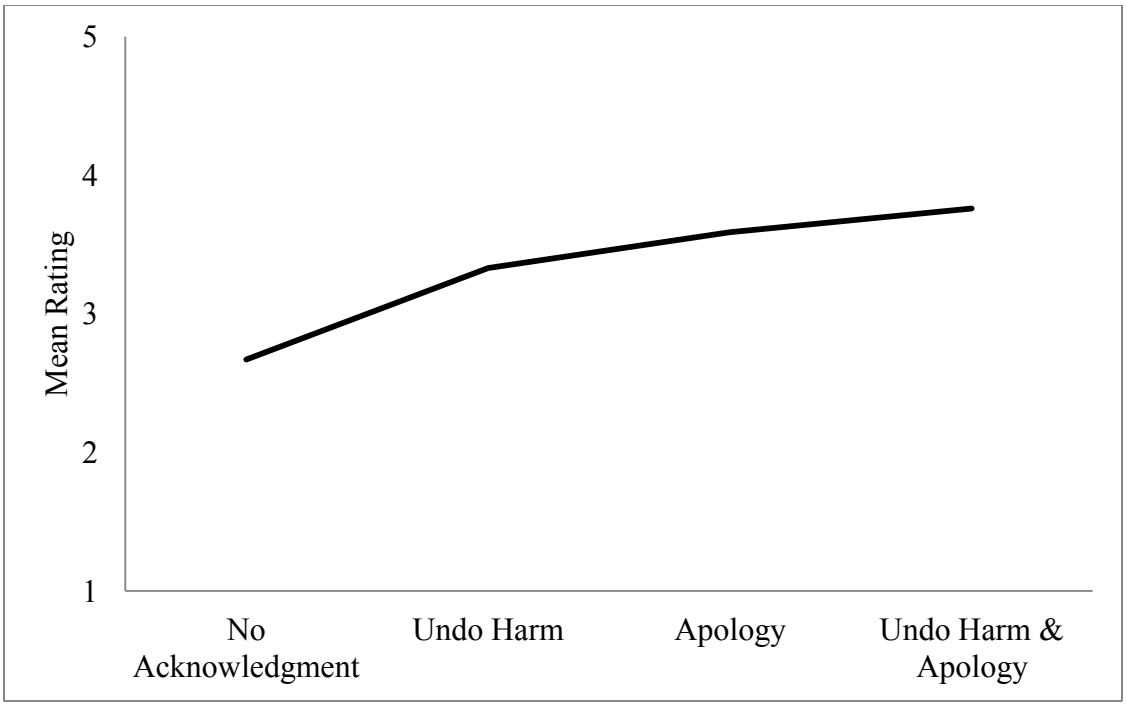

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Figure 4

Histogram for Justice Expectations

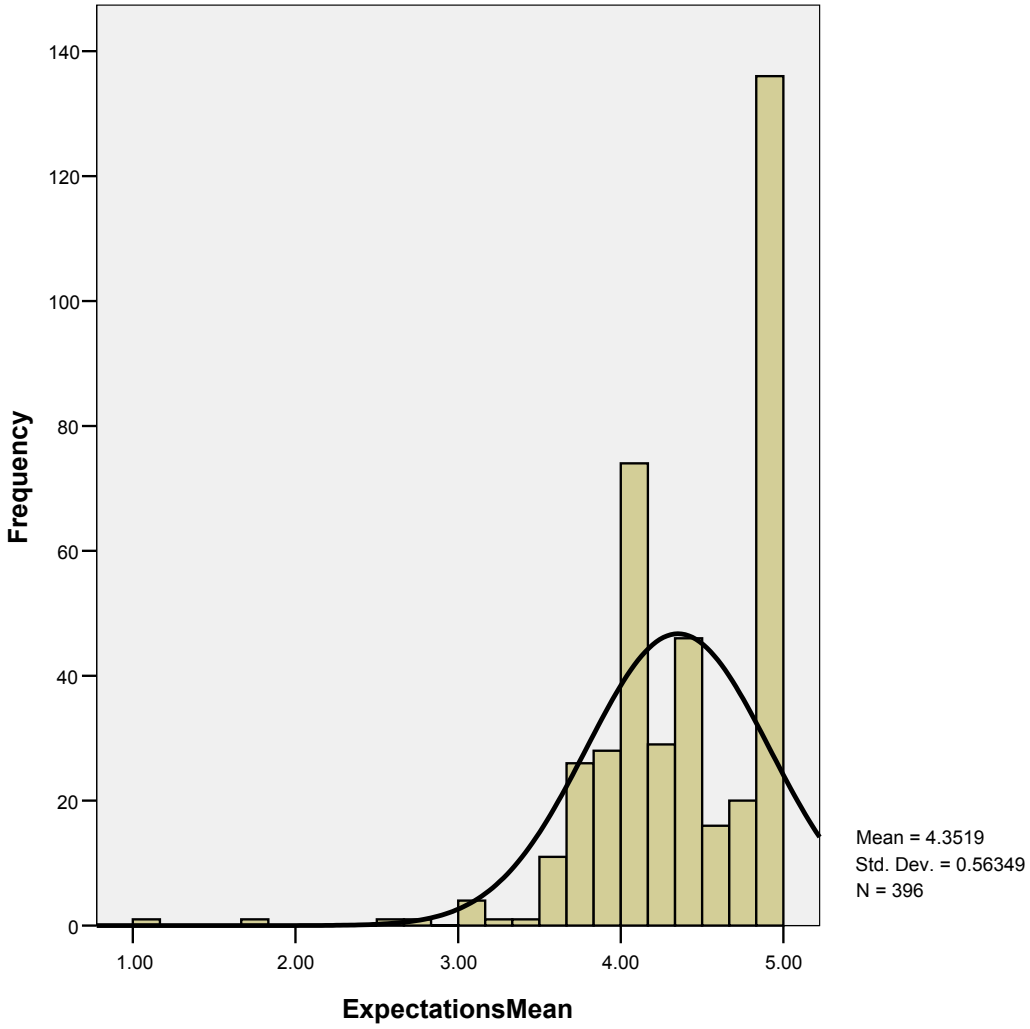

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Figure 5

Histogram for Revenge Motivation

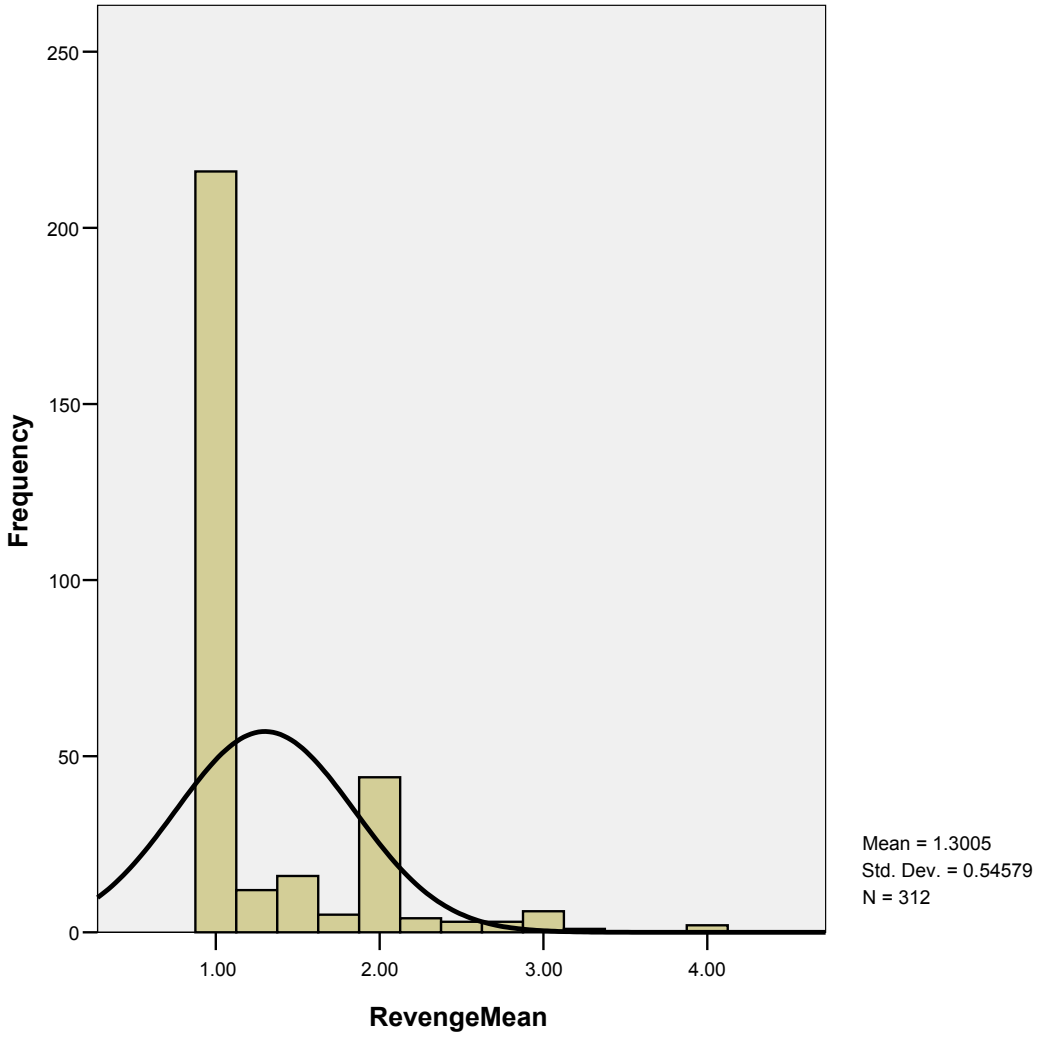

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Figure 6

Histogram for Avoidance Motivation

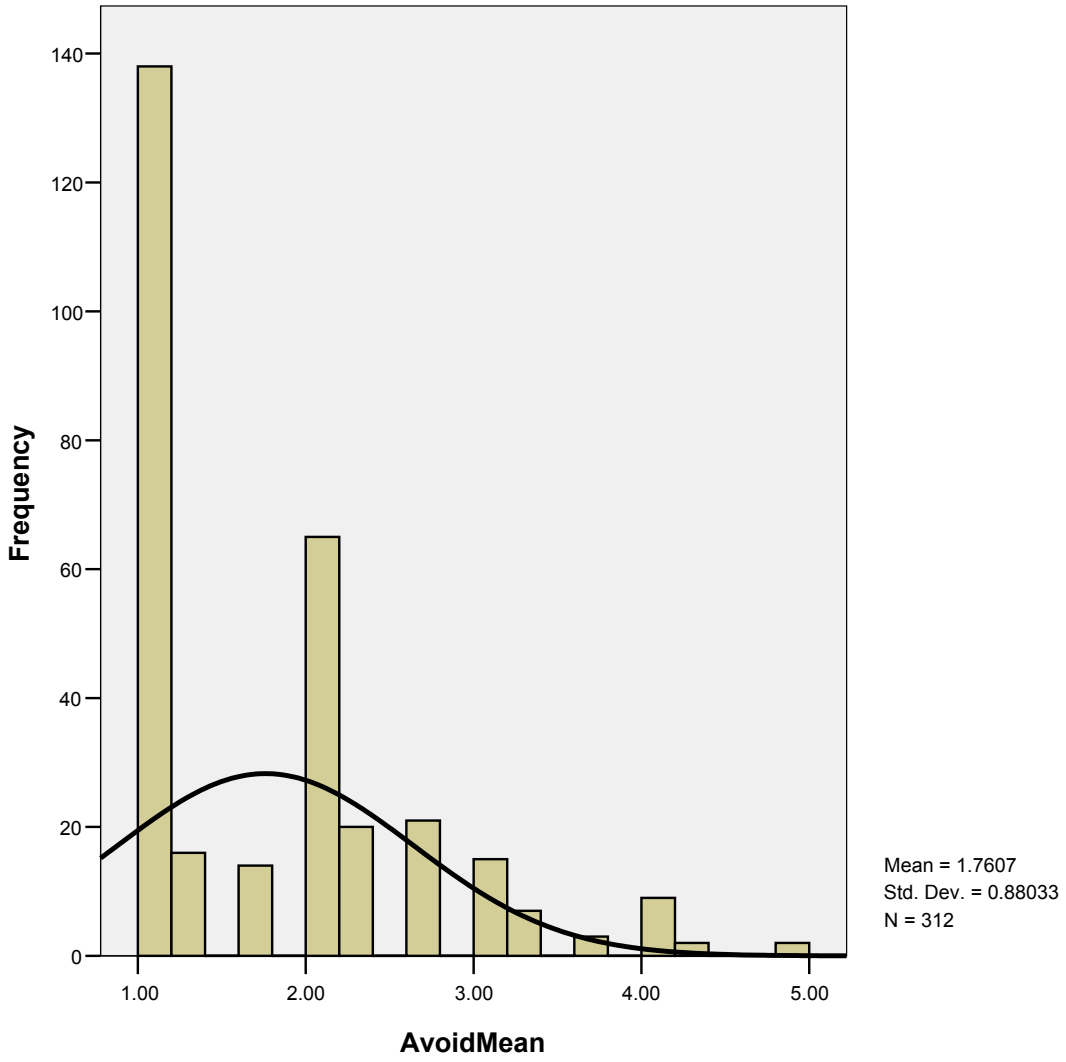

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Figure 7

Forgiveness: Ratings by E-mail Condition

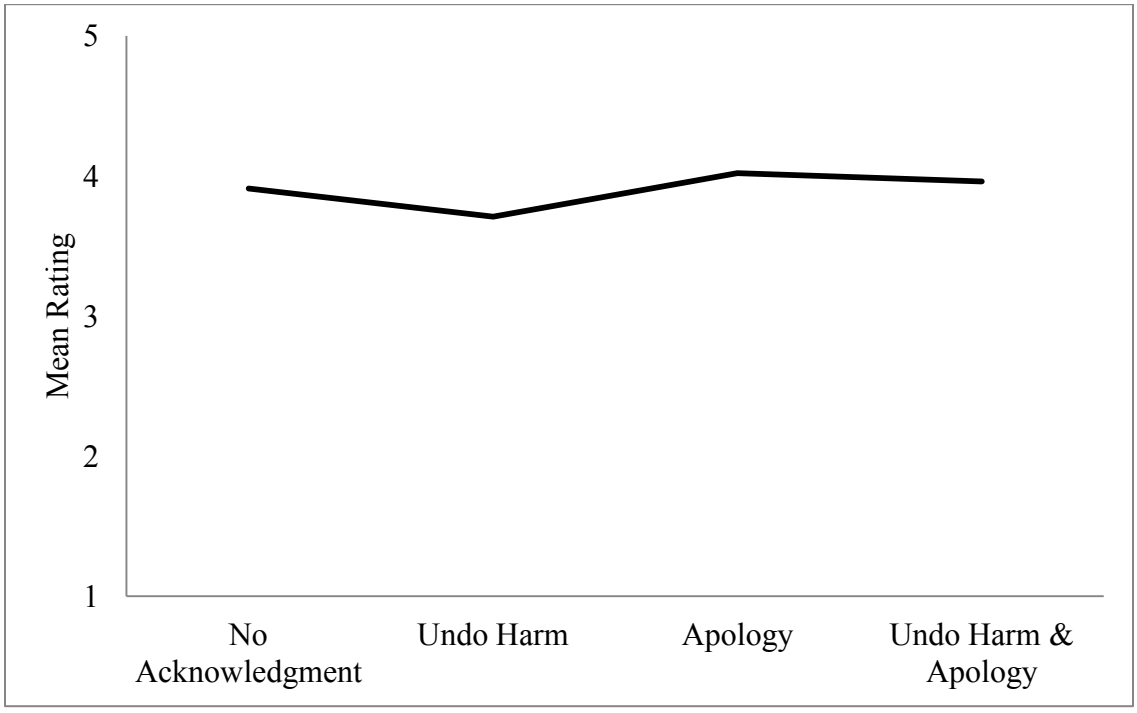

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Figure 8

Reconciliation: Ratings by E-mail Condition

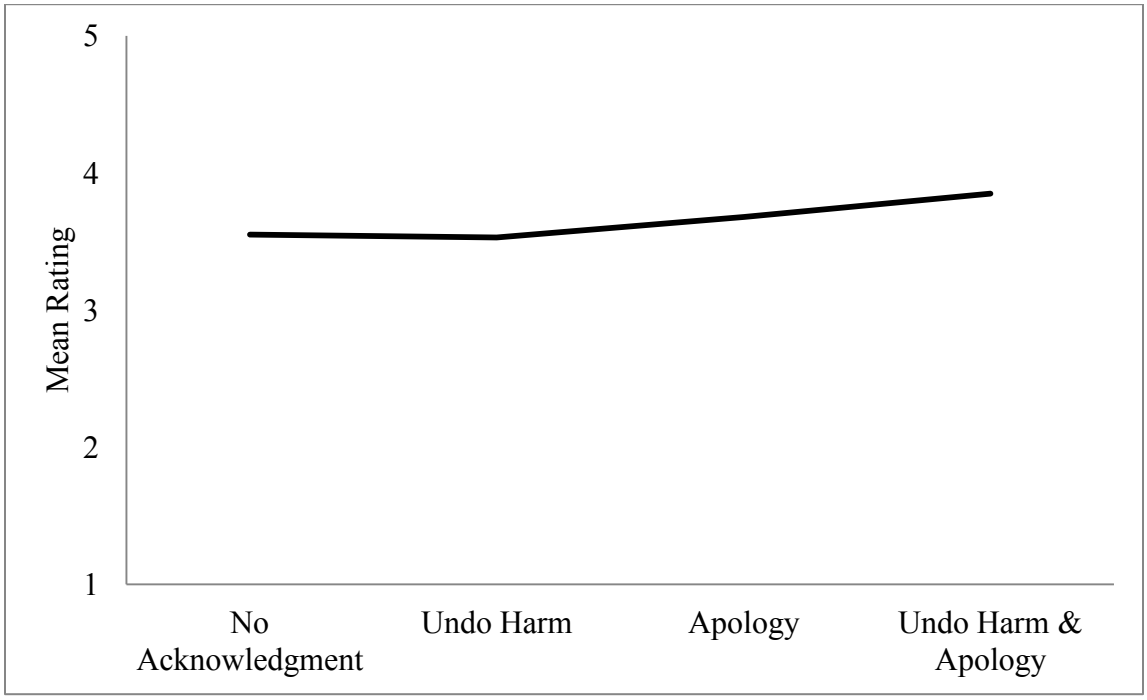

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Figure 9

Revenge Motivation: Ratings by E-mail Condition

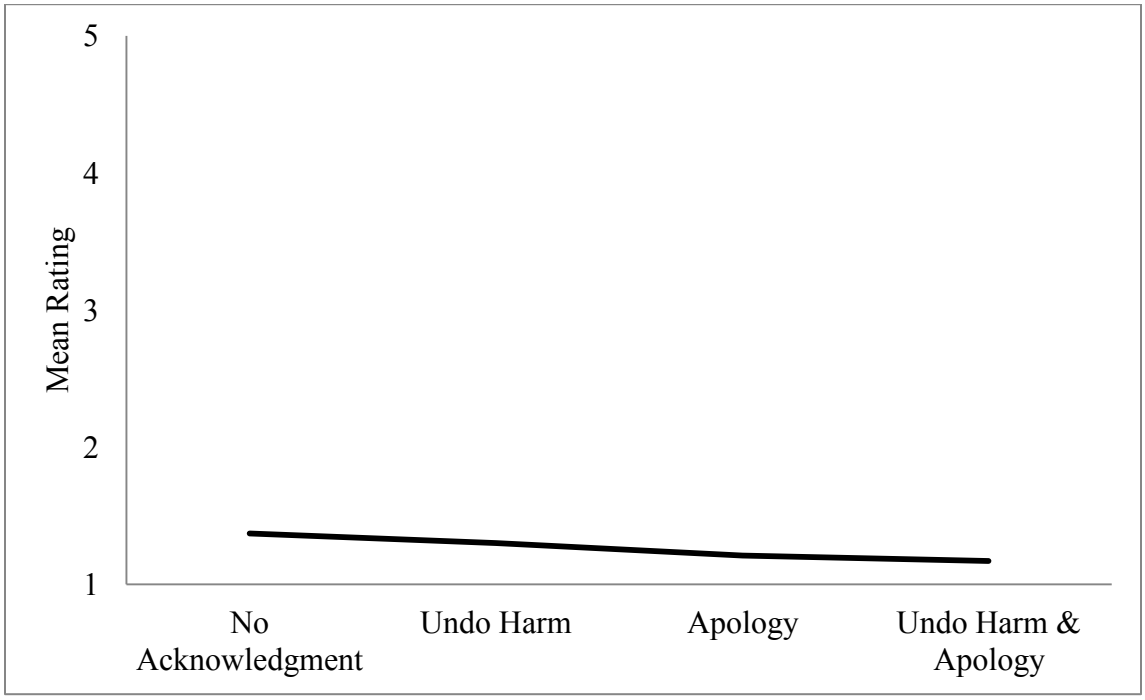

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Figure 10

Avoidance Motivation: Ratings by E-mail Condition

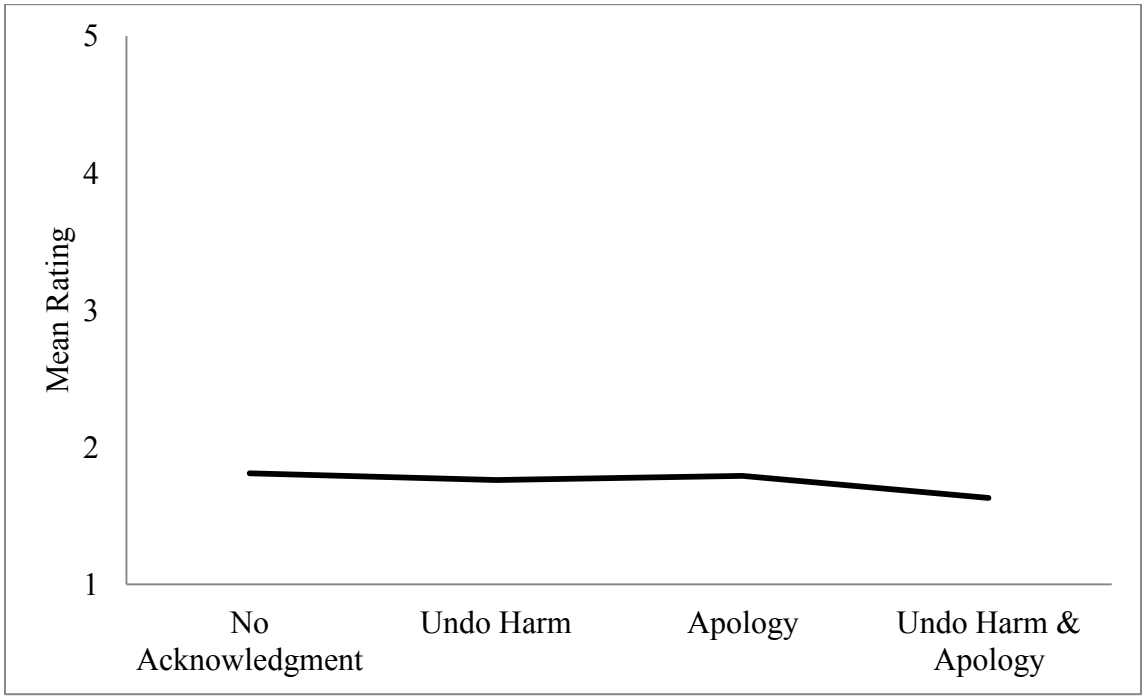

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Figure 11

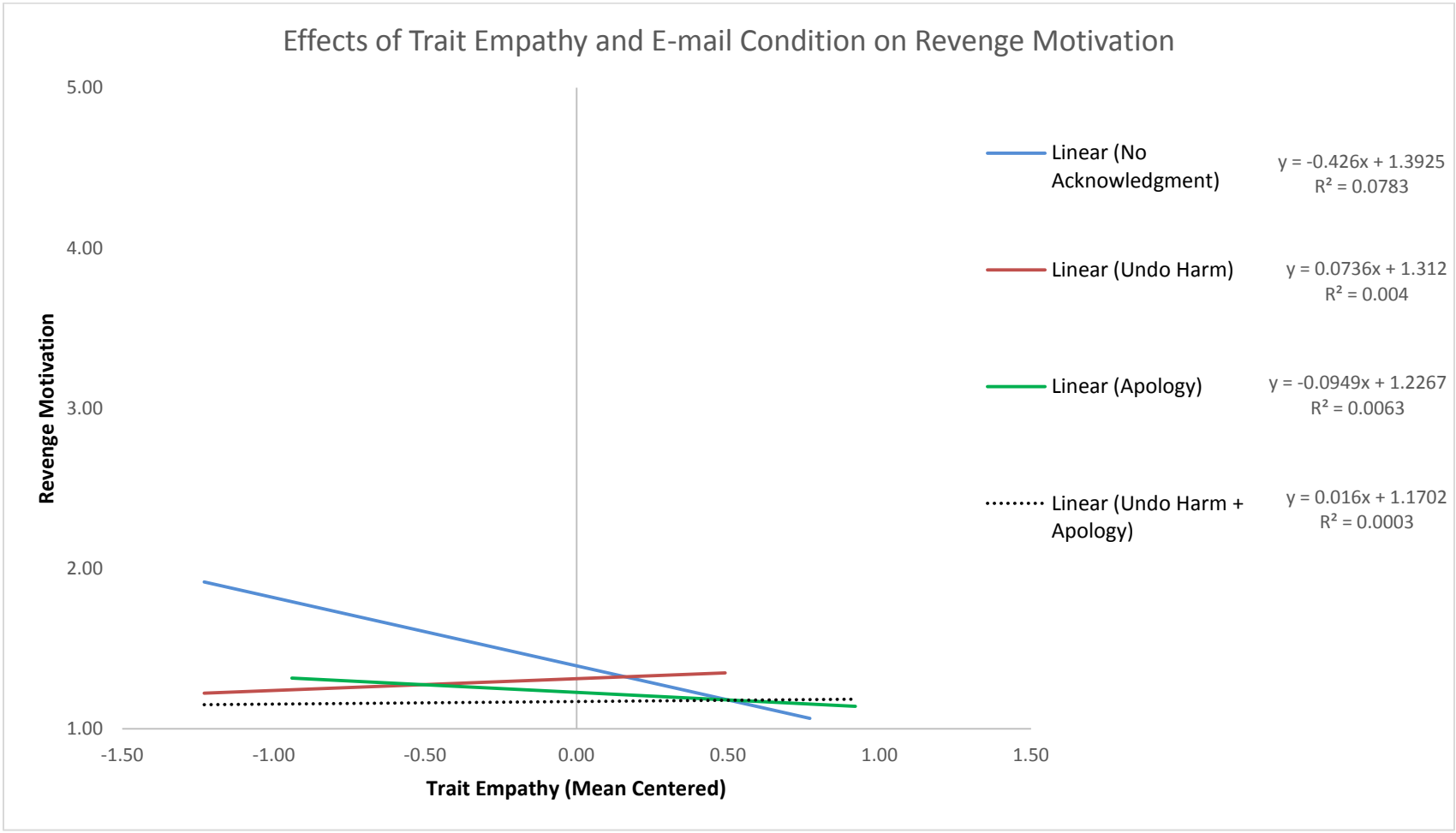

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Figure 12

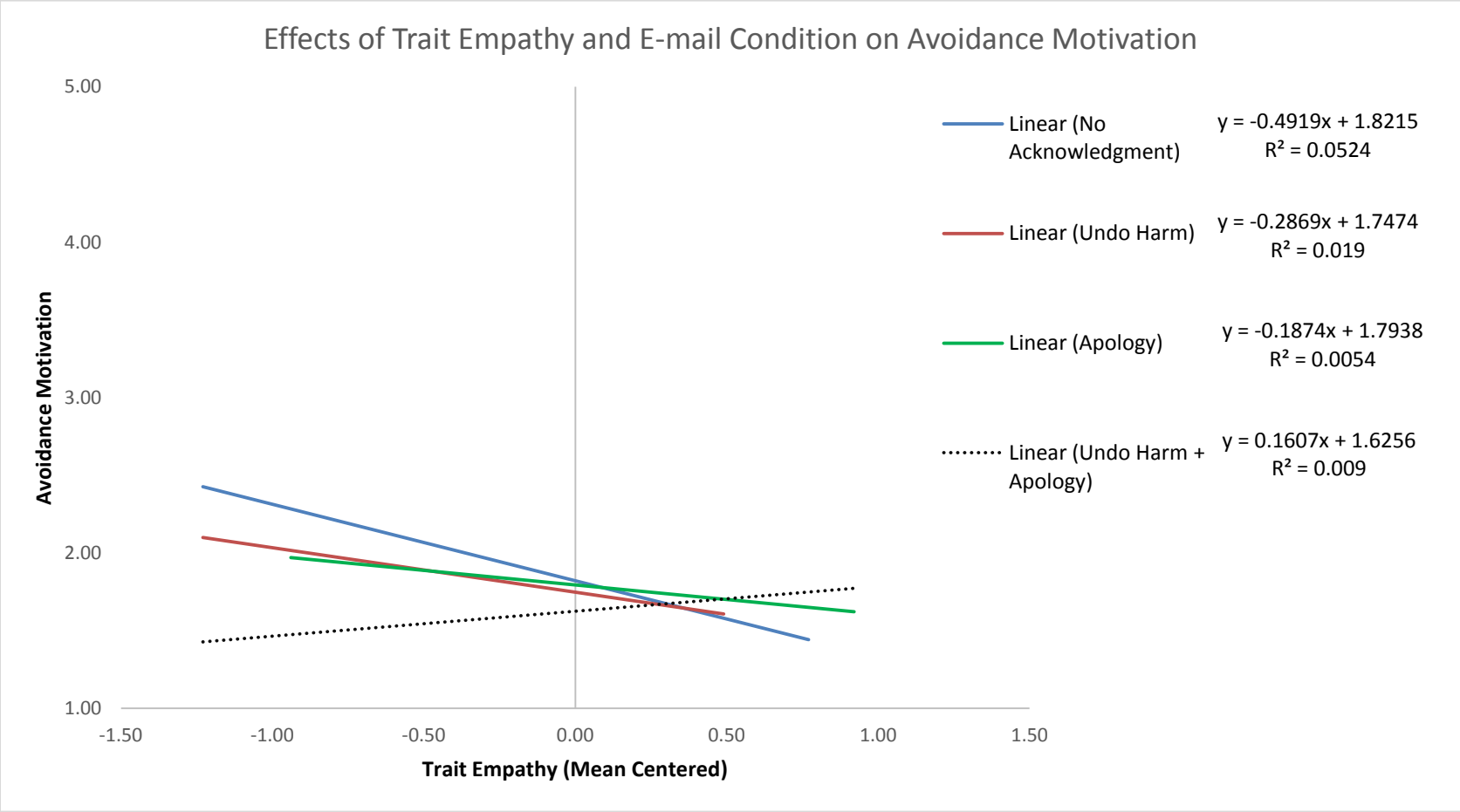

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Figure 13

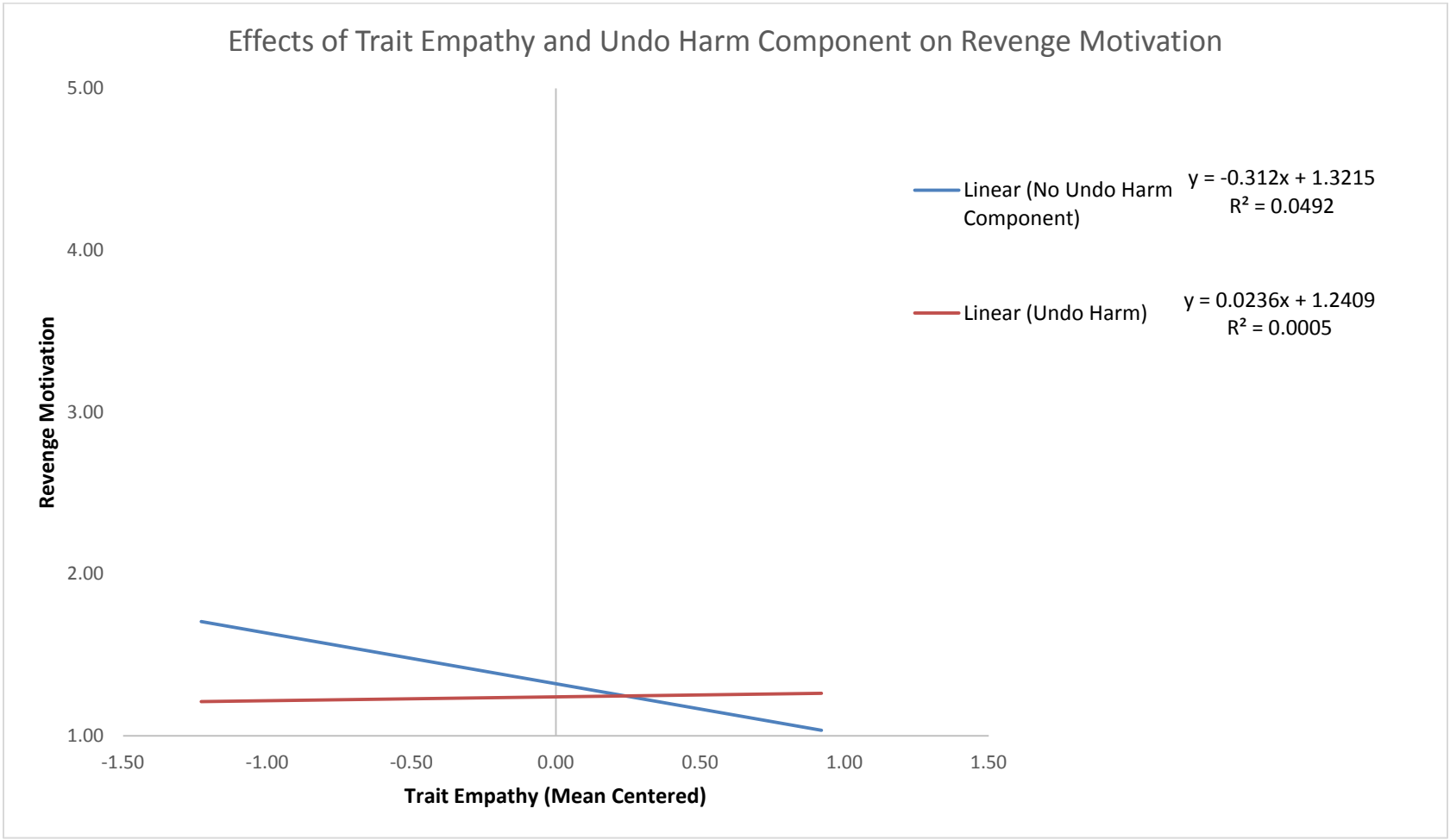

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Figure 14

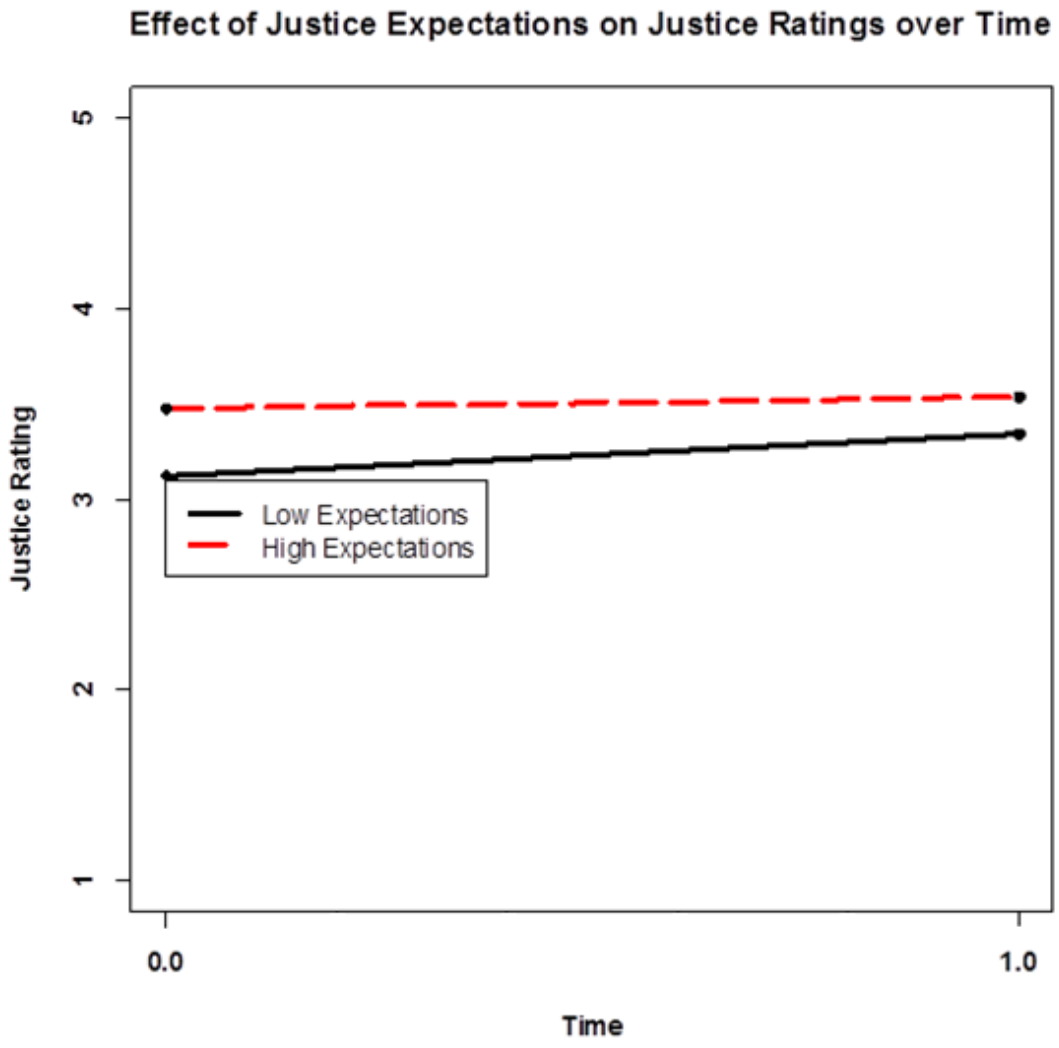

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Figure 15

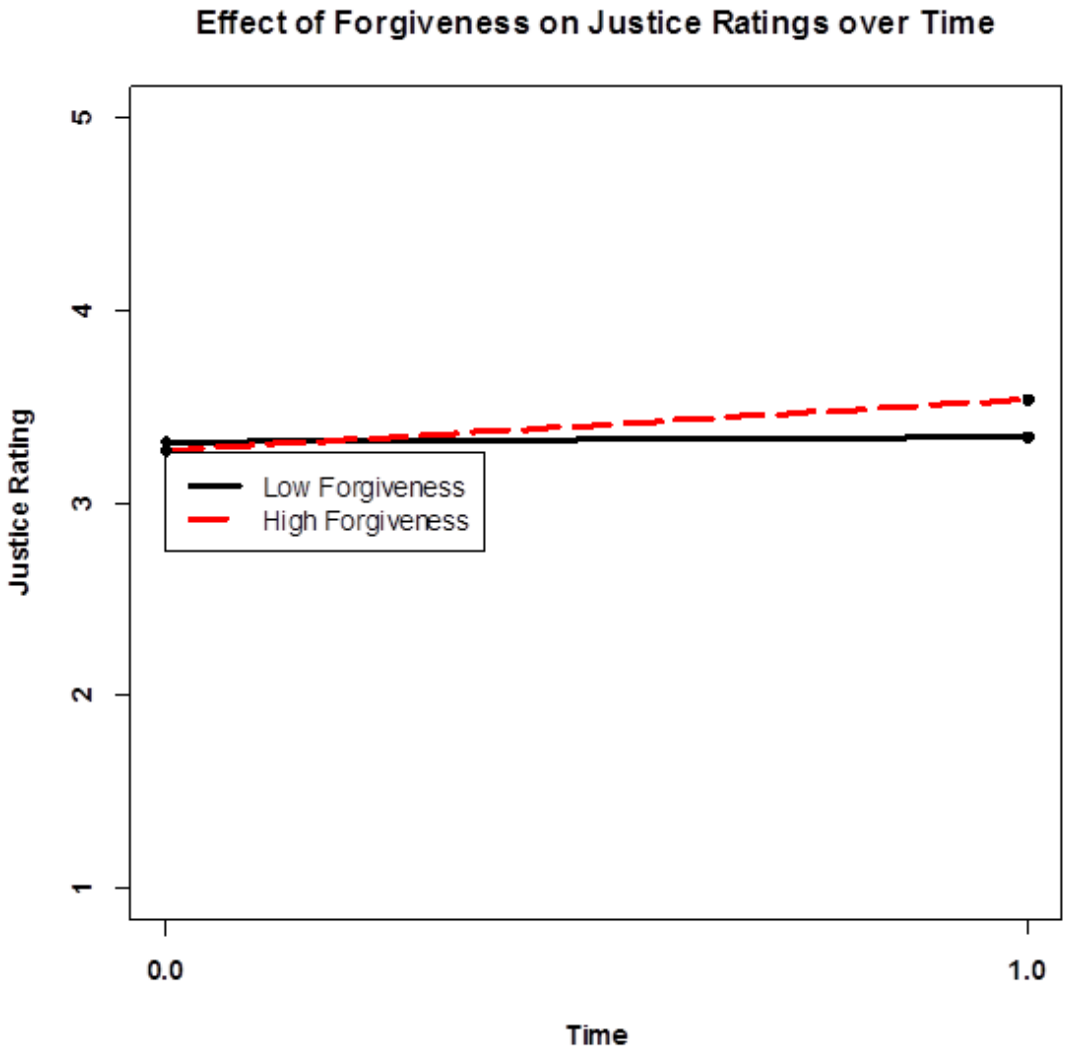

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Figure 16

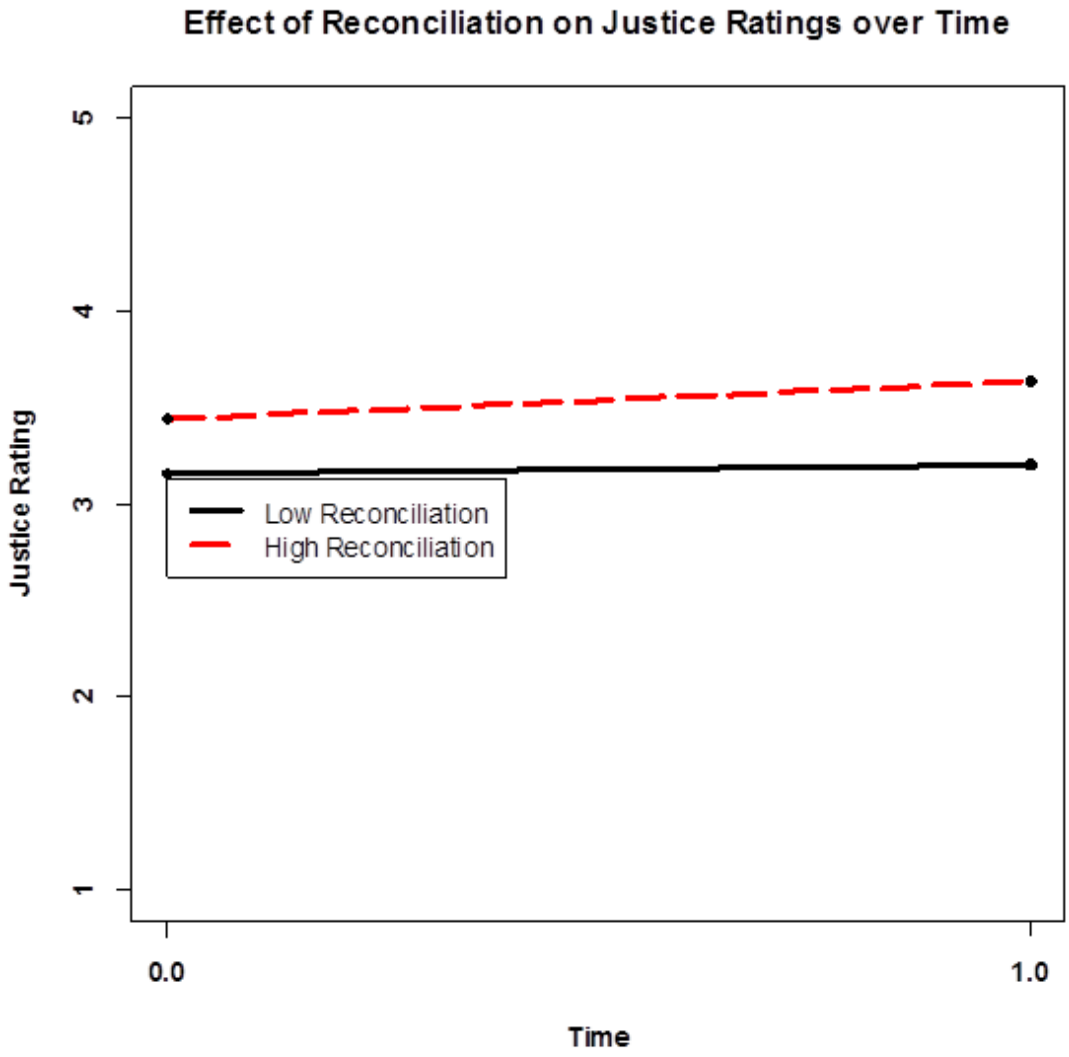

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Figure 17

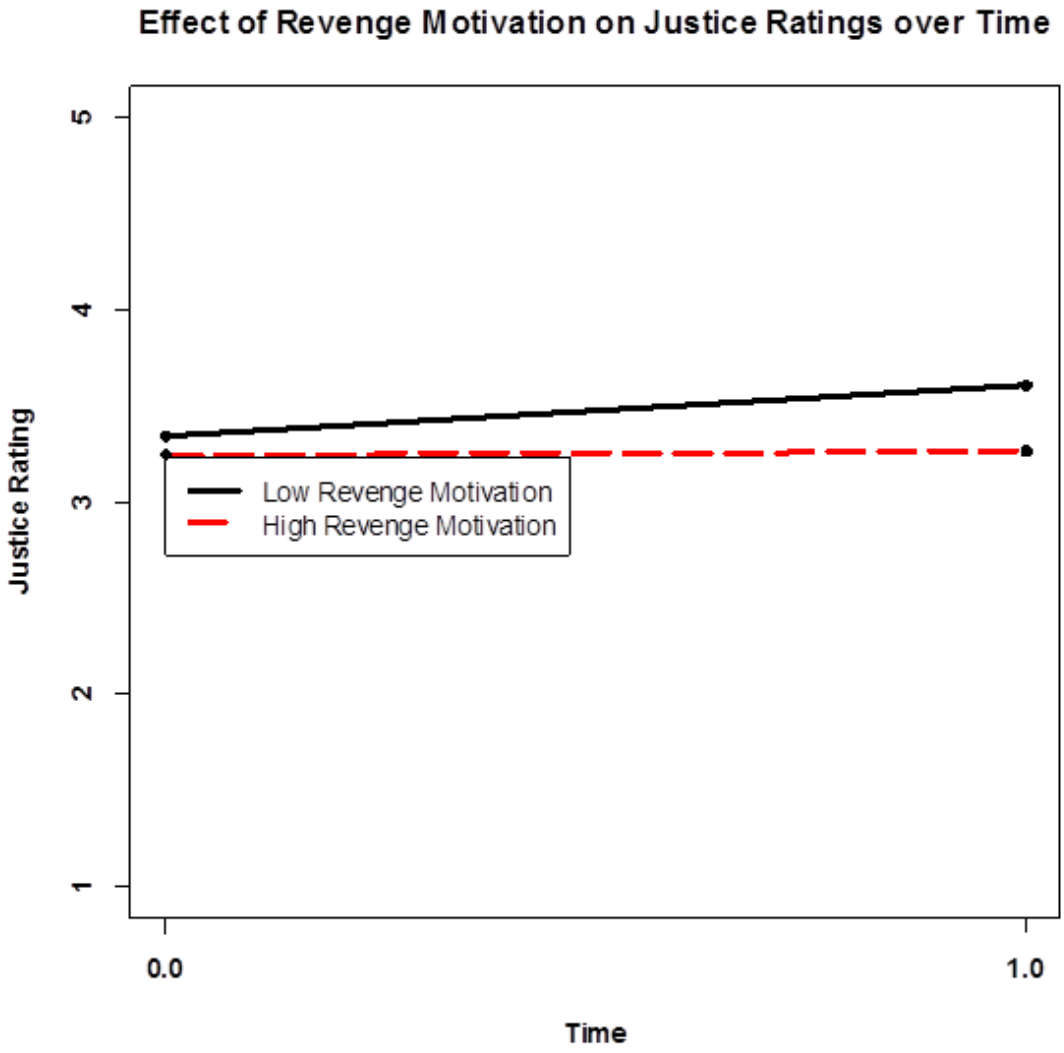

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Figure 18

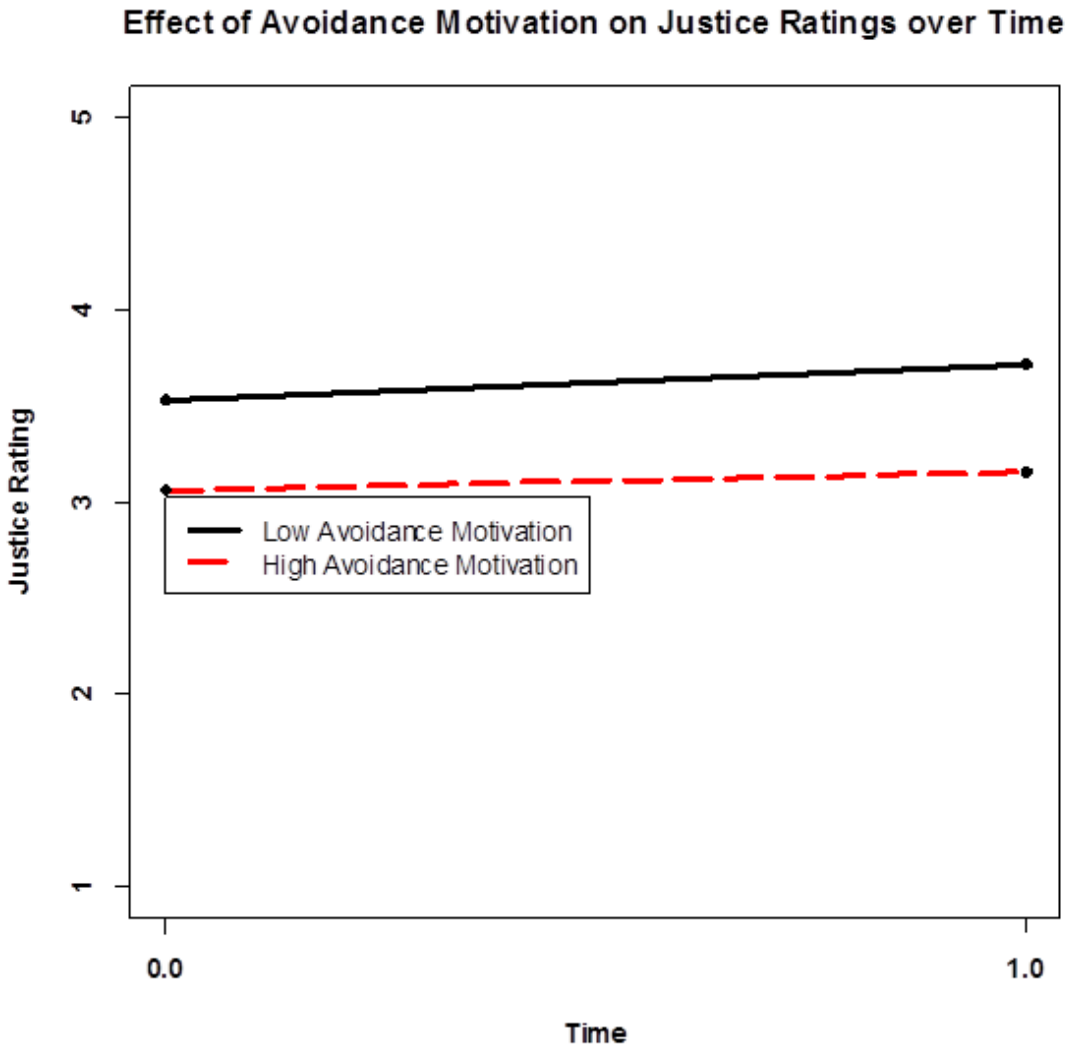

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Figure 19

Organizational Satisfaction as Predicted by Time 1 and Time 2 Justice Ratings

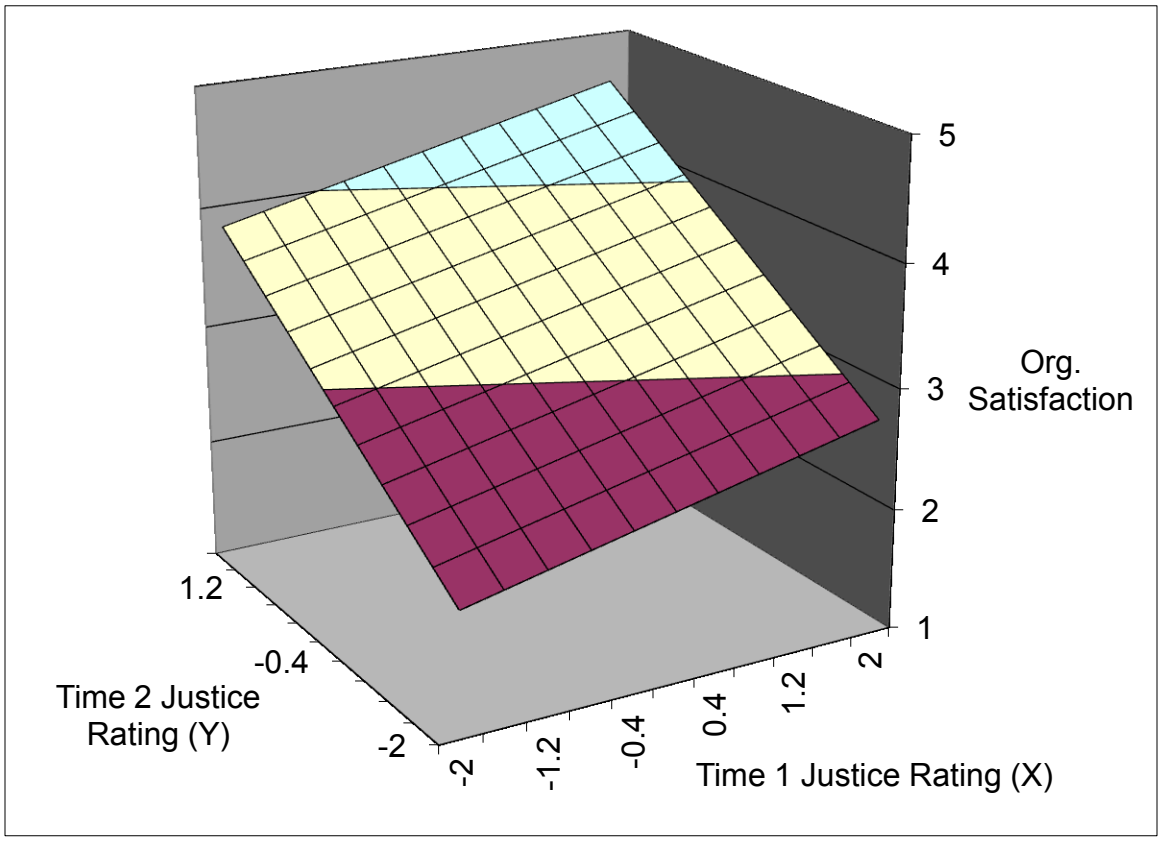

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Figure 20

Polynomial Regression: Slopes of Time 1 and Time 2 Justice Ratings for Organizational Satisfaction

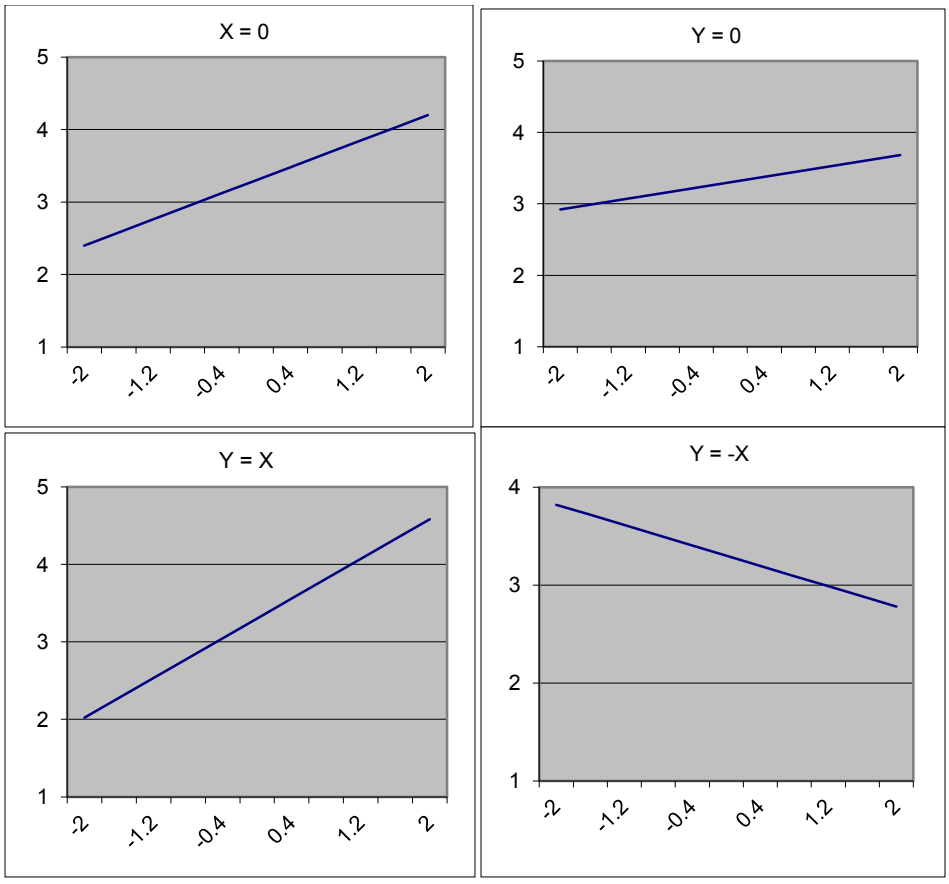

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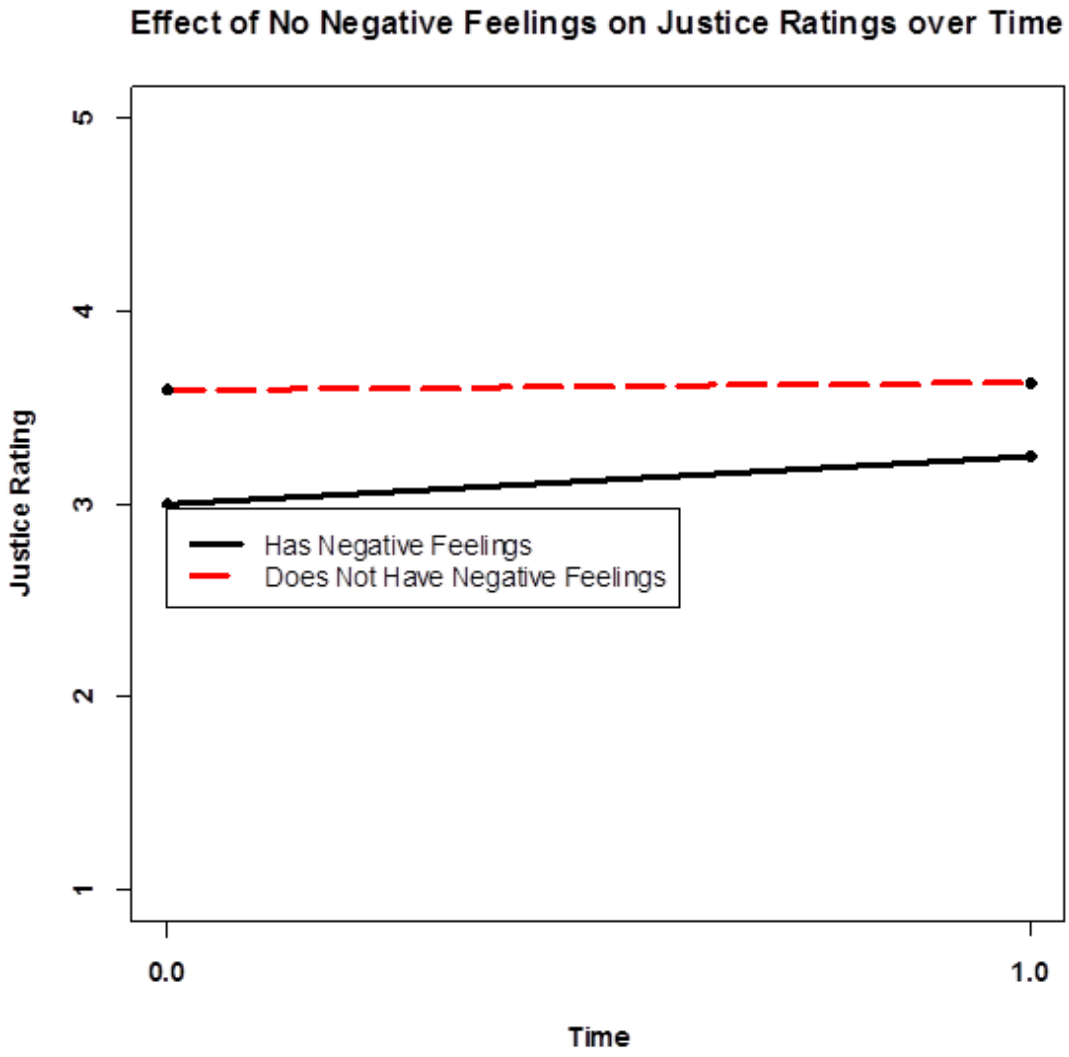
Figure 21



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