

Rochester Institute of Technology

RIT Digital Institutional Repository

Theses

7-20-2011

Effects of group apology and reparation after breach of psychological contract

Anthony Alongi

Follow this and additional works at: <https://repository.rit.edu/theses>

Recommended Citation

Alongi, Anthony, "Effects of group apology and reparation after breach of psychological contract" (2011). Thesis. Rochester Institute of Technology. Accessed from

This Thesis is brought to you for free and open access by the RIT Libraries. For more information, please contact repository@rit.edu.

Effects of Group Apology and Reparation after Breach of Psychological Contract

By

Anthony Alongi

Rochester Institute of Technology

College of Liberal Arts

Psychology Department

A Thesis in

Applied Experimental and Engineering Psychology

Submitted in partial fulfillment for the requirements of the degree of

Master of Science

July, 20 2011

We approve the thesis of Anthony Alongi:

Date of Signature

Nicholas DiFonzo, Ph.D.

Professor, Dept. of Psychology

Faculty Advisor and Chair of the Thesis Committee:

John E. Edlund, Ph.D.

Assistant Professor, Dept. of Psychology

Reader

Prashant Bordia, Ph.D.

Professor, Division of Business, University of South Australia

Reader

Abstract

Psychological contracts are expectations of reciprocal obligations between an employee and an organization which are held by the employee. Research has shown that victims who experience psychological contract breach may seek to retaliate towards the offending organization. Little research has investigated how a breach can be remediated. The present study investigated the effects of a group apology and reparation on victim's sense of power and revenge cognition after a breach of psychological contract. Participants were asked to imagine themselves in a vignette in which a student experiences psychological contract breach by their academic department. The outcome of the scenario differed according to the condition to which they were assigned: they received no response from the department, they received reparations, they received an apology, or they received an apology with reparations. All participants then completed the same series of measures, including their sense of power, revenge cognitions, likelihood to transmit a negative rumor, calculus-based trust, and identification-based trust. Results showed that reparations elicited a greater sense of power and less revenge cognition in the victim compared to not receiving a response. Receiving an apology did not increase sense of power or decrease revenge cognition. Additionally, the effect of reparations on sense of power and revenge cognition is mediated by calculus-based trust. Implications for these results suggest that if an organization breaches psychological contract and wishes to repair the relationship with the victim, they should focus in offering adequate reparations, as an apology may not be helpful in diffusing retaliation.

Effects of group apology and reparation after breach of psychological contract

Apology and forgiveness research is a growing field. However, the bulk of this research has been conducted only on an interpersonal level, which is an apology from one person to another single person. Indeed, only one experimental study to date has examined group apology, which is a group apologizing to another group or an individual (Philpot & Hornsey, 2008). Within the organizational psychology literature, a similar situation exists. There is a fair amount of apology and forgiveness research at the interpersonal level (Bottom, Gibson, Daniels, & Muringhan, 2002; Kim, Ferrin, Cooper, & Dirks, 2004; Tomlinson, Dineen, & Lewicki, 2004; Lewicki, 2006), but little research has been conducted at the group level within an organizational context (Gilliespie & Dietz, 2009).

Interpersonal studies have shown apology can be effective, even without any type of reparation (e.g., restitution, compensation), although providing reparations can improve its effectiveness (Lewicki, 2006). Only one experimental study has investigated apologies that come from a group (Philpot & Hornsey, 2008). Using vignettes, participants read apologies given by different out-groups to members of their in-group. The transgressions against their in-group varied, some were actual historical events and others were fabricated. A series of experiments varied how the apology was delivered; hence, one experiment tested each variation. They varied cross-sectionally (apology-no apology), longitudinally (apology given a week after the transgression), an apology accompanied by other victims advocating forgiveness, and finally an apology delivered by an individual of the out-group. The only variation which elicited forgiveness was when an individual member of the out-group apologized for the group. Yet participants only forgave the individual; they did not forgive the group as a whole. Considering these results, it seems that when coming from a group, apologies alone do not seem to be enough to elicit forgiveness (Philpot & Hornsey, 2008). This may be because groups are inherently impersonal and thus their apologies may seem less sincere than an apology from individual. Hence, in order for group apologies to be effective, they may need to be accompanied with reparations.

The present study seeks to contribute to apology research by examining the effectiveness of apology and reparation at the group level in an organizational context. Psychological contracts are expectations of reciprocal obligations between an employee and an organization which are

held by the employee. In other words, a psychological contract exists when an employee expects their organization to do something for them in exchange for something that the employee does for the organization. A psychological contract breach scenario provides a context that is well suited to studying apology at the group level. If an organization breaches a psychological contract of an employee, they may wish to repair the relationship with that employee. A group apology from the organization to the employee might be way in which they attempt to repair the relationship. Therefore, the present study will examine group apology after a breach of a psychological contract.

This review examines the nature of psychological contracts and the effects of a breach. Next, interpersonal apology research is reviewed, focusing on the effects of apology on trust. Two different forms of trust are explored to illustrate how apology and reparation may each address only one of these forms. A model of psychological needs in apology and forgiveness is also reviewed (Pratto & Glasford, 2008). It is argued that restoration of the victim's sense of power in a relationship requires both apology and reparation, and this effect is mediated by two forms of trust. Furthermore, it is argued that group apologies, unlike interpersonal apologies, require reparations in order to be perceived as genuine.

Psychological contracts and revenge seeking

The relationship between an organization and its employees often involves perceived expectations and obligations from one party to the other which are not actually concrete, legal contracts. These perceived expectations and obligations are known as psychological contracts. The most common definition of a psychological contract comes from Rousseau (1989). She specifies psychological contracts as being possessed solely by the employee, in which there are perceived reciprocal obligations between an employee and their organization. A psychological contract is not necessarily mutually understood; since these contracts are purely psychological, individual managers may not perceive the same set of expectations that their employees do. Thus, a psychological contract is defined by expectations of the employee. These expectations must also consist of a perceived promise to the employee, such that if they fulfill their obligation to the organization, the perceived promise will be honored (Rousseau & Parks, 1993).

There is also a distinction between transactional and relational contracts. Transactional contracts refer to purely material exchanges, such as more pay for good performance, whereas relational contracts also include emotional elements, such as job security for loyalty to the company (MacNeil, 1985). The relational and transactional distinction can be illustrated by the career intentions of recently hired people. New hires who report their intentions to remain at company as being short-term tend to have transactional contract expectations, while new hires who report long-term intentions tend to have relational contract expectations (Rousseau, 1990). Hence, transactional contracts tend to be more impersonal than relational contracts. The present study is more concerned with relational psychological contracts, because the ability to repair these types of contracts may be unique to apology due to the more personal and deeper relationship that is involved with a relational psychological contract.

When psychological contracts are violated, employees are given to feeling betrayed on both an affective and cognitive level (Morrison & Robinson, 1997). Evidence suggests that, following a breach, employees are likely to have thoughts of revenge which in turn can lead to deviant behavior in the workplace. For example, it had been demonstrated that revenge cognitions mediate a psychological contract breach and the likelihood of spreading a negative rumor about the offending organization (Kiazad, 2005). Other examples of deviant behavior following a breach include a higher likelihood of the employee leaving the organization, neglectful work behavior and a decrease in loyalty to the company (Turnley & Feldman, 1999). The relationship between revenge cognitions and deviant behavior is moderated by self-control, such that those with higher self-control are less likely to let their thoughts of revenge manifest into deviant behavior (Bordia, Restubog, & Tang, 2008). Hence, breach of psychological contract may result in the victim having thoughts of revenge which then lead to retaliation against the offending organization, particularly if the victim lacks self-control.

Individual differences in traits, such as self-control, seem to contribute most to how an employee may perceive the equity of their relationship with their employer. Trust, in particular, appears to be a significant aspect in psychological contracts. For example, if an employee is highly trusting, they may not be as apt to perceive a breach as those who are less trusting. (Morrison & Robinson, 1997). Robinson (1996) interviewed new-hires and found that an employee's initial trust of their employer at the time of hire was negatively related to the

perception of a psychological contract breach later in their job tenure. Higher initial trust resulted in less of a decline in trust after a breach was perceived than lower initial trust. In addition, trust was found to mediate the relationship between a breach and the employee's contributions, which include performing the role of one's job, going beyond their role to improve the organization and staying with the organization. Thus, the trust of an employee, like self-control, is strongly related to the perception of a psychological contract breach, as well as the ensuing behavioral effects of a breach.

Apology and trust repair

Considering the possible implications of breaching a psychological contract, organizations are likely to be concerned with ways in which they can repair the damaged relationship with their employees. Employee's self-control and prior trust can moderate the effects of a psychological contract breach (Bordia et al, 2008; Robinson, 1996). Of these two constructs, trust is likely more malleable to actions by the organization than self-control. Hence, an organization might seek a way to repair trust following a breach to avoid retaliation by the employee. An apology might be a way to accomplish this.

According to apology experts, a true apology has four components: an acknowledgement of the offense, an explanation, an expression of remorse, and offers of reparations (Lazare, 2004; Tavuchis, 1991). Research studying apology, forgiveness, and reconciliation within an organizational context found that apologies can be effective when conducted on an interpersonal level. In one study, a victim's willingness to reconcile after a broken promise was related to the relationship between the offender and victim as well as the nature, timing, and sincerity of the apology. In addition, the magnitude of the violation moderated willingness to reconcile (Tomlinson, Dineen & Lewicki, 2004). A similar study found that trust repair occurs when one apologizes when there is evidence of guilt, and this response is mediated by the victim's trusting beliefs of the other person, such as their perceived integrity (Kim, et al, 2004). Thus, it appears apologies can be effective in repairing trust and willingness to reconcile. There may also be an added effect for reparations. In one study, people who were offered reparations accompanying an apology reported more positive emotions and greater trust in the offending party than just an apology alone (Bottom et al, 2002).

The aforementioned studies indicate the importance of maintaining high trust in order for employers to have good relationships with employees. It should be noted that this research utilized a one-dimensional trust construct. Yet trust has been shown to be meaningfully divisible into specific forms (Lewicki & Stevenson, 1998). It may be that reparations are addressing a different form of trust than apology, which could be another reason for reparations to elicit an added level of trust when combined with apology. Therefore trust must be further defined to understand how it operates within psychological contracts. I turn next to the role of two types of trust in achieving reconciliation through apologies or reparations.

The role of trust in reconciliation

Lewicki (2006) distinguishes between two types of trust: calculus-based trust (CBT) and identification-based trust (IBT). CBT refers to trust which is based on an understanding of reciprocal behavior between two parties that is derived from some type of external validation, such as a reputation or reference, and is not usually based on past interaction (Rousseau et al, 1998). For example, a new hire might describe their trust of their new employer such as “I trust this organization because they have a reputation of rewarding their employees for good performance.” IBT is a deeper level of trust than CBT, and it requires an understanding of the other’s desires and motives, along with the reciprocal behavior in CBT. It is developed through repeated interactions between the two parties, such that some form of interdependence or common identity develops (Rousseau et al, 1998). Hence, with IBT, one is assured that the other party acts with their best interests in mind and that it is not necessary to audit actions of the other party. The employee from the CBT example may now describe their trust as “I trust my employer because we have developed a mutually beneficial relationship and we share a common loyalty to each other.” Apologies, as compared to giving reasons for the offending behavior (i.e., excuses), have been shown to be more effective in restoring IBT, but not CBT (Lewicki, 2006). This result highlights the difference between the two, as an apology is what appeals to the shared identity component of IBT. Thus within a relational psychological contract, apologies may address a victim’s IBT through restoring the victim’s faith in the common identity between the parties, while reparations may repair a victim’s CBT by restoring material equity.

Group apology vs. interpersonal apology

The aforementioned apology research has been conducted at the interpersonal level. Only one experimental study (Philpot & Hornsey, 2008) has attempted an extension to the group level. Group apology has two configurations: many-to-one, such as an organization apologizing to an individual employee, and many-to-many, such as one organization apologizing to a community of people (Tavuchis, 1991). Philpot and Hornsey (2008) showed that apologies from a group are perceived as less trustworthy and do not result in the granting of forgiveness, regardless of the content and timing of the group apology. Yet when coming from an individual, they are effective in procuring forgiveness for the individual, even if they are a member of the offending group. However, the scenarios used were almost all in the context of Australian relations with other nations (e.g. Japanese government officials apologizing for the treatment of Australian soldiers in WWII POW camps), and the offenses were often related to past violent conflict or adverse health effects (e.g., Saudi institution's support of Al Qaeda prior to a terrorist bombing that killed 88 Australians; A pharmaceutical company's malpractice led to 19 hospitalizations). Real world examples of group apologies similar to this study have mixed support for the results. In some cases, group apologies were very well received (Pope John Paul II's apology on behalf of the Catholic Church to the Jewish people for past Christian persecution of Jews; Lazare, 2004) and in other cases they were not (the United States apology and offer of reparations to victims of Japanese internment camps during World War II; Lazare, 2004).

Many failed apologies might be due to the lack of one of the four requirements for an effective apology, such as Air Canada's apology to thousands of customers who were stranded during a contract dispute; they failed to properly acknowledge the offense (Lazare, 2004). Yet some still fail even when seemingly meeting all four requirements, (acknowledgement, explanation, remorse, and reparations) such as the American government's apology and reparations to Japanese internment victims, or the Catholic church's apology and reparations to abuse victims (Oliner & Zylicz, 2008; Lazare, 2004). In these specific instances, victims reported that the severity of the offenses made the offers of monetary reparations insulting, because they did not feel that it was equitable to transgressions against them. Hence, there may be cases where it is not feasible to provide true reparations.

Considering this evidence, it seems the perception of group apologies differs from interpersonal apologies. This leads to the question: What makes an effective group apology?

Although not a specific study of apology, Nadler and Liviatan (2006) demonstrated that expressions of empathy from an adversarial group (Palestinians) elicited more positive emotions from the opposing group (Israeli-Jews), but only when high trust of the adversarial group was already present. If there was low trust, the expression of empathy actually resulted in more negative emotions toward the adversarial group. Expressions of empathy can be considered a component of apology in that they convey an acknowledgement of hurt experienced by the victim, albeit no responsibility of an offense is admitted (Lazare, 2004, p. 25-26). This result also echoes the findings of the aforementioned studies on trust in psychological contract violation (Morrison & Robinson, 1997; Robinson, 1996) and trust in interpersonal apologies (Kim et al, 2004), both of which indicate the importance of some pre-existing level of trust for restoring positive relationships after an offense. These results together suggest that, like interpersonal apologies, addressing both calculus-based trust and identification-based trust may be necessary at the group level in order for group apologies to function as they were intended.

Apology, reparations, trust, and sense of power

Thus far, the present discussion has covered the importance of trust in moderating the effects of psychological contract breach (Bordia et al, 2008) and that effective interpersonal apologies seem to repair two distinct types of trust, which can in turn foster reconciliation (Lewicki, 2006). Yet group apologies are often ineffective (Philpot & Hornsey, 2008), and this may be because reparations are needed to address both types of trust.

Organizational research has focused on how an offense is related to retaliatory thoughts and behaviors (Bordia et al, 2008; Kiazad, 2005). Research on sociopolitical conflict has often focused on the victim's emotions following an offense (Philpot & Hornsey, 2008; Nadler & Liviatan, 2006). Yet both indicate that trust has an underlying role in determining how an offense affects these thoughts, emotions and behaviors. Although sociopolitical conflicts differ in many ways from organizational conflicts, they should still affect the same basic psychological needs of the parties who are offended. Thus, a reconciliation model which addresses basic needs should be applicable to most any group conflict, be it sociopolitical, organizational or otherwise. Pratto and Glasford (2008) provide such a model in which apology fosters reconciliation by addressing a victim's psychological needs. They posit that after a victim has been harmed, they are

motivated to fulfill their damaged psychological needs. Among these needs, the restoration one's sense of power is particularly relevant after breaches of psychological contract.

For example, a group of factory workers may have their benefits cut and wages reduced by management, even though their productivity has not changed. The factory workers may experience a reduced sense of power, as their efforts seem to be less valued. Restoring this need can be accomplished through means which could further a conflict, such as retaliation by the offended party. The factory workers may choose to retaliate by going on strike and thus ceasing production, which demonstrates the worth and power of their group.

Alternatively, these needs could be met through ways which foster reconciliation. In the case of apology and forgiveness, a mutually beneficial exchange occurs. When the offended group receives a proper apology and accepts it, they might experience an affirmation of their power and worth. In the factory example, management may decide to restore the benefits to the workers and issue a formal apology, emphasizing their importance to the organization. The workers accept the apology and return to work, as they know their efforts are valued. Thus, according to this model, an apology can help reconcile a conflict by restoring the victim's sense of power.

A two-stage model of reconciliation

It has been demonstrated that group apologies are often ineffective when compared to similar interpersonal apologies, most likely because of the lack of trust toward the group (Philpot & Hornsey, 2008). Pratto and Glasford's (2008) model suggests that restoring the psychological needs of an offended group can lead to reconciliation, and that this might be accomplished through apology and reparation. Taking this with the evidence that apology elicits trust repair, it may be that apology and reparation address the two different types of trust (CBT and IBT), which in turn might restore the victim's sense of power. This possible reconciliation process is presented in a two-stage reconciliation model by Nadler and Shnabel (2008a).

Nadler & Shnabel (2008a) describe two stages of reconciliation: instrumental and socioemotional. Instrumental reconciliation establishes CBT between two parties, through restoring material equity, or providing reparations. This process would help to partially fulfill a psychological contract, as it is purely concerned with fulfilling material obligations. With CBT

established, the victim might experience some increase in their sense of power because obligations to them were fulfilled. Yet for the victim to perceive a truly equitable power balance, they might need to truly *identify* with the other party. If they feel that they share a common identity with the other party, then they might feel that the other's power is equitable to their own. Hence, the second stage, socioemotional reconciliation, develops IBT between the two parties, through an apology-forgiveness exchange. This process is what would be necessary to repair the relational aspects of a psychological contract, because it would reaffirm the shared identity of each party and fosters interdependence. Thus, with a renewed sense of common identity, the victim may experience a greater sense of power than in instrumental reconciliation. Socioemotional reconciliation cannot take place without instrumental reconciliation, as instrumental reconciliation lays down the basic level of trust (CBT) necessary for socioemotional reconciliation (IBT) to occur. Once trust has been established at the instrumental level using reparation, socioemotional reconciliation can take place using the apology-forgiveness cycle, which restores the victim's sense of power.

An organizational example in which this process could work can be drawn from a study by Kiazad (2005). In this experiment, subjects read scenarios directing them to imagine being a newly hired employee. At the time of hire, employees are told by human resources that the company is committed to a long-term relationship with the employee, with possible advancement if they demonstrate exemplary work. After six months of exceeding expectations, the employee receives a letter from their employer informing them that a) their employment will be terminated or b) they will receive a promotion. In this study, participants considered the termination envisioned in condition a) to be a breach of psychological contract. Relative to control condition b), this resulted in greater revenge cognition and higher likelihood to spread a retaliatory rumor about the company. Through instrumental and socioemotional reconciliation, the organization might be able to reduce thoughts of revenge and revenge behavior. By providing monetary compensation, such as a severance package, they can repair the material inequity and CBT, thus achieving instrumental reconciliation. After being informed of their severance pay, the company could issue a formal letter of apology to the employee which meets the other requirements (reparations has already been met) for a proper apology (acknowledgement, explanation, remorse). This could achieve socioemotional reconciliation by addressing IBT and further restore the damaged sense of power of the employee.

Therefore, within a relational psychological contract, apology will not be effective without some form of reparation, as there must be some restoration of inequity to address CBT. Although reparations alone might achieve some reconciliation toward the offending group, apology is still necessary as it will repair IBT, which would result in a more complete reconciliation.

Hypotheses:

After breach of psychological contract:

1. Apology alone, compared to no response, will result in no differences in victim's sense of power and revenge cognitions.

Without any instrumental reconciliation (reparations), socioemotional reconciliation cannot occur. Also, apology does not address material inequity. Thus the apology will be perceived as insincere and thus will not have an effect.

2. Receiving reparations without apology will elicit a greater sense of power and less revenge cognition in the victim than not receiving a response.

Material inequity will be addressed by reparations, thus the victim would not feel as strong of a desire to "get even" and would feel a greater sense of power. However reparations alone will not fully address the inequity and threat to identity that the victim experiences after a breach

3. Receiving both reparation and apology will elicit a greater sense of power and less revenge cognition in the victim than receiving reparation without apology.

Both material inequity and threats to shared identity will be addressed. Reparations provide an instrumental reconciliation, which then allows an apology to foster socioemotional reconciliation.

4a. Calculus-based trust will mediate the effect of reparation, without apology, on sense of power and revenge cognition.

Reparation accomplishes instrumental reconciliation because it addresses calculus-based trust.

4b. Identification-based trust will mediate the effect of apology and reparation on sense of power and revenge cognition.

Apology accomplishes socioemotional reconciliation because it addresses identification-based trust.

5. A victim's level of revenge cognition will significantly predict their reported likelihood to transmit a negative rumor about the offending party.

The victim's thoughts of revenge have been shown to mediate a psychological contract breach and the likelihood to spread a retaliatory rumor (Kiazad, 2005). Hence, the present study should demonstrate that revenge cognition predicts rumor transmission.

Research questions:

Research question 1: Will apology and reparations affect the likelihood of rumor transmission and will the effects be similar to revenge cognition?

Since there is no previous research on how apology and reparation could affect rumor transmission, it seems worthwhile question to ask whether it will mimic that of revenge cognition. This seems feasible, as the effect of a breach on rumor transmission is mediated by revenge cognition (Kiazad, 2005). Yet there is not sufficient evidence to warrant a specific hypothesis of the direct effect of apology and reparation on rumor transmission.

Positive Affect and Negative Affect

Though the victim's general emotional response is not the main focus of the present study, it may be a useful way in which to validate the measures of sense of power and revenge cognition. In addition, it can provide a more holistic description of the effects of group apology and reparation. A prior study using an interpersonal setting showed that receiving reparations with apology elicited greater positive emotions than an apology alone (Bottom et al, 2002). Thus,

it may be helpful to explore the relationship of positive affect and negative affect with sense of power and revenge cognition, as well as with the apology and reparation.

Research question 2: Are the measures of sense of power, revenge cognition, and rumor transmission related to standard measures of positive and negative affect?

The main dependent variables (sense of power, revenge cognition and rumor transmission) are rather specific constructs and are not widely utilized. Hence, to show that they are related to a strongly reliable and valid measure can bolster their validity as constructs. Positive and negative affect, measured using a state version of the PANAS (Watson, Clark & Tellegen, 1988), might be a useful general measure that can support the effects of apology and reparation on the dependent variables. In addition, they may show effects similar to the dependent variables.

Methods

Participants

139 undergraduate psychology students participated. The sample consisted of 71 females and 66 males (2 participants did not indicate gender). 74.1% of participants identified their primary race as Caucasian (9.4% Hispanic, 5.8% Asian, 3.4% Black and 1.4% Native American). The average age of participants was 19.97 years. Participants completed the study as an option to fulfill a course requirement in psychology or receive extra credit.

Design *Independent variables.* Participants were assigned to one of four conditions: apology, reparation, apology and reparation, or no response (control) in a 2 (apology/no-apology) x 2 (reparation/no-reparation) factorial design. These represent the response of the department, after they have breached the psychological contract with the student in the scenario. Thus, after the offense, participants received only an apology, only reparations, both apology and reparations, or no response was given.

Dependent variables. The outcome variables were sense of power, revenge cognition, rumor transmission, and change in state positive and negative affect.

Mediators. Variables treated as potential mediators were calculus-based trust and identification-based trust.

Controls. Variables measured as potential controls were social desirability, propensity to trust, trait forgiveness, and submissiveness to organizational authority.

Procedure and Measures

Using an online format, participants read a vignette (Appendix A) which asked them to imagine themselves in a situation where a college freshman is promised a scholarship for the following year if they achieve a certain grade point average. The student in the vignette achieves the goal, but is informed that, despite their efforts, they will not receive the scholarship that was promised to them. All participants then completed a state measure of positive and negative affect, the state PANAS (See Appendix B) (Watson, Clark & Tellegen, 1988). After this, participants read a final outcome to the scenario, which varied depending on the condition to which they were assigned. In the no response condition, participants were simply told that nothing had changed. In the apology condition, participants received a formal letter of apology on behalf of the college, but that they would still not receive the scholarship. In the reparation condition, participants received a letter informing them that their scholarship had been restored. For the apology and reparation condition, participants received a letter which contained an apology and also told them that their scholarship would be restored. All participants then completed the same series of measures in the following order.

Sense of power was measured using a ten-item measure (See Appendix C) developed around the context of the vignette. The items asked about the victim's own sense of power in the scenario and extent to which the department acted fairly towards them. The items were modeled after the sense of power measure used by Nadler & Shnabel (2008b). The items yielded a Cronbach's $\alpha = .844$.

Calculus-based trust and identification-based trust were measured using items adapted from Lewicki and Stevenson (1997). The items are presented in Appendix D. CBT utilized a four-item measure and yielded a Cronbach's $\alpha = .957$. To assess CBT, the items asked how much the participant felt that the department had kept their promises and obligations. IBT began with four items, but one was removed because it did correlate highly with the other items. The

remaining three items yielded a Cronbach's $\alpha = .931$. To assess IBT, the items asked how much they felt the department shared their values, goals and interests.

Revenge cognition was measured using three items (see Appendix E) adapted from Bradfield and Aquino (1999). These items asked about the extent of their thoughts of revenge toward the department. These items yielded a Cronbach's $\alpha = .912$. Likelihood to transmit a negative rumor was assessed with a two-item measure (see Appendix F), adapted from Kiazad (2005). Participants then completed a state version of the PANAS again (Watson, Clark & Tellegen, 1988),

Self-report measures of revenge cognition and rumor transmission are susceptible to socially desirable responding. The participant may feel that they should conform to their perception of the "socially acceptable" response to these questions. To account for this, all participants completed an eight-item version of Crowne-Marlowe Social Desirability Scale (see Appendix G) (Cronbach's $\alpha = .678$) (Crowne & Marlowe, 1964). Another possible confounding variable is the participant's attitude towards institutional authority. This was measured using the Submissiveness to Organizational Authority Scale (see Appendix H) (Cronbach's $\alpha = .808$) (DeZoort & Roskos-Ewoldsen, 1997). Responses may also be moderated by a participant's prior tendency to forgive and trust (Robinson, 1996). Trait forgiveness was measured using the Forgiving Personality Scale (see Appendix I) (Cronbach's $\alpha = .948$) (Kamat, Jones & Row, 2006). Propensity to trust was measured with an eight-item version (see Appendix J) (Cronbach's $\alpha = .759$) (Mayer & Davis, 1999) of the Interpersonal trust scale (Rotter, 1967).

Results

Manipulation Checks

Manipulations were verified using independent samples *t*-tests. Participants in the apology conditions reported that the department apologized to a greater extent ($t = -3.87, p < .001, r = .30$) and that their apology was more convincing ($t = -2.91, p < .001, r = .24$) than those in the no apology conditions. Participants in the reparation conditions reported that that the department provided reparations to a greater extent ($t = -8.032, p < .001, r = .56$) and the reparations were more fair ($t = -7.209, p < .001, r = .52$) than those in the no reparation conditions. Means and standard deviations are reported in Table 1.

Table 1
Manipulation check means and standard deviations for apology and reparation conditions

	<u>Apology?</u>	<u>N</u>	<u>M</u>	<u>SD</u>
To what extent do you feel that the department apologized to you?	No	70	2.03	1.54
	Yes	69	3.09	1.68
How convincing was the apology?	No	70	1.80	1.33
	Yes	69	2.46	1.36
	<u>Reparation?</u>	<u>N</u>	<u>M</u>	<u>SD</u>
To what extent do you feel that the department provided reparations?	No	69	1.61	1.11
	Yes	70	3.50	1.61
To what extent do you feel the reparations were fair?	No	69	1.46	.933
	Yes	70	3.17	1.74

Note: All differences between means were significant at the .05 level.

Control Variables

Group differences on potential confounding variables were measured using one-way ANOVA. Participants did not differ across experimental groups on any of the control variables, which were trait forgiveness, $F(3,138) = 1.25, p > .05, \eta^2 = .03$, submissiveness to organizational authority, $F(3,138) = .240, p > .05, \eta^2 = .005$, social desirability, $F(3,138) = 1.68, p > .05, \eta^2 = .03$, and propensity to trust, $F(3,138) = 2.56, p > .05, \eta^2 = .05$. Control variables were thus dropped from the subsequent analyses.

Table 2
Means and (standard deviations) for dependent variables by condition

DV	Control	Apology	Reparation	Apology and Reparation
	<i>N</i> = 34	<i>N</i> = 35	<i>N</i> = 36	<i>N</i> = 34
Sense of power	2.28 (.89)	2.45 (.91)	2.90 (1.10)	2.94 (1.00)
Revenge Cognition	2.92 (1.61)	3.15 (1.87)	2.18 (1.54)	2.37 (1.52)
Rumor Transmission	3.00 (2.10)	2.81 (1.87)	2.08 (1.70)	2.73 (1.78)
Pre-Negative Affect	30.97 (8.67)	30.37 (8.91)	31.44 (8.82)	31.32 (8.86)
Post-Negative Affect	31.70 (8.95)	28.62 (8.04)	23.19 (9.70)	22.94 (8.77)
Pre-Positive Affect	27.35 (8.25)	26.91 (7.06)	24.94 (6.78)	24.76 (8.22)
Post-Positive Affect	21.47 (7.03)	18.68 (6.31)	21.22 (7.43)	21.64 (7.36)

Sense of power

It was hypothesized that reparations would elicit more sense of power compared to control condition, apology would not be significantly different from the control condition and the apology and reparation condition would elicit greater sense of power than reparation only. Results are summarized in Figure 1.

Means and standard deviations are reported in Table 2. A two-way ANOVA was conducted on sense of power means. The omnibus test indicated that there was a significant main effect of reparations $F(1,138) = 11.03, p < .05, \eta^2 = .076$. Three planned contrasts were conducted to test for hypothesized group differences (see Table 3). As predicted, receiving reparations only resulted in significantly greater sense of power compared to the control

condition, $t(135) = 2.63, p < .05, r = .22$. Also as predicted, apology only was not significantly different from the control condition, $t(135) = .725, p > .05, r = .06$. Contrary to predictions, there was not a significant difference in sense of power from the reparation only to the apology and reparation condition, $t(135) = .176, p > .05, r = .03$. Hence, hypothesis 1 and hypothesis 2 were supported, but hypothesis 3 was not supported.

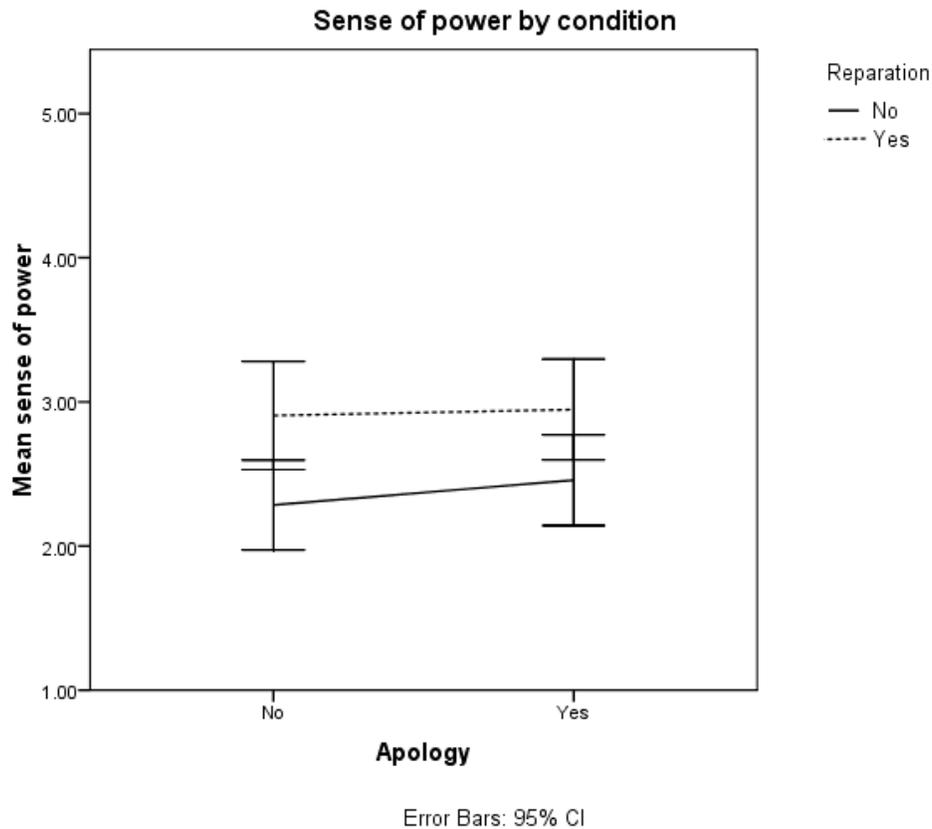


Figure 1 Sense of power means by condition. There was a significant main effect for reparations. Planned contrasts indicated that reparation only was significantly greater than the control condition. No other hypothesized differences were significant.

Revenge Cognition

It was hypothesized that receiving reparations only would elicit less revenge cognition compared to the control condition, apology only would not significantly differ from the control

condition, and the apology and reparation condition would result in less revenge cognition than the reparation only condition. Results are summarized in Figure 2.

Means and standard deviations are shown in Table 2. A two-way ANOVA was conducted on revenge cognition means. The omnibus test indicated that there was a significant main effect of reparations $F(1,138) = 7.36, p < .05, \eta^2 = .052$. Three planned contrasts were conducted to test for hypothesized group differences (see Table 3). As predicted, the reparation only condition resulted in significantly less revenge cognition than the control condition, $t(135) = 1.87, p < .05, r = .16$. Also as predicted, the apology only condition did not result in significantly less revenge cognition than the control condition, $t(135) = -.582, p > .05, r = .05$. Contrary to predictions, the apology and reparation condition did not result in significantly less revenge cognition than the reparation only condition, $t(135) = -.476, p > .05, r = .04$. Thus, hypothesis 1 and hypothesis 2 were supported, but hypothesis 3 was not supported.

Table 3
Summary of planned comparisons (N = 139)

DV	Contrast	Ψ	SE	<i>t</i>	<i>p</i>
Sense of power [†]	Control<Apology	.171	.237	.725	.235
	Control<Reparation	.620	.235	2.63	.004*
	Reparation<Apology+Reparation	.041	.235	.176	.435
Revenge cognition ^{††}	Control<Apology	.230	.396	.582	.280
	Control<Reparation	-.736	.393	-1.87	.032*
	Reparation<Apology+Reparation	.187	.393	.476	.317

Notes: All $df=135$. * $p < .05$; †Control<Apology Contrasts used -1, +1, 0, 0 as lambda weights for Control, Apology-only, Reparation-only, Apology+Reparation conditions, respectively;

Control<Reparation: -1, 0, +1, 0; Reparation<Apology+Reparation: 0,0,-1,+1, (Field, 2009).

††Control<Apology Contrasts used +1, -1, 0, 0 as lambda weights for Control, Apology-only, Reparation-only, Apology+Reparation conditions, respectively: Control<Reparation: +1, 0, -1, 0; Reparation<Apology+Reparation: 0, 0, +1, -1, (Field, 2009)

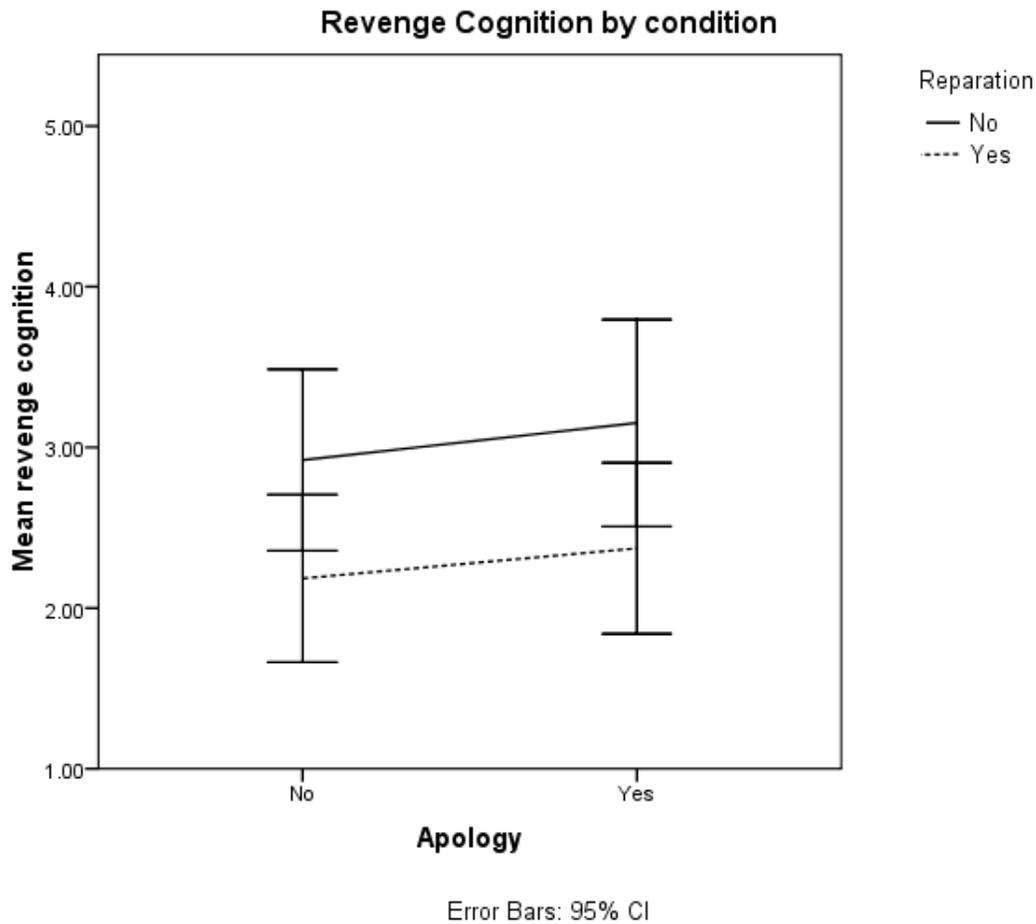


Figure 2 Mean revenge cognition scores by condition. There was a significant main effect for reparations. Planned contrasts indicated that the reparation only condition was significantly lesser than the control condition. No other hypothesized differences were significant.

Calculus Based Trust

Calculus-based trust (CBT) was hypothesized to mediate the effect of reparation on sense of power and revenge cognition. This was tested according to the bootstrapping method advocated by Preacher & Hayes (2004). This approach does not make an assumption about the distribution of the indirect effects of the independent variable on the dependent variable. Thus, it constructs 95% confidence intervals based on 5000 bootstrap resamples. If the constructed 95%

confidence intervals do not contain zero, it is interpreted that the indirect effect is significantly different from zero.

As predicted, the effect of reparation on sense of power was mediated by calculus-based trust, $\beta = .3773$, 95% CI = [.1442, .6197]. Also as predicted, calculus-based trust mediates the effect of reparation on revenge cognition, $\beta = -.2357$, CI = [-.4431, -.0823]. Because our 95% confidence intervals did not contain zero, it can be concluded that calculus-based trust significantly mediates the effect of reparation on sense of power and revenge cognition at the .05 level. Hence, the predictions for calculus-based trust were supported.

Identification Based Trust

It was hypothesized that identification-based trust would mediate the apology and reparation condition effect on sense of power and revenge cognition. Because there was no significant effect of the apology and reparation condition on sense of power or revenge cognition, identification-based trust cannot function as a mediator for those hypothesized effects.. Thus, no mediation analysis was conducted on identification-based trust and predictions concerning it were not supported.

Rumor Transmission

It was hypothesized that a participant's revenge cognitions would predict their reported likelihood to transmit a negative rumor against the department. A linear regression was performed with revenge cognition entered as a predictor and rumor transmission was the outcome. Revenge cognition was found to be a significant predictor of rumor transmission, $\beta = .623$, $t(138) = 9.33$, $p < .001$. Hence, hypothesis 5 was supported.

The possibility that rumor transmission would show similar results to revenge cognition as a direct effect of the independent variables was explored. A two-way ANOVA was conducted on rumor transmission means. There were no significant main effects for reparation $F(1,138) = 2.45$, $p > .05$, $\eta^2 = .004$, nor for apology $F(1,138) = .538$, $p > .05$, $\eta^2 = .018$, and there was not a significant interaction, $F(1,138) = 1.73$, $p > .05$, $\eta^2 = .013$. Thus it seems, while revenge cognition predicts rumor transmission, it is not directly affected by apology and reparation.

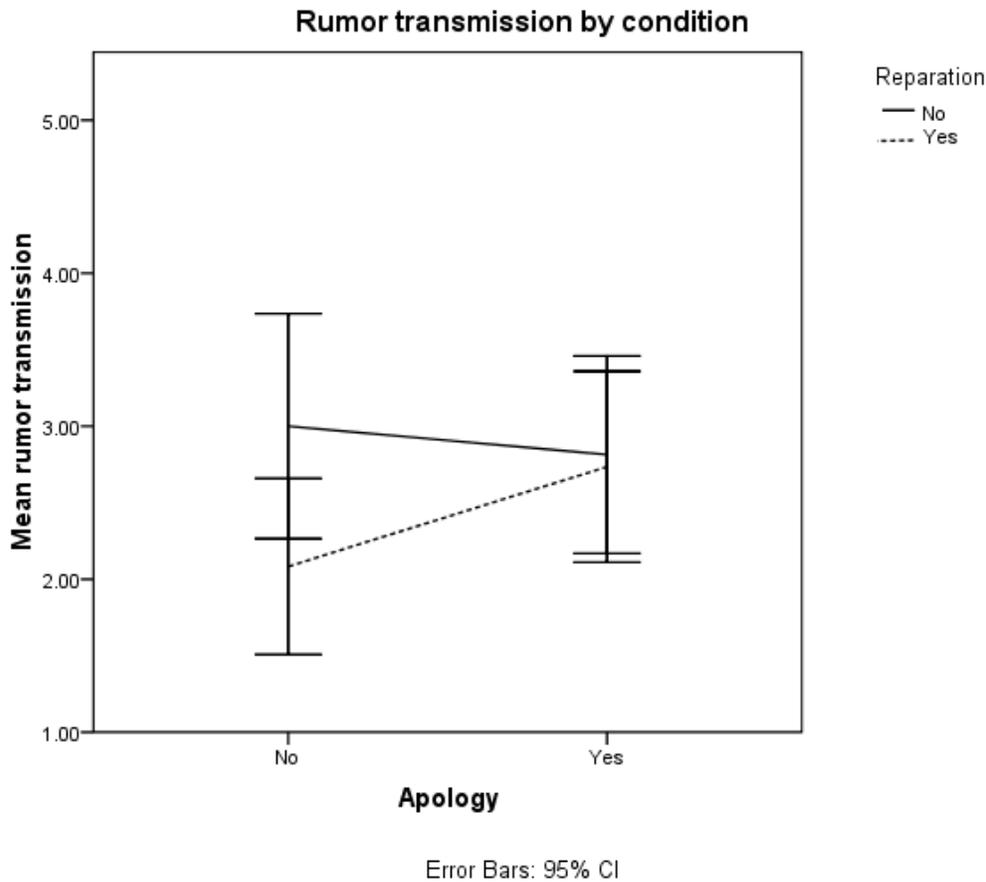


Figure 3 Mean rumor transmission scores by apology and reparation conditions. There were no significant differences across conditions.

Positive and negative affect

The relationship of positive and negative affect on sense of power, revenge cognition and rumor transmission was explored. Specifically, the interest was whether affect would have similar responses to apology and reparation, and if affect was associated with the dependent variables. The analysis was conducted on the change in affect from pre-manipulation to post-manipulation. Hence, change scores were calculated as the difference of the pre-manipulation affect score and the post-manipulation affect score.

A two-way ANOVA on positive affect change means indicated a significant main effect of reparations, $F(1,138) = 9.19, p < .05, \eta^2 = .064$. A two-way ANOVA on negative affect change means also indicated a main effect of reparations, $F(1,138) = 43.21, p < .05, \eta^2 = .242$.

Specifically, it seems that participants who received reparations experienced less of decrease in positive affect than those who did not receive them. Also, they experienced a greater decrease in negative affect compared to those who did not receive reparations. Hence, it seems the positive and negative affect results parallel those for sense of power and revenge cognition, both of which showed a main effect of reparations.

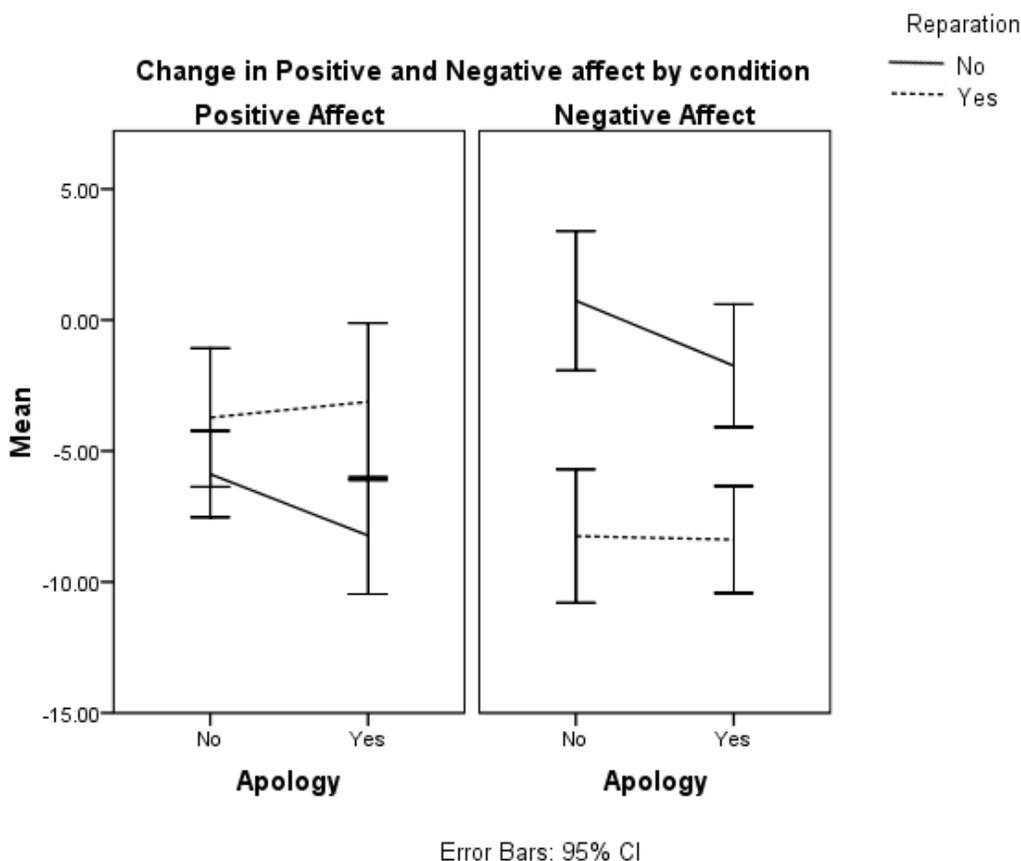


Figure 4 Mean change in positive and negative affect scores by apology and reparation conditions. Change scores represent the difference of the affect scores before receiving the department response and scores after receiving the response. There was significant main effect of reparations for both positive and negative affect.

Discussion

Summary

The present study investigated the differential effects of group apology and reparation on a victim's emotions, thoughts, and attitudes after a breach of psychological contract. Participants were asked to imagine themselves in a vignette in which psychological contract breach occurs, and then complete a series of measures about their thoughts and attitudes. It was hypothesized that apology alone would not differ from the control condition on sense of power and revenge cognition (Hyp. 1), that reparations alone would result in a greater sense of power and less revenge cognition than the control condition (Hyp. 2), and that combined apology and reparation would result in greater sense of power and less revenge cognitions than reparations alone (Hyp. 3). Hypotheses 1 and 2 were supported, but not Hypothesis 3. In addition, calculus-based trust was predicted to mediate the effect of reparation alone on sense of power and revenge cognition (Hyp. 4a), while identification-based trust was predicted to mediate the effect of combined apology and reparation on sense of power and revenge cognition (Hyp 4b). Hypothesis 4a was supported, but not Hypothesis 4b. Furthermore, it was hypothesized that participant's level of revenge cognitions would predict their level of rumor transmission (Hyp 5). Hypothesis 5 was supported. Two research questions were also explored. The first question investigated the possibility that rumor transmission would be directly affected by apology and reparation (RQ 1). Rumor transmission was found to not be directly affected by apology or reparation. The second questions explored how positive and negative affect might be affected by apology and reparation (RQ2). Reparation was found to increase positive affect and decrease negative affect, but apology did not elicit a change in either.

Implications

Although the pattern of results somewhat differs from what was predicted, it falls in line with other recent research that indicates apologies are not effective in facilitating reconciliation (Philpot & Hornsey, 2008; De Cremer & Schouten, 2008; Skarlicki, Folger & Gee, 2004). De Cremer, Pillutla and Folmer (2010) found that people tend to overestimate how much they value an apology in reality compared to when they imagine receiving an apology after a betrayal. Similar to these findings, the average participant rating of trait forgiveness in the present study

was fairly high, $M = 162.29$, ($SD = 32.55$), both within the range of the scale (231 is the highest possible score) and compared to the average score, $M = 124.73$, ($SD = 15.54$), $N = 536$, in larger samples of college students (Kamat, Jones, & Row, 2006). Hence, this may be an indication that the participants in the present study considered themselves to be highly forgiving and perhaps felt they would value an apology. Yet, in the present study, an apology had no effect on remediating the effects of psychological contract breach, even when combined with reparations. De Cremer, Pillutla, and Folmer suggested that future research test a potentially effective combination: apology combined with financial compensation. The present study has combined them, albeit in a different manner and in a group context, and found that the apology component does not add any value to receiving reparations.

The lack of any effects on rumor transmission may suggest that participants determined their likelihood to transmit a negative rumor regardless of the department response. However, revenge cognition significantly predicted rumor transmission. Also, the rumor transmission means trended towards a similar pattern of results as revenge cognition. Hence, with greater statistical power, the effect might be demonstrated.

The results of the change in positive and negative affect seems to indicate that receiving reparations do not necessarily make one feel more positive; one just feels less negative than they did before the reparations. Hence, reparations might function to restore your feelings about the relationship to where they previously. In other words, reparations help you to feel “less bad” about what happened, but they do not make you feel more positive.

Implications for the present results may be limited to impersonal group to individual breach of contract contexts. Groups who tend to have impersonal relationships with individuals they offend, such as large businesses and their customers or universities and their students, may realize that their apologies will do little to change their victim’s attitude towards them, particularly if the offense involves a monetary loss to the victim. If they are interested in repairing the relationship, providing reparations seems to be the only necessary component. Apologizing may simply be just a formality; it might be helpful in improving their image to a third party, but probably not to those directly affected by the offense.

Limitations

One must keep in mind that the present study was conducted using group apology, and that the research on the effects of interpersonal apology is still mixed. Indeed, other recent research suggests that interpersonal apologies can be effective in facilitating reconciliation (Kim, Dirks, Cooper, & Ferrin, 2006; Kim et al., 2004,) and in repairing trust (Tomlinson, Dineen, & Lewicki, 2004; Lewicki, 2006). Reparations have even been found to improve the effects of interpersonal apology on positive emotions (Bottom et al, 2002). Hence, group studies find apologies simply ineffective while interpersonal studies suggest apology effectiveness is dependent on many factors. Yet both interpersonal studies and the present study suggest that reparations can be effective in remediating the damage caused by a transgression. In light of findings that indicate that the nature of the relationship is an important factor in interpersonal apology effectiveness (Tomlinson et al, 2004; Mattila, 2001), the impersonal nature of an individual's relationship to a group may help explain why group apologies are ineffective, even when combined with reparations.

Nonetheless, one should still be somewhat wary of claiming a simple difference between group and interpersonal apologies. Aside from the present study, only Philpot & Hornsey (2008) have tested group apology experimentally, and both are limited by the use of a vignette manipulations and self-report measures. The nature of the relationships between victim and group on these studies were fairly impersonal and imaginary; studying real contexts with closer group-individual relationships may yield findings similar to interpersonal studies. Also, the offense utilized in the present study was monetary loss. An offense which does not involve material loss might be better addressed through apology. Thus, it may be that the same mixed results from interpersonal apology research could exist in a group context, provided that some of the factors influencing interpersonal apology effectiveness, such as the nature of the relationship, can hold true with both a group and individuals.

Future research

Future research could seek to address the limitations of the present study. Implementing more realistic experimental manipulations would add external validity to the present results. However, an important, yet difficult, component would be to create a believable group scenario. Investigating the different outcomes of different types of offenses (monetary, emotional) might demonstrate that apology can ameliorate offenses which reparation cannot. Furthermore,

exploring how the nature of the relationship between group and individual affects victim response would help relate group apology research back to interpersonal. Other related lines of research might further investigate the holistic effects (cognitive, behavioral, affective) that apology and reparation can have on a victim.

Conclusion

The findings of the present study suggest that, following a breach of psychological contract, a group can ameliorate the negative thoughts and emotions of the victim by offering proper reparations, but not by offering an apology. These results may have practical implications for groups who seek to improve their relationship with a victim and diffuse possible retaliation after psychological contract breach. There are also theoretical implications for enhancing the understanding of how individuals perceive groups differently from other individuals following a transgression. It may be that large groups are simply impersonal by their nature, and this may make it difficult for an individual to feel that the group is sincere. Without this sense of sincerity, an apology from the group may not be meaningful to the individual.

References

- Bordia, P., Restubog, S. L., & Tang, R. L. (2008). When employees strike back: Investigating mediating mechanisms between psychological contract breach and workplace deviance. *Journal of Applied Psychology*, 93 (5), 1104-1117.
- Bottom, W. P., Gibson, K., Daniels, S. E., & Muringhan, K. (2002). When talk is not cheap: Substantive penance and expressions of intent in rebuilding cooperation. *Organization Science*, 13 (5), 497-513.
- Bradfield, M., & Aquino, K. (1999). The effects of blame attributions and offender likableness on forgiveness and revenge in the workplace. *Journal of Management*, 25(5), 607-631.
- Crowne, D.P. & Marlowe, D. (1964) *The approval motive* N.Y.: Wiley.
- De Cremer, D., Pillutla, M. M., & Folmer, C. R. (2010). How important is an apology to you?: Forecasting errors in evaluating the value of apologies. *Psychological Science*, 22(1), 45-48.
- De Cremer, D. & Schouten, B. C. (2008). When apologies for injustice matter: The role of respect. *European Psychologist*, 13(4), 239-247.
- DeZoort, T. & Roskos-Ewoldsen, D. (1997). The Submissiveness to Organizational Authority Scale as a Measure of Authoritarianism. *Journal of Social Behavior and Personality*, 12 (3), 651-670.
- Field, A. (2009). *Discovering Statistics Using SPSS*. N.Y.: Sage.
- Gilliespie, N., & Dietz, G. (2009). Trust repair after an organization-level failure. *Academy of Management Review*, 34 (1), 127-145.
- Hutcheson, G. & Sofroniew, N. (1999). *The multivariate social scientist*. London: Sage.
- Kamat, V. I., Jones, W. H., & Row, K. L. (2006). Assessing forgiveness as a dimension of personality. *Individual Differences Research*. 4(5), 322-330.
- Kiazad, K. (2005). Responses to broken promises: An examination of psychological contract breach and rumor transmission. *Thesis Completed for B.A. Honours Degree in Psychology*. Oct. 17th. Queensland University, Brisbane, Australia.
- Kim, P., Dirks, K., Cooper, C., & Ferrin, D. (2006). When more blame is better than less: The implications of internal vs. external attributions for the repair of trust after a competence- vs. integrity-based trust violation. *Organizational Behavior and Human Decision Processes*, 99(1), 49-65.

- Kim, P. H., Ferrin, D. L., Cooper, C. D., & Dirks, K. T. (2004). Removing the shadow of suspicion: The effects of apology versus denial for repairing competence- versus integrity-based trust violation. *Journal of Applied Psychology*, 89 (1), 104-118.
- Lazare, A. (2004). *On Apology*. New York: Oxford University Press.
- Lewicki, R. J. (2006). Trust, trust development and trust repair. In M. Deutsch, P. Coleman, & E. Marcus (Eds.), *The Handbook of Conflict Resolution: Theory and Practice* (2nd Edition ed., pp. 92-119). Hoboken, New Jersey: US Wiley Publishing.
- Lewicki, R. J., & Stevenson, M. A. (1998). Trust development in negotiation: Proposed actions and a research agenda. *Journal of Business and Professional Ethics*, 16(1-3): 99-132.
- MacNeil, I. R. (1985). Relational Contracts: What we do and do not know. *Wisconsin Law Review*, 483-525.
- Mattila, A. S. (2001). The impact of relationship type on customer loyalty in a context of service failures. *Journal of Service Research*. 4(2), 91-101.
- Mayer, R. C. & Davis, J. H. (1999). The effect of the performance appraisal system on trust for management: A field quasi-experiment. *Journal of Applied Psychology*, 84(1), 123-126
- Morrison, E. W., & Robinson, S. L. (1997). When employees feel betrayed: A model of how psychological contract violation develops. *Academy of Management Review*, 22 (1), 226-256.
- Nadler, A., & Liviatan, I. (2006). Intergroup reconciliation: Effects of adversary expressions of empathy, responsibility, and recipients' trust. *Personality and Social Psychology Bulletin*, 32 (4), 459-470.
- Nadler, A., & Shnabel, N. (2008a). Instrumental and socioemotional paths to intergroup reconciliation and the needs-based model of socioemotional reconciliation. In A. Nadler, T. Malloy, & J. Fisher (Eds.), *The Social Psychology of Intergroup Reconciliation*. New York: Oxford University Press.
- Nadler, A. & Shnabel, N. (2008b). A Needs-Based Model of Reconciliation: Satisfying the Differential Emotional Needs of Victim and Perpetrator as a Key to Promoting Reconciliation, *Journal of Personality and Social Psychology*. 94(1). 116-132.
- Oliner, S. P., & Zylicz, P. O. (2008). *Altruism, Intergroup Apology, Forgiveness, and Reconciliation*. Paragon House Publishers.
- Philpot, C. R., & Hornsey, M. J. (2008). What happens when groups say sorry: The effect of intergroup apologies on their recipients. *Personality and Social Psychology Bulletin*, 34 (4), 474-487.

- Pratto, F., & Glasford, D. E. (2008). How needs can motivate intergroup reconciliation in the face of intergroup conflict. In A. Nadler, T. E. Malloy, & J. D. Fisher (Eds.), *The Social Psychology of Intergroup Reconciliation* (pp. 117-144). New York, New York: Oxford University Press.
- Preacher, K. J. & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments, & Computers*, *36* (4), 717-731.
- Restubog, S. L., Hornsey, M., Bordia, P., & Esposito, S. R. (2008). Effects of psychological contract breach on organizational citizenship behaviour: Insights from the group value model. *Journal of Management Studies*, *45* (8), 1377-1400.
- Robinson, S. L., & M, R. D. (1994). Violation the psychological contract: Not the exception but the norm. *Journal of Organizational Behavior*, *15* (3), 245-259.
- Robinson, S. (1996). Trust and breach of psychological contract. *Administrative Science Quarterly*, *41* (4), 574-599.
- Rotter, J. B. (1967). A new scale for the measurement of interpersonal trust. *Journal of Personality*, *35*, 651-665.
- Rousseau, D. M. (1990). New hire perceptions of their own and their employer's obligations: A study of psychological contracts. *Journal of Organizational Behavior*, *11* (5), 389-400.
- Rousseau, D. M. (1989). Psychological and implied contracts in organizations. *Employee Responsibilities and Rights Journal*, *2*, 121-139.
- Rousseau, D. M., & Parks, J. M. (1993). The contracts of individuals and organizations. In L. L. Cummings, & B. M. Staw (Eds.), *Research in Organizational Behavior* (Vol. 15, pp. 1-47). Greenwich, Connecticut: JAI Press.
- Rousseau, D. M., Sitkin, S. B., Burt, R. S., & Camerer, C. (1998). Not so different after all: A cross-discipline view of trust. *Academy of Management Review*, *23* (3), 393-404.
- Shnabel, N., & Nadler, A. (2008). A needs-based model of reconciliation: Satisfying the differential emotional needs of victim and perpetrator as a key to promoting reconciliation. *Journal of Personality and Social Psychology*, *94*(1), 116-132.
- Skarlicki, D., Folger, R. & Gee, J. (2004). When social accounts backfire: The exacerbating effects of a polite message or an apology on reactions to an unfair outcome. *Journal of Applied Social Psychology*, *34*(2), 322-341.
- Tavuchis, N. (1991). *Mea Culpa: A Sociology of Apology and Reconciliation*. Stanford: Stanford University Press.

- Tomlinson, E. C., Dineen, B. R., & Lewicki, R. J. (2004). The road to reconciliation: Antecedents of victim willingness to reconcile following a broken promise. *Journal of Management* , 30 (2), 165-187.
- Turnley, W. H., & Feldman, D. C. (1999). The impact of psychological contract violations on exit, voice, loyalty and neglect. *Human Relations* , 52 (7), 895-922.
- Tyler, T. R., & Lind, E. A. (1992). A relational model of authority. *Advances in Experimental Social Psychology* , 25, 115-191.
- Watson D., Clark, L., Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*. 54(6) 1063-1070.

Appendix A

Vignette

Instructions: Please read the following story and imagine that you are the student. After you have read the story, we ask that you complete the all of the questions that follow. Remember that all of your responses are voluntary and that you may quit the study at anytime.

Imagine you are an undergraduate student in a mid-sized college:

During your first visit to the college, the chair of the department stated that you would initially receive a \$3,000 financial aid scholarship for the first year; this amount was the standard scholarship offered to all incoming freshmen (the total tuition per year is \$30,000). However, second-year students could increase their scholarship to \$7,500 per year if they had an “A” average at the end of the first year. *“This is our promise”* the department chair had stated, *“But it will depend on your academic performance”*. *“This Department prides itself in maintaining and promoting long-term relationships with its students and alumni”* were her exact words.

You were excited as you realized that obtaining an “A” average, though challenging, would be possible with some hard work, and that you could nearly triple the amount of your financial aid. Furthermore, you sensed your college experience would be safe with this department. To your delight, the admissions office accepted your application that day, and you immediately committed to come to the college. The department chair had concluded your visit by saying *“...it’s very expensive here, but our promise to you is that as long as you get an “A” average, your tuition will be reduced.”*

When school began, you got off to a great start in every course. Over the entire freshman year, you diligently attended class, studied hard, and even handed in term papers early. You were always working, even as the other freshmen partied and procrastinated. You always maintained a positive attitude even when the workload was discouraging because, in the back of your mind, was the promise of increased financial aid. As a result of these efforts, you earned an “A” average throughout the year.

It is now the end of your freshman year, and you receive a letter from the department chair. You enthusiastically open it and find the following:

Dear student,

Re: Your financial aid.

This is to inform you that you will not receive a financial aid scholarship for your second year. You will receive a formal letter from the financial aid office shortly.

Yours sincerely,

DEPARTMENT CHAIR.

Your mind flashes back to that first meeting you had with the department chair, and more importantly, to your hard work and commitment over the past year. You wonder to yourself, *“I thought we had an understanding; I know I kept my end of the agreement.”* After discussing it with classmates, you find that they share similar feelings.

Apology and Reparation Condition

A few weeks later, you receive a letter from the department. It reads:

“On behalf of the department, we would like to offer an apology. We acknowledge that we have offended you, the student. We feel great remorse at our decision to revoke your financial aid. Our initial promise to you was not fulfilled, and for that we are deeply sorry.

With the hope that our relationship can remain strong, we would like to inform you that we are restoring your financial aid award of \$4500.”

No Apology with Reparation Condition

A few weeks later, you receive a letter from the department. It reads:

“Recently you were informed that you would not be receiving your financial aid for the upcoming school year. However, our financial circumstances have since changed.

We would like to inform you that we are restoring your financial aid award of \$4500.”

Apology with No Reparation Condition

A few weeks later, you receive a letter from the department. It reads:

“On behalf of the department, we would like to offer an apology. We acknowledge that we have offended you, the student. We feel great remorse at our decision to revoke your financial aid. Our initial promise to you was not fulfilled, and for that we are deeply sorry.

Unfortunately, we still cannot offer you the financial aid scholarship for the upcoming year.”

No Apology and No Reparation Condition

A few weeks later, you receive a letter from the financial aid office detailing that you did not receive the scholarship.

Appendix B

State PANAS

This scale consists of a number of words that describe different feelings and emotions. Read each item and then mark the appropriate answer in the space next to that word. Indicate to what extent you feel this way right now, that is, at the present moment **regarding the outcome of your financial aid and the department.**

Use the following scale to record your answers.

very slightly or not at all	a little	moderately	quite a bit	extremely
1	2	3	4	5
<input type="checkbox"/> interested	<input type="checkbox"/> distressed			
<input type="checkbox"/> excited	<input type="checkbox"/> upset			
<input type="checkbox"/> strong	<input type="checkbox"/> guilty			
<input type="checkbox"/> scared	<input type="checkbox"/> hostile			
<input type="checkbox"/> enthusiastic	<input type="checkbox"/> proud			
<input type="checkbox"/> irritable	<input type="checkbox"/> alert			
<input type="checkbox"/> ashamed	<input type="checkbox"/> inspired			
<input type="checkbox"/> nervous	<input type="checkbox"/> determined			
<input type="checkbox"/> attentive	<input type="checkbox"/> jittery			
<input type="checkbox"/> active	<input type="checkbox"/> afraid			

Appendix C

Sense of power items

The outcome of the situation regarding my financial aid left me feeling:

1	2	3	4	5	6	7
Weak						Strong

In interacting with the department I feel that I have:

1	2	3	4	5	6	7
Little influence					A lot of influence	

1	2	3	4	5	6	7
Little control					A lot of control	

The extent to which I feel “pushed around” by the department is:

1	2	3	4	5	6	7
Not at all					Very much	

The level of “power” I feel in my relationship with the department is:

1	2	3	4	5	6	7
Very little					Very much	

The extent to which I feel “helpless” in interacting with the department is:

1	2	3	4	5	6	7
Not at all					Very much	

The extent to which I feel “used” by the department is:

1	2	3	4	5	6	7
Not at all						Very much

The extent of my ability to affect the outcome of my financial aid was:

1	2	3	4	5	6	7
Very little						Very much

The balance of power regarding my financial aid in favor of **me** is:

1	2	3	4	5	6	7
Very little						Very much

The balance of power regarding my financial aid in favor of **the department** is:

1	2	3	4	5	6	7
Very little						Very much

Appendix D

Calculus-based trust items

To what extent do you feel that the department...

...has met your expectations?

1	2	3	4	5	6	7
(Not at all)						(Very much)

...has credibility in what they say they will do?

1	2	3	4	5	6	7
(Not at all)						(Very much)

...keeps their promises and commitments?

1	2	3	4	5	6	7
(Not at all)						(Very much)

...has a good reputation and is known as trustworthy?

1	2	3	4	5	6	7
(Not at all)						(Very much)

Identification-based trust items

To what extent do you feel that the department...

...shares similar interests with you and your classmates?

1	2	3	4	5	6	7
(Not at all)						(Very much)

...share similar goals and objectives with you and your classmates?

1	2	3	4	5	6	7
(Not at all)						(Very much)

...stands for the same values and principles as you and your classmates?

Appendix G

Marlowe-Crowne Social Desirability Scale

The "honest" responses are marked 'R'. Such items earn a score of 1 for 'Yes' and 3 for 'No'. The same answers for the other items earn scores of 3 and 1 respectively. "?" or "Not sure" or no answer is scored 2 on all occasions.

Listed below are a number of statements concerning personal attitudes and traits. Read each item and decide whether the statement pertains to you.

1. Have there been occasions when you took advantage of someone? R
2. Have you sometimes taken unfair advantage of another person? R
3. Are you always willing to admit when you make a mistake?
4. Are you quick to admit making a mistake?
5. Do you sometimes try to get even rather than forgive and forget? R
6. Do you sometimes feel resentful when you don't get your own way? R
7. Are you always courteous, even to people who are disagreeable?
8. Are you always a good listener, no matter whom you are talking to?
- * 9. In many cases, employees are better off not following their bosses wishes.
- * 10. The threat of getting in trouble at work for going against a superior is often worth it.

* Reversed scored items

Appendix H

The Submissiveness to Organizational Authority Scale

INSTRUCTIONS: The following statements ask your opinions about relationships with superiors at work. Please read each item carefully. Select a response to indicate the degree that you agree or disagree with the particular item. Circle the number of your chosen response. Your participation is voluntary and your responses will be confidential.

I. Employees should do what the boss tells them, even when they can't see the reason for it.

* 2. An employee should not follow those directions at work that seem unreasonable.

3. At work, an employee has a duty to go with the wishes of the boss.

* 4. Going against a boss's wishes at work can be justified.

5. There is no place for rebellion against the wishes of superiors in a work organization.

* 6. Workers should not worry about being disciplined for failing to follow orders.

7. Obedience to superiors at work is desirable.

8. If the boss tells you to do something, you'd better do it.

Appendix I

Forgiving Personality Scale

Indicate to what extent do you agree or disagree with the following statements:

1. I believe in the importance of forgiveness.

1	2	3	4	5	6	7	
Strongly Disagree					Strongly Agree		

2. There's a lot of truth in the old expression "revenge is sweet."

3. I believe that people should forgive others who have wronged them.

4. I tend to hold grudges.

5. I have genuinely forgiven people who have wronged me in the past.

6. I have to admit, I harbor more than a bit of anger toward those who have wronged me.

7. Forgiveness is a sign of weakness.

8. I believe that in order to be forgiven, we must first forgive.

9. If someone wrongs me, I tend to hold a grudge.

10. I believe that "revenge is devilish and forgiveness is saintly."

11. I tend to be an unforgiving person.

12. Even if someone wrongs me, I believe it would be wrong for me to seek revenge.

13. Forgiving someone who has wronged you is an invitation for that person to walk all over you.

14. I tend to expect the worst in others.

15. I am quick to forgive.

16. Forgiving someone with whom I am angry is virtually impossible for me to do.

17. If someone wrongs me, sooner or later I will try to make them pay for it.

18. Forgiving someone who has hurt or harmed you only encourages them to do it again.

19. No matter what has happened with a friend or family member, after thorough discussion, all can be forgiven.

20. I try not to judge others too harshly, no matter what they have done.

21. I don't believe in second chances.

22. I often seethe with anger.

23. I find it difficult to forgive others, even when they apologize.

24. Forgiveness is as beneficial to the person who forgives as it is to the person who is forgiven.

25. I tend to be a pessimistic person.

26. People must face the consequences of their mistakes, but they should also be forgiven.

27. I am slow to forgive.

28. Some misdeeds are so horrible that forgiveness is out of the question.

29. If you hurt me a little, I will hurt you a lot.

30. Compromise is a sign of weakness.

31. I tend to be a forgiving person.

32. I remain bitter about the actions of certain people towards me.

33. I tend to be an angry person.

