Timing is Everything: The Time at Which an Apology is Given Affects Willingness to
Forgive

A thesis submitted to
the Faculty of Graduate Studies and Research
in Partial Fulfillment of the requirements for the degree

Masters of Arts

by

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September 2009

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Your file *Votre référence*
ISBN: 978-0-494-58423-1
Our file *Notre référence*
ISBN: 978-0-494-58423-1

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Abstract

Whether there is an ideal time to apologize for an interpersonal transgression was examined. In Experiment 1 ($N = 157$), participants read hypothetical transgression scenarios. Apologies were offered that night, the next day, or two weeks later. Results revealed that as time distanced the apology from the transgression, victims were less forgiving. Post-transgression closeness mediated this effect. In Experiment 2 ($N = 193$), participants described real life minor or severe transgressions, indicating whether an apology was given and if so, whether it was too early, just right, or too late. Results showed that severe transgressions were less forgiven than minor transgressions. No differences emerged among the no, too early, and too late apologies on the measured variables, but all were significantly different from the apology that occurred at just the right time. Empathy and post-transgression closeness mediated this effect. No interaction emerged. Implications for pro-relationship behaviour following transgressions are discussed.

Acknowledgments

I would like to take this opportunity to thank Dr. Michael Wohl for his constant guidance, encouragement, and support throughout my Master's program. I have learnt a great deal under his supervision, and I look forward to applying this knowledge throughout my upcoming years as a PhD student. I would also like to thank my committee members, Dr. Kim Matheson, Dr. Chris Davis, and Professor Neil Sargent for their helpful questions and comments in this process. I would also like to thank the friends I have made throughout my graduate studies for their friendship and support. Lastly, I would like to thank my family and friends, who have been there for me throughout my education, and whom I could not have done this without.

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Timing is Everything: The Time at Which an Apology is Given Affects Willingness to Forgive

Over the course of a person's life an assortment of interpersonal transgressions will be experienced. For example, a person may be stood up by their friend after plans have been made, rumours may be spread by someone close, or personal secrets may be exposed by those entrusted with them. Such events can damage or terminate the relationship. An effective strategy to repair the damage caused is for the transgressor to apologize for the harm they have inflicted (Couch, Jones, & Moore, 1999; Darby & Schlenker, 1982; Exline & Baumeister, 2000; Lazare, 2004). In doing so, the transgressor takes responsibility for the harm done, which is a catalyst for the forgiveness process (Fincham, 2000; Fincham, Beach, & Davila, 2004, 2007; McCullough, Pargament, & Thoresen, 2000; McCullough et al., 1998; McCullough, Worthington, & Rachal, 1997).

Not all apologies may be equally effective at facilitating forgiveness and moving the relationship forward following the occurrence of an interpersonal transgression (Eaton, Struthers, Shomrony, & Santelli, 2007). Imagine, for example, that the apology came shortly after the transgression was committed. Contrast this with an apology offered well after the transgression occurred. Would the difference in when the apology was offered influence a victim's willingness to forgive their transgressor? In the present research, I will assess whether the temporal proximity of an apology to the harm committed influences whether or not forgiveness is granted by the victim. It is hypothesized that there is an ideal time for an apology to be offered and that apologies that stray from this window of opportunity will be ineffective at eliciting forgiveness. Specifically, because apologies that occur immediately after the transgression tend to

leave victims feeling that their distress is not well understood (Frantz & Bennis, 2005) forgiveness should be relatively low. Likewise, apologies that occur well after the transgression might be viewed as too late, thus undermining the forgiveness process. As a result, an ideal time to offer an apology might lie somewhere in between – not too early, and not too late.

Apologies

An apology is an important action in the process of forgiveness for an interpersonal transgression (Exline & Baumeister, 2000; Frantz & Bennis, 2005; Lazare, 2004; McCullough et al., 1997, 1998; Tavuchis, 1991). Indeed, apologies represent a universal norm for the manner in which people can attempt to return a relationship to its pre-transgression state following an interpersonal violation (Goffman, 1971). Following a transgression, an apology is often perceived as an acceptance of wrongdoing by the transgressor. That is, an apology indicates to the victim that the offender has acknowledged a wrong has been committed, is aware of the harm that has been done (Schneider, 2000), and takes full responsibility for what has occurred (Tavuchis, 1991).

In this light, an apology differs from other methods (e.g., making excuses or justifications for the behaviour) that address the hurt caused by the transgressor's actions (Schneider, 2000). Specifically, sometimes a transgressor will try to excuse their actions (e.g., "I was late because the bus did not arrive on time"), justify their misdeed (e.g., "I was late because it is fashionable to do so"), or deny the transgression even occurred (e.g., "I wasn't late at all"). Such explanations are ways in which a transgressor might attempt to defend his or her action thereby removing personal responsibility (Enright,

Freedman, & Rique, 1998). In admitting to their wrongdoing through an apology, the transgressor begins the process of repair to the damaged relationship. That said, not all apologies may be equally effective in promoting relational repair. To the point, factors external to the apology might impinge on a victim's willingness to accept an apology for harm inflicted upon them.

Important for the current research, an external factor that might influence the effectiveness of an apology is when it is offered post-transgression. As there are no preset markers for when an apology has to be offered, apologies are offered any time from immediately after the harm was committed to well after (or any time in between). There is a scarcity of research, however, on how the temporal proximity of an apology to the transgression can impact post-transgression relationship functioning. Addressing the lack of research on the topic, Tavuchis (1991) argued that an apology that comes too soon following an incident is likely to be ineffective because the victim will see the transgressor's apology as emanating from social norms, that is, an apology is what is expected after committing an interpersonal harm. In this regard, for the victim, an early apology may imply that the offender has not taken the time to properly understand the impact of their actions.

Frantz and Bennigson (2005), like Tavuchis (1991) and Lazare (2004), have suggested that a victim of an interpersonal transgression would be more likely to accept an apology from their offender at a later point in time, rather than immediately following the incident. Specifically, they hypothesized that when an apology occurred immediately following the transgression the victim had no opportunity to describe their feelings regarding the incident and thus the apology was offered without the transgressor

understanding why their actions were hurtful. To assess this possibility, two empirical studies were conducted to examine if apology timing influenced outcome satisfaction. In the first study, participants were asked to provide personal descriptions of a transgression they had experienced. It was found that when an apology had come later (i.e., after the participants had expressed their feelings about the transgression), participants felt more understood when compared with an apology that came immediately after the transgression was committed. In their second study, participants read hypothetical scenarios in which an apology was offered either immediately after the transgression or later (after the victim had expressed the hurt they experienced). Once again, outcome satisfaction was lower when the apology was offered immediately after compared to when it was offered later. Thus, an immediate apology might be counter-productive. If an apology occurs immediately following the transgression, the hurt party may not feel that the transgressor truly understands why what he or she did was hurtful. Based on these results, it should be anticipated that a temporally distant apology (i.e., an apology that occurs well after the transgression) would be especially helpful in promoting pro-social, post-transgression relations. The more time a transgressor has to contemplate the transgression the more effective an apology for that transgression would be.

On a similar front, Wohl and McGrath (2007) have shown that as time distances the victim from the offence willingness to forgive their transgressor increased. In their first experiment, participants read a hypothetical situation in which a friend failed to mail a job application for them before the deadline. In one condition, the participants learned that this happened about two years ago. In another condition, they learned that it happened about a month ago. People who read that it happened about two years ago

indicated that they would be more willing to forgive the friend at the present point in time than the people who read that it happened about a month ago. Two subsequent studies provided evidence that whether people perceive an event as being closer or farther away in time can influence willingness to forgive. In Experiments 3 and 4, participants were asked to describe an event that happened to them about a month ago and the subjective temporal distance of the event was manipulated. Participants who were led to believe the event occurred farther away in time indicated that they would be more willing to forgive the person at the present point in time than participants who perceived the event as being closer in time. These findings may have important implications for understanding the effect apologies have on post-transgression relationships. As time distances the victim from the offence forgiveness increases. Thus, one might expect that an apology would be more effective as time distances the harmed party from the event. As such, it is possible that because the pain of the transgression wanes or is blunted with time, an apology that occurs later will be more effective.

Conversely, an apology that is offered well after the transgression was committed might have similar adverse effects as those that come too early. Indeed, Zilzer and Frantz (2002) showed that an apology that happens long after the transgression (i.e., a “too late” apology) decreases participant’s relationship satisfaction. Specifically, the late apology led to lower value placed in the relationship and negative attitudes towards the transgressor. Although an apology is eventually offered, it seems that the victim has begun to distance themselves from the relationship and has negative perceptions of the transgressor. The specifics of this relationship are still unclear. As such, more research

needs to explore the effects of apology timing on the forgiveness process and the mechanisms that can impact this relationship.

In the current research, the time at which an apology is offered will be assessed as a determinant of victim's willingness to forgive their transgressor. Previous research (Fincham & Beach, 2002; Karremans & Van Lange, 2004; McCullough et al., 1997, 1998) has suggested that following an interpersonal transgression, forgiveness is important in order to mend the relationship. Since the mere presence of an apology has been shown to have a beneficial impact on post-transgression relationships, from increasing satisfaction with the resolution of the transgression to reducing the negative consequences for the transgressor to facilitating forgiveness (Couch et al., 1999; Darby & Schlenker, 1982; Exline & Baumeister, 2000; Frantz & Bennigson, 2005), it is expected that the time at which an apology is offered will influence the forgiveness process.

Forgiving

People experience interpersonal transgressions on a regular basis. When a hurtful interaction has occurred in a relationship, as a victim there are generally two options. The first option is to hold on to the hurt and remove yourself from the relationship, while the second choice is to forgive the hurtful party for their transgression. Forgiving has been shown to aid in the repair of relationships after they have been damaged by the hurtful actions of another person. By increasing liking (Darby & Schlenker, 1982), positively influencing perceptions of the relationship as a single unit (Karremans & Van Lange, 2004), and facilitating positive relationship motivations (McCullough et al, 1997) forgiveness can help restore interpersonal relations.

By definition, forgiveness is a process involving a pro-social change to a damaged relationship (McCullough et al., 2000). This process often involves positive changes in affect, motivation, behaviour, and cognitions for both the victim as well as the transgressor about their relationship and about each other (Enright et al., 1998; McCullough et al., 2000; Worthington, 1998). Specifically, McCullough, Worthington and Rachal (1997) have suggested that forgiveness is a motivational process in which there is a reduction in the desire to seek revenge and avoid one's transgressor, while at the same time there is an increase in benevolent intentions towards them. In addition, according to Enright and colleagues (1998), the process of forgiving is one in which, over time, the victim chooses to let go of negative thoughts and feelings about their offender, while at the same time viewing them in a positive light. Thus, forgiveness involves getting past negative feelings, such as anger and resentment, and replacing these with positive affect, that is, moving towards compassion and love for the transgressor (North, 1998). Indeed, the starting place for forgiveness is a letting go of negative aspects and focusing on the positive (McCullough et al., 2000).

Research on forgiveness and the factors that have an influence on forgiving behaviour has experienced a steady increase in recent years (Koutsos, Wertheim, & Kornblum, 2008). Possible reasons for this growth in interest include recent research demonstrating that one's physical and mental health is influenced by the ability to forgive others (Witvliet, Ludwig, & Vander Laan, 2001; Ysseldyk, Matheson, & Anisman, 2007). Witvliet and colleagues (2001) examined the emotional and physiological impact of people imagining how they would respond to a real-life offender. The results indicated that unforgiving thoughts, when compared to baseline levels, created more negative

affect and increased heart rate and blood pressure, whereas more forgiving thoughts showed significantly lower physiological changes. Additionally, Ysseldyk and colleagues (2007) suggest that higher levels of forgiveness are linked to greater psychological well-being.

Importantly, forgiveness has many benefits and also pro-social implications for a range of interpersonal relationships, including friendship in adolescence (Wernli, 2006) and conflict resolution in marriage (Fincham et al., 2004, 2007). Forgiving is important to interpersonal relationships as it assists in the restoration of relationships following the damage caused by transgressions (Darby & Schlenker, 1982; Exline & Baumeister, 2000; Karremans & Van Lange, 2004; McCullough et al, 1997; Schlenker & Darby, 1981). For example, Karremans and Van Lange (2004) investigated whether forgiveness of a past offence was related to a person's current ratings of their willingness to sacrifice, accommodate, and intended cooperation with the transgressor. The findings indicated that regardless of commitment towards the transgressor, past forgiving was associated with current pro-relationship behaviours. Being able to forgive impacts a large number of important aspects of a person's life and fully understanding all the influential factors in this process is essential to help maintain positive relationships, along with a happy and healthy lifestyle.

Importantly, in such situations, apologizing for the harm done is one factor following a transgression that can facilitate the forgiveness process (e.g., Boon & Sulsky, 1997; Darby & Schlenker, 1982; Exline, Baumeister, Bushman, Campbell, & Finkel, 2004; McCullough et al., 1997, 1998; Takaku, Weiner, & Ohbuchi, 2001). For example, Couch and colleagues (1999) showed that forgiveness was almost twice as likely to be

given when an apology is offered as when one is not. In this vein, it is thus expected that since the presence of an apology can increase the likelihood of being forgiven, the time at which an apology is given will also influence a victim's willingness to forgive following an interpersonal transgression. That is, when an apology is offered immediately after or well after the harm doing, people should be less willing to forgive the transgressor than when the apology comes shortly after. Although an apology has still been offered, when an individual apologizes too soon the victim may feel as though the transgressor does not fully understand their feelings regarding what happened (see Frantz & Bennigson, 2005). Similarly, when the apology occurs too long after the transgression, forgiveness may be less likely, as the victim may begin to give up on the relationship.

How Apology Timing Might Influence Willingness to Forgive

It was of interest to assess the possible mechanisms by which apology timing might influence people's willingness to forgive their transgressor. Based on the extant literature on both apologies and forgiveness, I focused on three possibilities: empathy, perceived responsibility of the transgressor for committing the transgression, and relationship closeness.

Empathy is defined as the ability to experience the emotions of another person, or to experience vicariously an emotional arousal in response to the distress the other person is experiencing (Coke, Batson, & McDavis, 1978). Thus, simply taking the perspective of your offender might have an impact on forgiveness. Indeed, according to Takaku (2001), when individuals are reminded of their own imperfections, of times when they were the transgressor and hurt someone else, they tended to be more forgiving than when only considering their role as the victim. Moreover, an apology can be more or less effective

depending on whether or not the victim can adopt the offender's perspective (a cornerstone of empathetic concern). According to Takaku and colleagues (2001) victims forgive their transgressors due to hypocrisy-induced dissonance. That is, forgiveness was more likely when the victim not only considered how they currently felt as a result of the transgression, but also how they would want to be treated if they themselves had been the transgressor. An apology from the offender can encourage the victim to examine the situation from more than just their particular perspective. When such perspective taking is initiated, apologies become more effective.

What's more, studies have shown that empathy mediates the relationship between apologies and forgiveness (McCullough et al., 1997, 1998). In a series of studies by McCullough and colleagues (1997), participants were asked to think of a relational transgression they had experienced and answer the questions that followed with that conflict in mind. The findings indicated that empathy mediated the relationship between apology and forgiveness (McCullough et al., 1997). When a transgressor apologizes, empathy increases in the victim, and this increased empathy facilitates the forgiveness process. A study with dating couples has provided additional support for the apology-empathy-forgiveness link (McCullough et al., 1998). Again, participants were asked to consider a time in which they were seriously hurt by a romantic partner, and then to answer the questions that followed with this situation in mind. In this study, empathy again mediated the relationship between an apology and forgiveness. As empathy appears to influence the apology-forgiveness process it is anticipated that empathy may play a role in the relationship between apology timing and forgiveness, such that, when an

apology is offered too quickly or conversely, too long after the transgression, empathy for the offender should decrease and in turn forgiveness will be less likely.

Another possible mediator of the hypothesized effect of apology timing on forgiveness is the extent to which the victim assigns responsibility for the harm experienced to the transgressor. Importantly, responsibility has been shown to be inversely related to willingness to forgive – the more responsibility that is assigned to a transgressor for the harm experienced, the less forgiveness is generally offered by the victim (see Bennett & Earwaker, 1994; Bradfield & Aquinos, 1999; Wohl & Pritchard, 2008). For example, Bradfield and Aquinos (1999) found that attributions of blame were negatively related to forgiving, and also that as revenge cognitions increased forgiveness cognitions lessened. The same relationship between attributions of responsibility and forgiveness has been demonstrated in romantic relationships (see Boon & Sulsky, 1997).

Most recently, Wohl and Pritchard (2008) had participants read a hypothetical scenario and were asked to imagine themselves as the person in the situation described while responding to questions regarding the transgressor's responsibility. As the extent to which the transgressor was seen as responsible for the event increased, by altering task clarity, personal obligation and person control, forgiveness decreased.

An apology is often more effective when the transgressor is viewed as less responsible for the transgression (see Bennett & Earwaker, 1994; Darby & Schlenker, 1982, 1989; Ohbuchi & Sato, 1994). Bennett and Earwaker (1994), for example, had participants read transgression scenarios in which the responsibility of the offender was manipulated. Specifically, participants read that the victim had asked the offender to look after their watch. The watch ended up in water because either the offender slipped and

fell (low responsibility) or because the offender decided to go swimming with the watch (high responsibility). Thereafter, participants were asked to rate how angry they would be if the situation had happened to them and the extent to which they thought they would desire revenge. The apology was more effective at restoring the relationship when the offender was less responsible for the incident. An association between apologizing and perceptions of responsibility has also been found with children in the fifth grade. When the offender apologized they were evaluated as less responsible and participants were more likely to forgive than when no apology was offered or when the offender attempted to make excuses for the offence. Even among children, accountability is important in the reconciliation process (Ohbuchi & Sato, 1994). An apology offered is harder for the victim to digest as responsibility increases, apologizing can reduce perceptions of blame and responsibility, and one's willingness to forgive decreases to the extent that the transgressor is perceived as being more responsible for the offence.

It is predicted that perceived responsibility will vary with the timing of an apology, thus influencing victim's willingness to forgive their transgressor. It is expected that when the apology occurs too soon or too long after the transgression, the victim will perceive the transgressor as more responsible for the incident. An apology that comes too quickly may be viewed as lacking sincerity and consequently, the hurried apology may work against the transgressor, triggering negative impressions of them and thus, their perceived responsibility. Conversely, the omission of the apology for an extended period of time following the incident may cause the victim to dwell on the event and this may increase negativity towards the transgressor and as such, increase perceptions of responsibility.

Lastly, it is also possible that perceived relationship closeness will influence the relationship between apology timing and willingness to forgive an interpersonal transgression. It is almost an axiom that acts of betrayal within a relationship can decrease the closeness one feels with the person who has hurt them. Closeness within interpersonal relationships has been linked to forgiving (Exline et al., 2004; Finkel, Rusbult, Kumashiro, & Hanon 2002; McCullough et al., 1998; Tsang, McCullough, & Fincham, 2006). Indeed, Exline and colleagues (2004) found that individuals reporting greater levels of relationship closeness were found to be more forgiving for the transgression they had described. A study of romantic relationships revealed that participants' commitment levels were correlated with self-reported forgiveness, as well as their partner's commitment levels (McCullough et al., 1998). Furthermore, higher levels of relationship closeness increased the likelihood of the offender apologizing. The apology in turn increased empathetic responses in the victim and facilitated the forgiveness process. Thus, closeness is positively related to willingness to forgive. The greater the ratings of relationship closeness, the more willing victims are to forgive.

As closeness has been associated with apologies and forgiveness, it is possible that timing of an apology could impact perceived closeness between the victim and their transgressor. Specifically, when an apology is given shortly after the transgression, rather than too soon or too long after, it is hypothesized that willingness to forgive will increase to the extent that participants perceived the post-transgression relationship to be close. If the apology falls outside of the predicted optimal time to apologize, the victim may feel less close to the person that caused them harm, perhaps because they believe that the transgressor does not care enough about the relationship to offer an appropriate apology,

and in turn this could reduce relationship closeness and lessen their willingness to forgive.

Overview of the Present Research

In two experiments, the effect of apology timing on people's willingness to forgive following an interpersonal transgression was assessed. In Experiment 1, participants were asked to imagine how they would respond to hypothetical transgression scenario with a particular friend in mind. The time at which the apology was offered was manipulated such that participants read that the apology came immediately after (i.e., seconds), shortly after (i.e., the next day), or well after (i.e., two weeks later) the transgression occurred. It was hypothesized that participants would be more willing to forgive when the apology came shortly after the transgression than when either too early or too late. It was also predicted that participants would be more empathetic, perceive their friend as being less responsible for the transgression, and experience less change in relationship closeness when the apology was offered shortly after the transgression occurred, and as such, would be more willing to forgive.

In Experiment 2, the effects of apology timing on forgiveness were again examined. While in Experiment 1 participants responded to a hypothetical transgression, in Experiment 2 participants were asked to provide a detailed description of an interpersonal transgression that they had personally experienced and to provide a subjective rating of the timing of the apology. Once again, it was expected that when the apology was offered too early or too late, participants would be less forgiving. In addition, transgression severity was also assessed, along with the possible mediators tested in Experiment 1 (empathy, perceived responsibility, and post-transgression

relationship closeness). Transgression severity was introduced to explore an additional factor that can impact a victim's willingness to forgive following harm.

Two additional mechanisms by which the timing of the apology (too early, just right, or too late) might influence willingness to forgive were also assessed. First, the potential mediating role of the victim's impression of the transgressor was examined. Specifically, apologizing can help to minimize the effects of a transgression and in doing so bring about more favourable appraisals of the transgressor (see Schlenker & Darby, 1981). The moderately timed apology then, should positively impact the victim's impression of the transgressor, making them more likely to forgive. Conversely, the early and late apologies could lead to negative impressions of the transgressor and decrease willingness to forgive. Finally, the victim's perception of how understood they felt was investigated as another possible mediator. People feel less heard and understood, with regards to why they are hurt, when an apology is offered before they have had a chance to express themselves (Frantz & Bennis, 2005). It is predicted that when not provided the opportunity to communicate their feelings, following an interpersonal transgression, people will be less likely to forgive their transgressor.

When offered too soon or too long after the transgression, the effectiveness of an apology is proposed to decrease to the point where apologizing may become ineffective and forgiveness will no longer be granted. Specifically, I wanted to explore how the timing of an apology influences forgiveness following an interpersonal transgression. In addition, it was expected empathy, perceived responsibility, and relationship closeness, would mediate this relationship (see Figure 1).

Figure 1. Mediation model with three putative mediators.

Experiment 1

Method

Participants

One hundred and fifty seven introductory psychology students at Carleton University (Male = 42, Female = 115) participated in Experiment 1. The study was administered online via a link provided to potential participants on the online recruitment tool used by the department of psychology at Carleton University. Participants ranged in age from 17 to 47 years ($M = 20.29$, $SD = 3.88$). All participants received 0.25% in grade-raising credit towards their introductory psychology course for participating.

Procedure and Design

Participants were directed to an online consent form. If they selected “I Consent”, they were then randomly assigned to one of four versions of the online questionnaire, where the experiment was described as investigating interpersonal relations. Participants were then asked to think of a friend while completing the experiment. To facilitate this exercise, they were asked to type in the first name of a friend they would like to anchor their responses to. Following this, they completed a short background information questionnaire, which included items regarding their relationship with that friend (e.g., “Please indicate how long you have been friends”). Thereafter, participants read a scenario that placed them as the victim of an interpersonal transgression and the friend they had indicated earlier as the transgressor.

The scenario varied in terms of the timing of the apology (Appendix B). In the immediate apology condition, participants were asked to imagine that an apology was offered moments after the transgression. In the moderate apology condition, they were asked to imagine that the apology was offered the following day. Lastly, participants were asked to imagine that the apology was offered two weeks after the transgression in the late apology condition.

Following the experimental manipulation, participants completed items assessing aspects of the offence (Appendix C), such as if an apology had been offered and whether or not they would accept the apology. Participants were also asked to complete measures of their subjective ratings of the timing of the apology, to assess the effectiveness of the manipulation, and also the offender’s responsibility for the transgression. State

forgiveness, as well as empathy, were also assessed (Appendix C). After completing the final questionnaire, participants were then fully debriefed (Appendix A).

Measured Variables

Forgiveness. The State Forgiveness scale was used to assess forgiveness of the transgressor (Brown & Phillips, 2005). On a seven-point scale anchored at 1 (strongly disagree) and 7 (strongly agree), participants were asked to rate, how much they agree with seven statements ($\alpha = .89$). Sample items include: “I hope this person gets what’s coming to them for what they did to me,” and “I feel warmly toward this person.” Negative items were reverse scored and higher scores indicate greater levels of forgiveness.

Empathy. Responses to six emotion words ($\alpha = .91$) were used to assess empathy for the transgressor (*sympathetic, concerned, moved, compassionate, tender, and empathic*) (Coke et al., 1978). Each item was rated on a seven-point Likert scale ranging from 1 (*not at all*) to 7 (*extremely*). Higher scores reflect greater empathy.

Responsibility. Seven items assessed the participant’s perception of the offender’s responsibility for the transgression ($\alpha = .90$). These items were: “To what extent do you feel the person who wronged you would be to blame for the conflict?”, “How responsible was your friend for the event?”, “To what extent do you think your friend had control over the event?”, “Was the main cause of the event something that was controllable by your friend?”, “Would you say that the main cause of the event reflected an aspect of your friend?”, “How accountable was your friend for the event?”, and “To what extent do you think that the cause of the event had something to do with your friend?” Higher scores indicate greater perceptions of responsibility.

Closeness. Participant's relationship closeness was assessed before and after the manipulation using the Inclusion of Other in the Self (IOS) scale, a single-item pictorial measure (Aron, Aron, & Smollan, 1992). The images consist of two circles with varying degrees of overlap, one labelled "self" and the other labelled "other". Participants are asked to circle the picture that best describes their relationship. The pictorial options are scored from 1 (*the self and other circles having no overlap*) to 7 (*almost completely overlapping circles*). Additionally, participants also rated how close and committed they were with their friend on a seven-point Likert scale. The mean score of the three items combined was used as a total measure of closeness both before and after the transgression scenario ($\alpha = .79$ and $\alpha = .86$, respectively).

Results

Preliminary Analyses

Prior to the main analyses, the data was screened for the presence of missing data, outliers, and to ensure the appropriate statistical assumptions for the planned analyses were met. Pre-screening analyses of the data identified three cases in which a participant had submitted data twice. All data submissions were time stamped and so the second submission was considered invalid, as the participant had prior knowledge of the overall purpose from the first study's debriefing. Additionally, 17 participants were noted to have responded incorrectly to the manipulation check regarding whether or not an apology was provided in the scenario. These cases were removed from the dataset, making the total number of participants one hundred and thirty seven (Male = 37, Female = 100) ranging in age from 17 to 47 years ($M = 20.39$, $SD = 4.02$).

Frequency tests were run on all variables of interest. These tests indicate that all the variable total scores fall within the proper range of minimum and maximum values.

Missing data. Missing values analyses (MVA) were conducted to search for missing data. Little's MCAR test revealed non-significance, $\chi^2(224) = 273.81, p = .01$, suggesting that the missing data may not be missing completely at random (MCAR). Further MVA were conducted as a secondary test. This indicated that no cases were missing more than 5% of the data and as such separate variance t-test could not be calculated. It was decided that the cases with missing data should remain in the dataset and be replaced with valid mean substitution as it was less than 5% of the data¹. Furthermore, correlations and analyses were compared with and without these cases and there was little to no change in the results.

Examining scatterplots of the variables, it did not appear that the assumption of homogeneity of variance was violated. The cases all appeared to be evenly scattered with no particular patterns that would suggest a violation. Furthermore, linearity also does not appear to have been violated. Scatterplots indicate that the relationships between variables are linear.

Normality, univariate and multivariate outliers. Visual analysis of the variables was conducted by examining histograms, indicating there seems to be a departure from normality for some of the variables. Skewness and kurtosis for these variables also indicate that a violation of normality may be of concern. Forgiveness and closeness were examined further and the assumption of normality appears to be violated after

¹ The substitution method used for the missing data was valid mean substitution (VMS), recommended for missing items that are used to form a scale score (Raaijmakers, 1999). VMS involves replacing the missing items with the average score of the non-missing items.

triangulation of several analyses. An examination of a statistical test of normality (Kolmogorov-Smirnov) provides results that indicate normality is not met for forgiveness, $D(137) = .13, p < .001$, and closeness change, $D(137) = .18, p < .001$. Several transformations, including square root and logarithm (Tabachnick & Fidell, 2007), were attempted with both variables in order to reduce their negative skew, however these transformations were unsuccessful at reducing skewness and so the original scores for each measure were retained. Correlations before and after the transformations were compared and there were no differences, suggesting the sample size is large enough that slight deviations from normality are not creating considerable differences. No other variables revealed problematic skew or other deviations from normality.

Initial examination of boxplots revealed some cases that were potentially influential, however only one was identified with a z score greater than + or - 3.29 for forgiveness. This outlier was then assessed using cook's distance. This case² (and all others) did not have values greater than one, suggesting no cases were overly influencing the results.

Mahalanobis' distance was used to determine whether multivariate outliers were present. According to the Chi Square distribution, for a level of $p = .001$ with $N=137$ the critical value of Chi Square is 18.47 (Tabachnick & Fidell, 2007). One case falls above this range, and so was deleted from the dataset and analyses were compared pre- and post-deletion. Removal of this case does not impact the results and so the original data was retained.

² The outlying case was retained in order to maintain the original data. All analyses were conducted with and without this case and comparable results were obtained.

Multicollinearity. Examining the collinearity statistics found in the coefficients table indicated that multicollinearity is not an issue. Higher tolerance values, close to one are recommended (Pedhazur, 1997), and the tolerance values found were sufficient. Bivariate correlations typically should not be high (e.g., .80-.90) and therefore the correlations found are acceptable (Tabachnick & Fidell, 2007).

Descriptive statistics and correlation analyses were conducted among the variables of interest. Means, standard deviations, and bivariate correlations, are presented in Table 1. Correlations among the variables of interest are in the hypothesized directions.

Table 1. *Descriptive Statistics and Intercorrelations for Apology Timing, Forgiveness, Perceived Responsibility, Empathy, and Pre- and Post-Closeness*

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6
1 Timing	-	-	-	-	-	-	-	-
2 Forgiveness	5.61	1.13	-.18*	-	-	-	-	-
3 Responsibility	4.25	1.35	.22**	-.35**	-	-	-	-
4 Empathy	3.95	1.47	-.21**	.29**	-.43**	-	-	-
5 Pre-Closeness	5.65	.95	-.12	.33**	-.09	.33**	-	-
6 Post-Closeness	4.78	1.27	-.24**	.54**	-.46**	.40**	.60**	-

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

Manipulation Check.

Importantly, the manipulation was successful. Participants were asked to indicate their perceptions of the timing of the apology on a seven-point Likert scale anchored at 1 (*too early*), 4 (*just right*), and 7 (*too late*). One-way ANOVA confirmed that the timing manipulation was successful, $F(2,128) = 17.26$, $p < .001$, $\eta_p^2 = .21$. Tukey's HSD post hoc

analysis was performed in order to examine where the significant differences lay between the groups. The comparison test indicated that both the early ($M = 4.79$, $SD = 1.21$) and moderate ($M = 5.02$, $SD = 1.23$) apologies were significantly different on their mean scores from the late apology ($M = 6.13$, $SD = 1.03$), $p < .001$. Additionally, the early and moderate apology groups did not differ significantly on any of the dependent variables, $ps > .13$, and as such these two groups were collapsed into one group in order to compare with the late apology condition.

Dependent Variable

Forgiveness. One-way ANOVA assessed the extent to which the timing of an apology impacted willingness to forgive. When participants were presented with an apology soon after the transgression (collapsed condition), they were more likely to forgive the transgressor ($M = 5.75$, $SD = 1.11$) than those who received an apology well after ($M = 5.33$, $SD = 1.12$), $F(1,135) = 4.47$, $p = .04$, $\eta_p^2 = .03$.

Mediator Variables

Empathy. To assess the extent to which the timing of the apology influenced participant's empathy for the transgressor, one-way ANOVA was performed. When the apology was offered two weeks after the apology, participants were less empathetic towards the transgressor ($M = 3.54$, $SD = 1.36$) than those who received an earlier apology (i.e., the collapsed group) ($M = 4.17$, $SD = 1.47$), $F(1,135) = 6.05$, $p = .02$, $\eta_p^2 = .04$.

Perceived responsibility. In order to determine whether timing of the apology impacted the participant's perception of the transgressors responsibility for the offence, one-way ANOVA was performed. As predicted, the transgressor was perceived as being

more responsible when the apology was late ($M = 4.66$, $SD = 1.17$) than when compared with the collapsed apologies ($M = 4.03$, $SD = 1.39$), $F(1,135) = 7.02$, $p = .009$, $\eta_p^2 = .05$.

Closeness change. There were no significant differences in pre-transgression closeness, $F(1,135) = 1.94$, $p = .17$, $\eta_p^2 = .01$, however there was a significant difference in post-transgression closeness, $F(1,135) = 8.05$, $p = .005$, $\eta_p^2 = .06$. Specifically those in the late apology conditions ($M = 4.38$, $SD = 1.27$) reported lower levels of closeness with their friend post-transgression when compared to the earlier apologies (the collapsed groups) ($M = 5.00$, $SD = 1.22$)³. A change in closeness score was created to observe the impact that timing of the apology had on relationship closeness. This generated difference was created by subtracting each individual's post-transgression closeness score from their pre-transgression closeness score (PreCloseness – PostCloseness). I then conducted a one-way ANOVA to assess the extent to which the timing of an apology affected relationship closeness. When the apology was offered well after the transgression, participants reported a greater decrease in their closeness to the transgressor ($M = 1.12$, $SD = 1.15$) than participants who were offered an earlier apology ($M = .73$, $SD = .93$), $F(1,135) = 4.63$, $p = .03$, $\eta_p^2 = .03$.

³ A 2 (apology time: collapsed versus late) x 2 (closeness: pre-transgression versus post-transgression) mixed measure ANOVA was conducted with closeness as the repeated measure. The analysis revealed a significant main effect of the within-subjects factor, closeness, $F(1,135) = 102.80$, $p < .001$, partial $\eta_p^2 = .43$. Specifically, participants reported higher relationship closeness ($M = 5.61$, $SE = .09$) before the transgression than after ($M = 4.67$, $SE = .11$). A significant two-way interaction between apology timing and closeness was also revealed, $F(1,135) = 4.63$, $p = .03$, partial $\eta_p^2 = .03$. Specifically, there were no differences in pre-transgression closeness ratings in the collapsed ($M = 5.73$, $SE = .10$) or late apology ($M = 5.49$, $SE = .14$) conditions. However, there was a significant difference in post-transgression closeness, specifically those in the collapsed apology conditions ($M = 5.00$, $SE = .13$) reported greater levels of closeness with their friend when compared to the late apology ($M = 4.38$, $SE = .18$). These results are consistent with the one-way ANOVA's conducted with pre- and post-transgression closeness in order to create a change score. It was necessary to use this change score for the purpose of the subsequent mediation analyses.

Mediation Analyses

Multiple mediation was conducted using both Baron and Kenny's (1986) procedure for testing mediation and the bootstrapping method for small samples (Preacher & Hayes, 2008) in order to determine if the effect of apology timing on willingness to forgive could be explained by either (or all) empathy, perceived responsibility, or closeness change. As the ANOVA indicated, the apology timing manipulation (coded as 0 = collapsed-earlier apologies, 1 = late apology) predicted willingness to forgive and each of the potential mediators. When all four predictor variables were entered (apology timing manipulation, empathy, perceived responsibility, and change in closeness), the regression equation accounted for substantial variance in forgiveness, $R^2 = .20$, $F(4, 132) = 8.16$, $p < .001$. With all mediators in the model, as shown in Figure 2, only the coefficient associated with closeness change remained significant, $\beta = -.25$, $t(135) = -2.82$, $p = .005$. Neither the apology manipulation, $\beta = -.07$, $t(135) = -.84$, $p = .40$, empathy, $\beta = .17$, $t(135) = 1.90$, $p = .06$, or perceived responsibility, $\beta = -.14$, $t(135) = -1.43$, $p = .16$, significantly predicted willingness to forgive. The bootstrapping technique (with 5000 iterations) was then used to determine whether the indirect effect of the manipulation on willingness to forgive was due to greater changes in relationship closeness. The indirect effect for change in closeness was estimated to lie between $-.30$ and $-.01$ with 95% confidence. As zero is not included in the 95% confidence interval, the indirect effect is significantly different from zero at $p < .05$ (two tailed).

Figure 2. Mediation model for time to apologize and willingness to forgive in Experiment 1. Coefficients with an asterisk indicate significant beta weights, $p < .05$. Coefficients with a double asterisk indicate significant beta weights, $p < .01$.

Discussion

The results of Experiment 1 confirm the central hypothesis that willingness to forgive is related to apology timing. In particular, as the temporal distance between the transgression and the ensuing apology increases, forgiveness is less likely to be given. As expected, the apology that was given well after the transgression produced significantly less forgiveness when compared to those that came earlier. Furthermore, as more time elapsed between the transgression and when the offender apologized, victims began to feel less empathy, perceived the offender to be more responsible for the harm done, and experienced a decrease in relationship closeness. Greater changes in relationship closeness mediated the effect of apology timing on willingness to forgive.

People are less likely to forgive when they receive an apology that is offered well after the transgression has occurred. Frantz and Bennis (2005) had suggested that it could also be too early to apologize due to the fact that victims did not feel they had been heard and understood by the transgressor. Contrary to this perspective, no difference was found in willingness to forgive when comparing the apology that came immediately after the transgression and the moderately timed apology. It is possible that the discrepancy in findings could be explained by the different ways in which the timing of apologies was defined and manipulated in each study. Whereas Frantz and Bennis (2005) categorized their apology time based on whether or not the participant had a chance to express their feelings regarding the offence, the current research scenarios manipulated the actual time at which the apology was offered. Perhaps it is never too early to apologize to receive forgiveness, specifically, any apology may be better than no apology at all, and even an early apology may indicate a sincere regret for the harm done.

Although the results of Experiment 1 provided evidence that a late apology substantially reduced willingness to forgive, results should be interpreted with caution as a hypothetical transgression scenario was used. Participants may have responded to the hypothetical situation by constructing how they think they would feel and react, which may be different from how they would actually behave when confronted by such a transgression (Wilson & Gilbert, 2003). To determine if similar results would be found in real-life situations, a second experiment was conducted in which participants described an interpersonal transgression they had experienced. Thereafter, participants were asked to indicate if an apology was offered and if so, the time frame in which the apology was offered following the transgression (too early, just right, or too late).

Experiment 2

In Experiment 2, it was of interest to determine how apology timing influences participants' willingness to forgive a real life transgression as well as the potential moderating effect of transgression severity. Indeed, while some transgressions are relatively minor (e.g., a friend being late for a coffee date), others can be extremely serious (e.g., experiencing infidelity in your romantic relationship). The ease with which the transgressed party can forgive the transgressor might, therefore, also be dependent on variations in transgression severity. After an interpersonal conflict, people often wish to repair the harm done and return the relationship to a positive state. Forgiving someone for harm that they have caused is an essential part of reconciliation after conflict. However, forgiveness does not always come easily, especially in the case of serious conflicts. Forgiving a friend who is late or forgets to call is much easier for most people than forgiving an unfaithful lover.

When the harm in question is relatively minor, apologizing is often more successful (Bennett & Earwaker, 1994; Ohbuchi, Kameda, & Agarie, 1989). For example, Bennett and Earwaker (1994), investigated apology effectiveness when participants read hypothetical scenarios in which the severity of the transgression was manipulated. Specifically, participants read that the victim had asked the offender to look after their watch. The watch either remained undamaged (low severity) or became damaged (high severity). Subsequently, participants indicated that an apology was more effective at returning the relationship to its pre-transgression status after the transgression that was mildly severe in comparison to the more severe outcome. Furthermore, apology acceptance was negatively correlated with severity. To this end, Experiment 2 assessed

the impact of transgression severity and its interaction with the timing of an apology on willingness to forgive.

It was hypothesized that the severity of the transgression would influence a victim's willingness to forgive such that forgiveness would be less likely when the transgression was more severe. It is also predicted that there should be an interaction between apology timing and transgression severity such that, forgiving will be least likely for severe transgressions and poorly timed apologies (i.e., too early, too late, or not at all). Not apologizing following a transgression can have damaging consequences, from increasing aggressive tendencies towards the transgressor (Ohbuchi et al., 1989), to creating negative impressions of them as a person (Darby & Schlenker, 1982, 1989). Since a severe transgression has been shown to reduce willingness to forgive, and not apologizing negatively impacts post-transgression relationships, it is expected that an ill-timed apology for a serious harm will have the greatest damaging effect on the forgiveness process. In Experiment 2, I also assessed two additional potential mediators of the hypothesized effect of apology timing on willingness to forgive. Specifically, the victim's impression of the transgressor and how heard and understood the victim felt following the transgression were examined.

Apologizing can help to minimize the effects of a transgression and in doing so bring about more favourable appraisals of the transgressor (Schlenker & Darby, 1981). Past research has shown an association between apologies, a victims' impression of the transgressor, and forgiveness. Specifically, people who evaluated the transgressor as more likable and as having more honest explanations for what had occurred were more forgiving of their transgressor (Darby & Schlenker, 1982). Similar results were found for

children's reactions to transgressions (Darby & Schlenker, 1989). Moreover, Ohbuchi and colleagues (1989) found that when an apology was offered following the transgression, participants viewed the transgressor in a more positive light. Given that apologies have been shown to impact impression of the transgressor and a positive impression in turn can lead to increases in forgiveness, it is probable that timing of the apology can impact these appraisals. It is expected that when the apology comes too soon or too long after the transgression there will be a decrease in positive appraisals of the transgressor and this will in turn reduce willingness to forgive.

Lastly, when an apology occurs immediately following the transgression, the hurt party may not feel the transgressor truly understands why what he or she did was hurtful (Frantz & Bennis, 2005). That feeling should make the transgression more difficult to forgive, as the victim may feel the transgressor does not fully appreciate the damage they have done to the relationship. As such, the victim's impression of how heard and understood they felt following the transgression was also assessed as a potential mediator between apology timing and willingness to forgive.

In Experiment 2, it was hypothesized that levels of forgiveness would be highest for apologies that were received at what participants perceived as being just the right time after the transgression. Furthermore, the severity of the transgression, whether it was major or minor, would influence the relationship between the timing of the apology and forgiveness of the relational transgression, that is, it was expected that more severe transgressions with poorly timed apologies would have lower ratings of willingness to forgive. In addition, a variety of potential mediators were again proposed to mediate the relationship between apology timing and forgiveness including empathy, perceived

responsibility, and relationship closeness, with the addition of the victim's impression of the transgressor and how heard and understood the victim felt.

Methods

Participants

One hundred and ninety three introductory psychology students at Carleton University (Male = 51, Female = 142) participated in exchange for 0.25% in grade-raising credit towards their introductory psychology course for participating. Participants ranged in age from 18 to 52 years ($M = 20.89$, $SD = 4.81$).

Procedure and Measures

The measures and procedure for Experiment 2 were similar to those in Experiment 1, however participants were asked to recall a personal transgression and apology timing was both manipulated and measured. Participants were told that the study concerned interpersonal relations and conflict, and were asked to consent to participate. Upon consent, they were automatically directed to the online study. First, a short demographics questionnaire was completed. Thereafter, they were asked to think of a situation in the past when they had experienced either a major or minor transgression by a friend, for which they may or may not have received an apology. Those in the conditions in which an apology was offered were asked to describe either an apology that came immediately after, shortly after, or well after the transgression. Participants were asked to describe the incident in as much detail as possible (Appendix B). Subsequently, participants were also asked to indicate their subjective ratings regarding aspects of the incident (e.g., the hurtfulness and severity of the transgression and the offender's responsibility and remorse). All dependent variables assessed in Experiment 1 were

assessed in Experiment 2, with the addition of the impression of the transgressor and how understood participants felt (Appendix C).

Specifically, participants were asked to rate the transgressor on three items about their personality (*sincere, responsible, and careless*) on a Likert-scale anchored at 1 (*not like them*) to 7 (*very like them*). The negative item was reverse scored and higher scores indicated a more positive impression ($\alpha = .79$). A single item assessed the extent to which participants felt heard and understood following the transgression. This item was: “Indicate the degree to which you perceive your friend as having understood your feelings and point of view regarding the transgression” anchored at 1 (*not at all understood*) and 7 (*very understood*).

State forgiveness ($\alpha = .92$), empathy ($\alpha = .91$), perceived responsibility ($\alpha = .81$), and relationship closeness ($\alpha = .94$) were again assessed (Appendix C). A change in closeness from pre- to post-transgression was not used, as pre-transgression closeness could not be measured, consequently, closeness was measured with only the post-transgression score. After completing the final questionnaire, participants were presented with a full debriefing regarding the nature of the study (Appendix A).

Results

Preliminary Analyses

The dataset was examined for missing data and for potential outliers. In addition, data were examined to ensure that statistical assumptions for the planned analyses were met. Pre-screening identified 30 participants who did not provide transgression descriptions (i.e., they noted that they could not recall a transgression that met the set criteria). These cases were removed from the dataset. This brought the total participants

to one hundred and sixty three (Male = 38, Female = 125), ranging in age from 18 to 52 years ($M = 21.16$, $SD = 5.54$).

Frequency tests were also run on all measured variables. These tests revealed that all the variable total scores were within the proper range of values. MVA was conducted to check for missing data. Little's MCAR test was not significant, $\chi^2(348) = 362.38$, $p = .29$, thus the data are MCAR. As in Experiment 1, cases with missing data were kept in the dataset and were replaced with valid mean substitution. Scatterplots indicate that heterogeneity of variance and linearity are not an issue.

Initial examination of skewness and kurtosis values for forgiveness, responsibility, and closeness all indicate deviations from normality. A check of the statistical test of normality (Kolmogorov-Smirnov) provides similar results: forgiveness $D(212) = .14$, $p < .001$, closeness $D(212) = .11$, $p < .001$, and responsibility $D(212) = .075$, $p = .005$. Transformations were attempted with all variables and were unsuccessful at attaining normality and as such, the original scores were retained. Comparable results were found from the analyses with and without the transformations.

Inspection of the data did not indicate the presence of outliers on any of the measured variables. Boxplots reveal some cases that appear to possibly be influential, however the computed z-scores in the data file indicate that there are no cases greater than three standard deviations above the mean and no cases are influential according to cook's distance. Multivariate outlier analysis was performed using Mahalanobis' distance. According to the Chi Square distribution, there were no cases falling above the critical value, $\chi^2(5) = 20.52$, $p = .001$ (Tabachnick & Fidell, 2007). Collinearity statistics indicate that multicollinearity is also not an issue.

Descriptive statistics and correlation analyses were conducted. Means, standard deviations, as well as bivariate correlations are presented in Table 2. Correlations among the variables of interest were, again, in the hypothesized directions.

Table 2. *Descriptive Statistics and Intercorrelations for Experiment 2*

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9
1 Timing Manipulation	-	-	-	-	-	-	-	-	-	-	-
2 Severity	-	-	-	-	-	-	-	-	-	-	-
3 Subjective Timing	3.06	2.67	-.11	-.01	-	-	-	-	-	-	-
4 Forgiveness	5.28	1.56	.10	-.23**	-.21**	-	-	-	-	-	-
5 Responsibility	5.05	1.25	.02	.21**	.28**	-.37**	-	-	-	-	-
6 Empathy	3.32	1.59	.10	-.06	-.17*	.56**	-.26**	-	-	-	-
7 Closeness	4.35	1.97	.11	-.07	-.15	.68**	-.33**	.61**	-	-	-
8 Impression	4.67	1.60	.01	-.10	-.25**	.50**	-.44**	.50**	.50**	-	-
9 Feeling Understood	4.58	2.01	-.02	-.09	-.08	.28**	-.17*	.15	.30**	.30**	-

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

Transgression Severity

The manipulation of transgression severity was successful, as one-way ANOVA indicated the severity that participants reported differed by condition, $F(1,159) = 15.21$, $p < .001$, $\eta_p^2 = .09$. Specifically, participants in the major transgressions ($M = 4.68$, $SD = 1.87$) rated their experienced transgression as more serious than those in the minor transgression condition ($M = 3.56$, $SD = 1.79$). The results did not reveal an interaction between severity of the transgression and the time at which the apology was received on any measured variable, $ps > .13$.

Apology Timing

Manipulation. Participants were asked to discuss either a transgression in which they did not receive an apology or a transgression in which the apology came immediately after, shortly after, or well after the transgression. This manipulation was unsuccessful, as a one-way ANOVA revealed that there are no significant differences in timing, $F(2, 156) = 1.60$, $p = .21$, $\eta_p^2 = .02$, as can be seen in Table 3.

Table 3. *Descriptive Statistics for Timing Manipulation*

	<i>M</i>	<i>SD</i>
Just After (N = 59)	3.78 _a	2.01
Shortly After (N = 52)	4.12 _a	2.06
Well After (N = 48)	4.50 _a	2.16

Note. Means with different subscripts are significantly different from each other ($p < .05$).

As the manipulation was ineffective, participants' subjective judgments of the timing of the apology were then assessed.

Subjective Measure. Those who indicated they had received an apology were asked to indicate the timing of that apology on a seven-point Likert scale anchored at 1

(*too early*), 4 (*just right*), and 7 (*too late*). Participants who rated a 1 or a 2 were categorized as the “Too Early” group, a 4 the “Just Right” group, and a 6 or 7 the “Too Late” group⁴. ANOVA indicated that there are no significant differences among the no apology, early apology and late apology groups on any of the measured variables, $ps > .06$. As such, these groups were collapsed and compared with the apology that was perceived as being “just right” for all subsequent analyses.

Forgiveness. A two-way ANOVA (Apology Timing: Just Right vs Collapsed X Transgression Severity: Major vs Minor) was conducted on willingness to forgive. There was a main effect of apology timing, $F(1, 159) = 26.71, p < .001, \eta_p^2 = .14$, as well as a significant main effect of transgression severity, $F(1, 159) = 3.94, p = .05, \eta_p^2 = .02$. Participants who received an apology they perceived to be just right were considerably more forgiving of the transgressor ($M = 6.24, SD = .79$) than those in the collapsed group ($M = 4.93, SD = 1.63$). Furthermore, participants who described a severe transgression were less forgiving ($M = 4.93, SD = 1.68$) than participants who described a minor transgression ($M = 5.64, SD = 1.34$). There was no significant interaction between apology timing and transgression severity, $F(1, 159) = 2.34, p = .13, \eta_p^2 = .01$.

Mediator Variables

Empathy. Empathy was analyzed with a two-way (Apology Timing: Just Right vs Collapsed X Transgression Severity: Major vs Minor) between-participants ANOVA. The results indicated a significant main effect of apology timing, $F(1, 159) = 16.13, p < .001, \eta_p^2 = .09$, but a non-significant main effect of transgression severity, $F(1, 159) = .10, p = .76, \eta_p^2 = .001$. Participants expressed higher ratings of empathy for the

⁴ Participants who rated the timing as a 3 or 5 were left out of the analyses in order to create distinct cutoff between the groups. All applicable major analyses were conducted including these participants within the “Just Right” group and the results remained the same.

transgressor when they received a just right apology ($M = 4.11$, $SD = 1.48$) than participants in the collapsed conditions ($M = 3.03$, $SD = 1.54$). The interaction between apology timing and transgression severity was not significant, $F(1, 159) = .39$, $p = .53$, $\eta_p^2 = .002$.

Perceived responsibility. A two-way ANOVA revealed a main effect of the time at which an apology is given on perceptions of responsibility. Participants viewed the transgressor as being less responsible when the apology was perceived as being timed just right ($M = 4.32$, $SD = 1.29$) than when compared with the collapsed times ($M = 5.32$, $SD = 1.13$), $F(1, 159) = 22.67$, $p < .001$, $\eta_p^2 = .13$. The analysis also revealed that perceived responsibility was influenced by the severity of the transgression. Specifically, participants rated the transgressor as more responsible when the transgression was major ($M = 5.31$, $SD = 1.07$) as compared to when the transgression was less severe ($M = 4.78$, $SD = 1.37$), $F(1, 159) = 9.72$, $p = .002$, $\eta_p^2 = .06$. The interaction between apology timing and transgression severity was not significant for perceived responsibility, $F(1, 159) = 2.15$, $p = .15$, $\eta_p^2 = .01$.

Closeness. Closeness was analyzed with a two-way (Apology Timing: Just Right vs Collapsed X Transgression Severity: Major vs Minor) between-participants ANOVA. The results indicated a significant main effect of apology timing, $F(1, 159) = 18.15$, $p < .001$, $\eta_p^2 = .10$, but a non-significant main effect of transgression severity, $F(1, 159) = .03$, $p = .86$, $\eta_p^2 < .001$. Participants expressed higher ratings of post-transgression relationship closeness when they perceived the apology as being timed just right ($M = 5.37$, $SD = 1.30$) than participants in the collapsed conditions ($M = 3.97$, $SD = 1.97$). The

interaction between apology timing and transgression severity was not significant for relationship closeness, $F(1, 159) = 1.45, p = .23, \eta_p^2 < .009$.

Additional Mediator Variables

Impression. The victim's impression of the transgressor was also assessed with a two-way (Apology Timing: Just Right vs Collapsed X Transgression Severity: Major vs Minor) between-participants ANOVA. As expected, participants appraised the transgressor in a more positive light ($M = 5.10, SD = 1.37$) when they perceived the apology as being delivered at just the right time after the transgression whereas, the collapsed comparison group provided more negative impression ratings ($M = 4.10, SD = 1.60$), $F(1, 159) = 13.09, p < .001, \eta_p^2 = .08$. However, the results revealed a non-significant main effect of transgression severity, $F(1, 159) = 1.46, p = .23, \eta_p^2 = .009$, as well as a non-significant interaction between apology timing and transgression severity, $F(1, 159) = .14, p = .71, \eta_p^2 = .001$.

Feeling understood. A two-way ANOVA (Apology Timing: Just Right vs Collapsed X Transgression Severity: Major vs Minor) was conducted and the results revealed a significant main effect of apology timing, $F(1, 159) = 11.16, p = .001, \eta_p^2 = .06$, but a non-significant main effect of transgression severity, $F(1, 159) = 1.52, p = .22, \eta_p^2 = .01$. Participants who received an apology perceived to be timed just right following the transgression felt significantly more heard and understood by the transgressor ($M = 5.43, SD = 1.53$) than those in the collapsed group ($M = 4.26, SD = 2.08$). There was no significant interaction between apology timing and transgression severity for feeling heard and understood, $F(1, 159) = .41, p = .53, \eta_p^2 = .003$.

Mediation Analysis for Transgression Severity

As transgression severity was found to influence perceived responsibility for the transgression, this relationship was explored further. To determine if the effect of transgression severity on willingness to forgive a harm doer could be explained by perceived responsibility of the harm doer, Baron and Kenny's (1986) procedure for testing mediation was employed. As the ANOVA indicated, the transgression severity (coded as 0 = minor, 1 = major) predicted willingness to forgive and perceived responsibility. It was further established that responsibility was negatively related to forgiveness, $\beta = -.37$, $SE = .09$, $t(162) = -5.10$, $p < .001$, specifically, the more responsible participants perceived the transgressor as being, the less forgiving they were. When both predictor variables were entered in the analysis, the regression equation accounted for a significant amount of variance, $R^2 = .16$, $F(2, 160) = 15.58$, $p < .001$. With the mediator in the model, as shown in Figure 3, the coefficient associated with perceived responsibility remained significant, $\beta = -.34$, $t(162) = -4.59$, $p < .001$, however, the relationship between transgression severity and forgiveness decreased, $\beta = -.16$, $SE = .23$, $t(162) = -2.13$, $p = .04$. To determine whether the indirect effect of transgression severity on willingness to forgive, via perceived responsibility, was significantly different than zero the bootstrapping technique for small samples recommended by Preacher and Hayes (2008) was used. For perceived responsibility, the indirect effect was estimated to lie between $-.42$ and $-.06$ with a 95% confidence interval. Because zero is not in the 95% confidence interval for the mediator, the indirect effect is significantly different from zero at $p < .05$ (two tailed).

Figure 3. Model of perceived responsibility as a mediator between transgression severity and forgiveness. Coefficients with an asterisk indicate significant beta weights, $p < .05$. Coefficients with a double asterisk indicate significant beta weights, $p < .01$. Coefficients with a triple asterisk indicate significant beta weights, $p < .001$.

Alternative mediation models assessing reversed directional paths between the mediator and the dependent variable were also evaluated. For instance, there was a possibility that an increase in forgiveness due to the less severe transgression made people less likely to perceive the offender as responsible for the transgression. In fact, when this alternate path through forgiveness to responsibility was tested, transgression severity was no longer a significant predictor of perceived responsibility, $B = .13$, $SE = .19$, $t(162) = -1.78$, $p = .076$, with 95% bias corrected confidence intervals of .06 to .36. As such, it is possible that forgiveness preceded perceptions of responsibility for the transgression however past theory has indicated a strong relationship between

responsibility and forgiveness in the proposed directions (Boon & Sulsky, 1997; Bradfield & Aquinos, 1999; Wohl & Pritchard, 2008).

Multiple Mediation Analyses for Apology Timing

Because the ANOVAs indicated that the time at which an apology was given reliably was correlated with all five of these variables, all were included as possible mediators of the relationship between apology timing and willingness to forgive. Therefore, the apology timing (coded as 0 = just right apology, 1 = collapsed apology groups), empathy, perceived responsibility, relationship closeness, impression of the transgressor, and feeling understood were entered in a regression equation with forgiveness as the dependent variable, $R^2 = .54$, $F(6, 155) = 30.21$, $p < .001$. As can be seen in Figure 4, the coefficients associated with both empathy, $\beta = .17$, $t(160) = 2.34$, $p = .02$, and relationship closeness, $\beta = .44$, $t(160) = 5.97$, $p < .001$, remained significant predictors of willingness to forgive. Perceived responsibility, $\beta = -.08$, $t(160) = -1.30$, $p = .19$, impression of the transgressor, $\beta = .12$, $t(160) = 1.68$, $p = .09$, and feeling understood, $\beta = .04$, $t(161) = .75$, $p = .46$, failed to predict forgiveness. Importantly, the time at which the apology was given, $\beta = -.11$, $t(160) = -1.72$, $p = .09$, no longer predicted willingness to forgive.

The bootstrapping technique (with 5000 iterations) outlined by Preacher and Hayes (2004, 2008) for small samples was then used to determine whether the indirect effect of apology timing on forgiveness, via empathy as well as relationship closeness was significantly different than zero. For empathy, the indirect effect was estimated to lie between $-.46$ and $-.03$ with a 95% confidence interval. For post-transgression relationship closeness, the indirect effect was estimated to lie between $-.84$ and $-.24$, again with a 95%

confidence interval. Because zero is not in the 95% confidence interval for empathy or relationship closeness, the indirect effects for both mediators are indeed significantly different from zero at $p < .05$ (two tailed).

Figure 4. Full mediation model for time to apologize and willingness to forgive.

Coefficients with an asterisk indicate significant beta weights, $p < .05$. Coefficients with a double asterisk indicate significant beta weights, $p < .01$. Coefficients with a triple asterisk indicate significant beta weights, $p < .001$.

Discussion

The results of this experiment provide further support for the link between the time at which an apology is offered and willingness to forgive following an interpersonal

transgression. Consistent with Experiment 1, in the real world when an apology is offered at just the right time, higher levels of forgiveness are found. It can be both too late and too early to apologize, decreasing the likelihood that one will be forgiven after harm is caused. Extending the findings from Experiment 1, severity of the transgression also influenced the forgiveness process. Participants who described a severe transgression were less forgiving than those describing transgressions they viewed as minor. Interestingly, no interaction between apology timing and severity emerged in this experiment. It is possible that this lack of relationship could have occurred because all transgressions are similarly affected by apologies and the time at which they are offered. For example, it may be that when an apology is badly timed, either too early or too late, regardless of the severity of the harm done, the apology will be ineffective at producing forgiveness. One possible explanation for this is that the ill-timed apology enhances the severity of the transgression, possibly making a minor transgression seem more severe and as such, the timing of the apology affects both transgressions equally.

Importantly, perceived responsibility mediated the relationship between transgression severity and willingness to forgive. Specifically, as transgression severity increased, willingness to forgive decreased to the extent that the transgressor was held responsible for the harm committed. This is not surprising given the extant literature that suggests both transgression severity and attributions of responsibility are negatively related to forgiveness (see Boon & Sulsky, 1997; Schlenker & Darby, 1981; Wohl & Pritchard, 2008). Before the forgiveness process can begin, people must attribute responsibility for the harm that has been done, and the more severe the harm, the more responsibility the victim will attribute to the transgressor. This result supports past

research, which indicates that blame attributions are significantly related to revenge cognitions (Bradfield & Aquino, 1999). It seems that increased perceived responsibility decreases willingness to forgive, which has been associated with reduced motivations to seek revenge (McCullough et al., 1997).

Mediation analysis also revealed that when the apology was perceived as being timed just right (compared to the collapsed comparison) forgiveness increased to the extent that participants felt empathy for the transgressor and perceived the post-transgression relationship to be close. As in Experiment 1, perceived responsibility did not uniquely account for the relationship between apology timing and forgiveness above and beyond empathy and closeness, nor did the additional possible mediating variables, impression of the transgressor and feeling understood, that were included in Experiment 2. These findings from Experiment 2 are similar to previous literature regarding the effect that apologies have on empathy and forgiveness (Fincham et al., 2002; McCullough et al., 1997; 1998). Specifically, empathy has been shown to mediate the relationship between apologies and forgiveness such that an apology leads to increased empathy which in turn facilitates willingness to forgive. The results from Experiment 2 extend the literature by suggesting that an important consideration in repairing a relationship following a transgression is not only to apologize and increase empathy, but to apologize at the right time to have the most optimal effect on empathy and relationship closeness.

General Discussion

The current research sought to investigate how the time at which an apology is given (or not given) following a transgression impacts willingness to forgive. Across both studies, the perceptions of a just right apology time increased the likelihood of

forgiveness. The results suggest evidence for an ideal time to apologize following a transgression, and when an apology comes too soon before or too long after this time frame, apologizing becomes ineffective.

In Experiment 1, participants were asked to respond to a hypothetical transgression scenario. In that scenario, the transgressor either apologized immediately after, shortly after, or well after the transgression. As predicted, participants were more forgiving of the transgressor when the apology came earlier (collapsed condition) than when the apology was offered well after the harm occurred. The effect of apology timing on willingness to forgive was mediated by the degree to which relationship closeness changed.

In Experiment 2 participants described a transgression they had experienced with someone close to them and provided subjective ratings of the timing of the apology. When participants rated the timing as being just right, they were more forgiving than when they perceived the apology as occurring too early or too late. Additionally, when the transgression was more severe, participants were less forgiving. Contrary to expectations, there was no interaction between apology timing and transgression severity. However, the effect of severity on forgiveness was mediated by perceived responsibility. Importantly, the effect of apology timing on forgiveness was again mediated by post-transgression relationship closeness and also by empathy.

Apology Timing

A key finding in the present research was that an apology that was perceived as being offered at just the right time was most effective (compared to no apology as well as an early or late apology) at producing forgiveness. Apologies that are perceived as being

too early, too late, or not occurring at all are all less effective in the forgiveness process than one that is perceived as being timed just right. This is an important finding because previous research has not considered temporally early, moderate, and late apologies together in one study. Essentially, following an interpersonal harm, the transgressor needs to be cautious that they do not apologize too quickly or wait too long to apologize, as this may reduce the victim's willingness to forgive.

Interestingly, the results of both experiments diverge from those found by Frantz and Bennigson (2005). Whereas they found a late apology is better than one that comes early, Experiment 2 showed that an early apology did not differ from a late apology in facilitating forgiveness. A potential explanation for this is that Frantz and Bennigson defined an early apology as one that came before the victim had expressed their feelings with regards to the transgression, whereas the late apology came after the victim had expressed themselves. In the present research participants provided their perceptions of both early and late apologies. Specifically, there was a difference in what was being examined, either feeling heard and understood or the subjective experience of the temporal distance of the apology from the transgression, and this could be the source of the these inconsistent findings.

It is interesting to note that although no difference was found in Experiment 1 between the early and moderately timed apologies, the too early apology was shown to negatively impact forgiveness in Experiment 2 much the same as the too late apology. It is possible that participants were not able to accurately predict how they might respond to a hypothetical apology that came immediately after the transgression. Experiment 2 allowed participants to recall a transgression that they directly experienced and indicate

the timing of the apology. Thus, the variance in results between Experiment 1 and 2 might be attributed to the methodology employed.

Social psychology has been criticized for not focusing on observable human behaviours, and relying on questionnaires and hypothetical scenarios (Baumeister, Vohs, & Funder, 2007). Moreover, studies have demonstrated that individuals inaccurately predict their own feelings and behaviour when compared to actual observable behaviour (Wilson & Gilbert, 2003). Importantly, the current findings regarding the impact of apology timing on the forgiveness process have been demonstrated with both a vignette and the participants own real-life experiences.

Transgression Severity

In addition to the relationship found between apology timing and forgiveness, the results of Experiment 2 revealed transgression severity also influenced the forgiveness process through perceived responsibility. Boon and Sulsky (1997) demonstrated that willingness to forgive decreases as the severity of the offence and blame attributions increase. Furthermore, they found that transgression severity was directly related to perceptions of blame following a transgression. Finally, it has also been suggested that following an interpersonal transgression, attributing responsibility for the incident happens just prior to making decisions regarding forgiveness (see Fincham, 2000; Fincham, Paleari, & Regalia, 2002; Schlenker & Darby, 1981). The current experiments lend support to this previous research (e.g., Bennett & Earwaker, 1994; Ohbuchi et al., 1989) regarding transgression severity, responsibility, and forgiveness. In Experiment 2 it was hypothesized that the severity of the transgression would play a role in forgiveness. When the transgression was more severe, the participant's willingness to forgive

subsequently decreased. Interestingly, this effect was mediated by perceived responsibility of the transgressor for the incident. It seems that the more harm people experience at the hands of an offender leads to greater perceptions of responsibility for the event and this, in turn, diminishes a victim's willingness to forgive.

Mediation of the Apology Timing and Forgiveness Relationship

Past research has also shown an association between one's willingness to forgive following a transgression and relationship factors such as closeness and commitment (Exline et al., 2004; Finkel et al., 2002; McCullough et al., 1998; Tsang et al., 2006). In both experiments, closeness was shown to have a role in mediating the relationship between apology timing and forgiveness. In Experiment 1, participants who received a late apology reported greater change in ratings of closeness with their friend than participants who received an earlier apology. This decrease in closeness led to reduced forgiveness. Experiment 2 replicated these findings such that post-transgression closeness ratings were higher for participants who reported a just right apology compared to the other apology times. Apologizing is critical following an incident in which a person harms someone close to them. Not offering an apology within a certain amount of time may lead the victim to feel the relationship is not important enough to the transgressor to warrant an appropriate apology. As a result this may lead to reductions in relationship closeness and possibly termination of the relationship.

Contrary to the results in Experiment 1, empathy was a unique predictor of willingness to forgive when included in the mediation model in Experiment 2. The differing results might be due to methodological differences between the two experiments. In Experiment 1, participants may not have been able to appreciate how

they would truly react in the context or they found it difficult to feel empathy for a transgressor following a hypothetical transgression. Conversely, when a real transgression is the focus, participants can reflect on the amount of empathy they hold for their real transgressor. Indeed, in Experiment 2, the effect of apology timing on forgiveness was mediated by empathy. These results reveal that not only can the mere presence of an apology increase empathy for the transgressor, but the perceived time at which the apology is offered can influence willingness to forgive as well. The apology participants viewed as being offered at just the right time increased empathy for the transgressor that, in turn, may have reduced motivations to seek revenge and avoid the transgressor. These results are in line with previous research that has shown empathy to be a mediator of the relationship between apologies and forgiveness (Fincham et al., 2002; McCullough et al., 1997, 1998).

Both transgressor responsibility (Boon & Sulsky, 1997; Bradfield & Aquinos, 1999; Wohl & Pritchard, 2008) and impression of the transgressor (Darby & Schlenker, 1982; 1989; Ohbuchi et al., 1989; Schlenker & Darby, 1981) have been shown to impact one's willingness to forgive. While each of these variables mediate the relationship between time to apologize and willingness to forgive when entered as the only possible mediator in Experiment 2, neither uniquely contributed to explaining this relationship when assessed simultaneously with empathy and relationship closeness. The fact that perceived responsibility did not account for any unique variance above and beyond relationship closeness and empathy does not discount the existing research that has highlighted the importance of offender responsibility for apologies and forgiveness (see Boon & Sulsky, 1997; Bradfield & Aquinos, 1999; Wohl & Pritchard, 2008). The

findings of this research merely suggest that perceived responsibility does not uniquely predict this relationship when examined simultaneously with closeness and empathy. The results of the current research suggest that interpersonal factors, like empathy and relationship closeness, are more likely to motivate a person to forgive than individual factors specific to the transgressor or the victim, such as responsibility, impressions, and feeling understood.

In summary, this research revealed that if people wait too long after having hurt someone close, they may inadvertently worsen the situation. When an apology is offered too soon or too long after a transgression other psychological mechanisms activate and can decrease the effectiveness of the apology. For example, empathy for the transgressor decreases, the victim perceives the transgressor as being more responsible, and relationship closeness starts to decline. The victim also begins to have an increasingly negative opinion about the person who has harmed them and does not feel as though their feelings have been understood. What is more, this may lead to a complete closing off of the relationship and if there is no relationship left to repair, forgiveness is less likely to occur. Essentially, apologizing too late could lead to ruinous results for the restoration of interpersonal relationships.

Limitations and Future Directions

Several limitations of the research should be noted. First, the sample used for this research was undergraduate university students and as such, the results of this study may not generalize to other populations. Specifically, research on forgiveness has previously demonstrated a difference in willingness to forgive based on age. For example, Girard and Mullet (1997), found an overall increase in willingness to forgive as age increased

from adolescence, through middle age, and into old age. As such, the results of the current research may vary if an older population was tested. However, because there appears to be variance in younger people's willingness to forgive, the younger sample may have been at the optimal age to detect differences in apology timing. Older people could be more willing to forgive, regardless of timing, because of their greater overall propensity to forgive. Future research would benefit from the use of more generalized samples, including having a larger variation in age.

A further caveat is the lack of information, in Experiment 2, regarding how typical of an event the recalled transgression was in the victim-transgressor relationship. Perhaps this was not the first time that the victim has experienced this type of harm by the transgressor and their responses may reflect a build up of reactions to these incidents. There may be a decrease in forgiveness for transgressions that are repetitive behaviours in the relationship or there could be an increased willingness to forgive if this is something that the victim has come to see as an unavoidable aspect of the relationship with this person. Further research regarding apologies and forgiveness would benefit from including items that assess the frequency of the transgression in order to answer these queries.

Having baseline closeness and impression measures could also have been beneficial when investigating post-transgression changes in Experiment 2. These pre-transgression factors would offer more accurate insights into how the transgression and subsequent apology altered the relationship. Conducting longitudinal research may provide a better understanding of the full impact transgressions and apologies have on people.

Conclusions

Forgiving plays a major role in interpersonal relationships and as such, it is important to understand what factors, such as apology timing, can affect this process. The current research provides a stepping stone to understanding why an apology offered at the right time might be most effective in facilitating forgiveness. In both experiments the possible mediating effects of variables related to apologies and forgiveness were also assessed.

The present research supports the main hypothesis that the time at which an apology is offered can lower a person's willingness to forgive following an interpersonal transgression. Furthermore, the findings were comparable with both the hypothetical transgression scenario and when real-life transgressions were described. People's willingness to forgive was associated with the time at which an apology was given but also by the severity of the transgression. In addition, the relationship between perceived apology timing and willingness to forgive was mediated by a variety of variables that have been shown previously to impact interpersonal forgiving, specifically empathy and relationship closeness.

The process of forgiving is a complex one and apologies are a crucial element in this process as the transgressor tries to make amends. The results presented provide additional insights into the purpose of apologies and their effect on forgiving. Transgressions in interpersonal relationships are often inevitable. It appears that apology timing has important implications for post-transgression relationships. An important consideration is that there is a window of opportunity that exists in which an apology is

most effective. Apologies that occur outside this window negatively impact the relationship and reduce willingness to forgive following an interpersonal transgression.

References

- Aron, A., Aron, E. N., & Smollan, D. (1992). Inclusion of other in the self scale and the structure of interpersonal closeness. *Journal of Personality and Social Psychology*, 63, 956-612.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51, 1173-1182.
- Baumeister, R. F., Vohs, K. D., Funder, D. C. (2007). Psychology as the science of self-reports and finger movements: Whatever happened to actual behaviour? *Perspectives on Psychological Science*, 2, 396- 403.
- Bennett, M. & Earwaker, D. (1994). Victims' responses to apologies: The effects of offender responsibility and offence severity. *The Journal of Social Psychology*, 134, 457-464.
- Boon, S. D., & Sulsky, L. M. (1997). Attributions of blame and forgiveness in romantic relationships: A policy-capturing study. *Journal of Social Behavior and Personality*, 12, 19-44.
- Bradfield, M., & Aquino, K. (1999). The effects of blame attributions and offender likeableness on forgiveness and revenge in the workplace. *Journal of Management*, 25, 607-631.
- Brown, R. P., & Phillips, A. (2005). Letting bygones be bygones: Further evidence for the validity of the tendency to forgive scale. *Personality and Individual Differences*, 38, 627-638.
- Coke, J. S., Batson, C. D., & McDavis, K. (1978). Empathic mediation of helping: A two-stage model. *Journal of Personality and Social Psychology*, 36, 752-766.

- Couch, L. L., Jones, W. H., & Moore, D. S. (1999). Buffering the effects of betrayal: The role of apology, forgiveness, and commitment. In J. M. Adams & W. H. Jones (Eds.), *Handbook of commitment and relational stability* (pp. 451- 469). New York: Plenum Press.
- Darby, B. W. & Schlenker, B. R. (1982). Children's reactions to apologies. *Journal of Personality and Social Psychology*, 43, 742-753
- Darby, B. W. & Schlenker, B. R. (1989). Children's reactions to transgressions: Effects of the actor's apology, reputation and remorse. *British Journal of Social Psychology*, 28, 353-364.
- Eaton, J., Struthers, C. W., Shomrony, A., & Santelli, A. G. (2007). When apologies fail: The moderating effect of implicit and explicit self-esteem on apology and forgiveness. *Self and Identity*, 6, 209-222.
- Enright, R.D., Freedman, S., & Rique, J. (1998). The psychology of interpersonal forgiveness. In R.D. Enright & J. North (Eds.), *Exploring forgiveness* (pp. 46-62.) Madison, WI: University of Wisconsin Press.
- Exline, J. J., & Baumeister, R. F. (2000). Expressing forgiveness and repentance: Benefits and barriers. In M. E. McCullough, K. I. Pargament, & C. E. Thoresen (Eds.), *The psychology of forgiveness* (pp. 133–155). New York: Guilford.
- Exline, J. J., Baumeister, R. F., Bushman, B. J., Campbell, W. K., Finkel, E. J., (2004). Too proud to let go: Narcissistic entitlement as a barrier to forgiveness. *Journal of Personality and Social Psychology*, 87, 894–912.
- Fincham, F. D. (2000). The kiss of the porcupines: From attributing responsibility to forgiving. *Personal Relationships*, 7, 1-23.

- Fincham, F. D., & Beach, S. R. H. (2002). Forgiveness in marriage: Implications for psychological aggression and constructive communication. *Personal Relationships, 9*, 239-251.
- Fincham, F. D., Beach, S. R. H., & Davila, J. (2004). Forgiveness and conflict resolution in marriage. *Journal of Family Psychology, 18*, 72-81.
- Fincham, F. D., Beach, S. R. H., & Davila, J. (2007). Longitudinal relations between forgiveness and conflict resolution in marriage. *Journal of Family Psychology, 21*, 542-545.
- Fincham, F. D., Paleari, G. & Regalia, C. (2002). Forgiveness in marriage: The role of relationship quality, attributions and empathy. *Personal Relationships, 9*, 27-37.
- Finkel, E. J., Rusbult, C. E., Kumashiro, M., & Hanon, P. A. (2002). Dealing with betrayal in close relationships: Does commitment promote forgiveness? *Journal of Personality and Social Psychology, 82*, 956-974.
- Frantz, C. M. & Bennigson, C. M. (2005). Better late than early: The influence of timing on apology effectiveness. *Journal of Experimental Social Psychology, 41*, 201-207.
- Girard, M. & Mullet, E. (1997). Forgiveness in adolescents, young, middle-aged, and older adults. *Journal of Adult Development, 4*, 209-220.
- Goffman, E. (1971). *Relations in Public*. New York: Basic Books.
- Karremans, J. C. & Van Lange, P. A. M. (2004). Back to caring after being hurt: The role of forgiveness. *European Journal of Social Psychology, 34*, 207-227.
- Koutsos, P., Werheim, E. H., & Kornblum, J. (2008). Paths to interpersonal forgiveness: The roles of personality, disposition to forgive and contextual factors in predicting

forgiveness following a specific offence. *Personality and Individual Differences*, 44, 337-348.

Lazare, A. (2004). *On Apology*. New York: Oxford University Press.

McCullough, M. E., Pargament, K. I., & Thoresen, C. E. (2000). The psychology of forgiveness: History, conceptual issues, and overview. In M. E. McCullough, K. I. Pargament, & C. E. Thoresen (Eds.), *Forgiveness: Theory, research, and practice* (pp. 1-14). New York: Guilford Press.

McCullough, M., Rachal, K., Sandage, S., Worthington, E., Brown, S., & Hight, T. (1998). Interpersonal forgiving in close relationships II: Theoretical elaboration and measurement. *Journal of Personality and Social Psychology*, 75, 1586-1603.

McCullough, M. E., Worthington, E. L., Jr., & Rachal, K. C. (1997). Interpersonal forgiving in close relationships. *Journal of Personality and Social Psychology*, 73, 321-336.

North, J. (1998). The "ideal" of forgiveness: A philosopher's exploration. In R.D. Enright, & J. North (Eds.), *Exploring forgiveness* (pp. 150-35). New Madison, WI: University of Wisconsin Press.

Ohbuchi, K., Kameda, M., & Agarie, N. (1989). Apology as aggression control: Its role in mediating appraisal of and response to harm. *Journal of Personality and Social Psychology*, 56, 219-227.

Ohbuchi, K. & Sato, K. (1994). Children's reactions to mitigating accounts: Apologies, excuses, and intentionality of harm. *Journal of Social Psychology*, 134, 5-17.

Pedhazur, E. J. (1997). *Multiple regression in behavioral research* (3rd Ed). Orlando, FL: Harcourt Brace College Publishers.

- 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, 717-731.
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40, 879-891.
- Raaijmakers, Q.A.W. (1999). Effectiveness of different data treatments in surveys with Likert-type data: Introducing the relative mean substitution approach. *Educational and Psychological Measurement*, 59, 725-748.
- Schlenker, B. R. & Darby, B. W. (1981). The use of apologies in social predicaments. *Social Psychology Quarterly*, 44, 271-278.
- Schneider, C. (2000). What it means to be sorry: The power of apology in mediation. *Mediation Quarterly*, 17, 265-281.
- Tabachnick, B.G., & Fidell, L.S. (2007). *Using Multivariate Statistics* (5th Ed). Boston: Pearson.
- Takaku, S. (2001). The effects of apology and perspective taking on interpersonal forgiveness: A dissonance-attribution model of interpersonal forgiveness. *Journal of Social Psychology*, 141, 494-508.
- Takaku, S., Weiner, B., & Ohbuchi, K. (2001). A cross-cultural examination of the effects of apology and perspective taking on forgiveness. *Journal of Language and Social Psychology*, 20, 144-166.
- Tavuchis, N. (1991). *Mea culpa: A sociology of apology and reconciliation*. Stanford, CA: Stanford University Press.

- Tsang, J., McCullough, M. E., & Fincham, F. D. (2006). The longitudinal association between forgiveness and relationship closeness and commitment. *Journal of Social and Clinical Psychology, 25*, 448-472.
- Wernli, M. A. (2006). Interpersonal forgiveness in close peer relationships during adolescence: An examination of the role of relational self-worth and transgression history. *Dissertation Abstracts International, 67*, (3-B). (UMI No. 3211383)
- Wilson, T.D., & Gilbert, D.T. (2003). Affective forecasting. *Current Directions in Psychological Science, 14*, 131-134.
- Witvliet, C. V. O., Ludwig, T. E., & Vander Laan, K. L. (2001). Granting forgiveness or harbouring grudges: Implications for emotion, physiology, and health. *Psychological Science, 12*, 117-123.
- Wohl, M. J. A., & McGrath, A. L. (2007). The perception of time heals all wounds: Temporal distance affects willingness to forgive following an interpersonal transgression. *Personality and Social Psychology Bulletin, 33*, 1023-1035.
- Wohl, M. J. A. & Pritchard, E. T. (2008). Elements of the triangle model of responsibility affect willingness to forgiveness: How context can influence our judgments of others. In B. P. Reimann (Ed.), *Personality and social and psychology research* (pp. 75-92). New York: Nova Science Publishers, Inc.
- Worthington, E. L., Jr. (Ed.). (1998). *Dimensions of forgiveness: Psychological research and theological perspectives*. Philadelphia, PA: The Templeton Foundation Press.
- Ysseldyk, R., Matheson, K., & Anisman, H. (2007). Rumination: Bridging a gap between forgiveness, vengefulness, and psychological health. *Personality and Individual Differences, 42*, 1573-1584.

Zilzer, S. J., & Frantz, C. M., (2002). *The influence of timing on apology effectiveness:*

Exploring the phenomenon of a “too late” apology. Poster presented at the

Annual Meeting of the American Psychological Society, New Orleans, LA.

Appendices

Appendix A. Experiment 1 Informed Consent, Debriefing, and Measures

Consent Form

The purpose of an informed consent is to ensure that you understand the purpose of the study and the nature of your involvement. The informed consent must provide sufficient information so that you have the opportunity to determine whether you wish to participate in the study.

Study Title: Interpersonal Relations and Conflict Situations

Study Personnel: Dr. Michael Wohl (Faculty Sponsor, michael_wohl@carleton.ca)
Erinn Squires (M.A. Candidate, esquires@connect.carleton.ca)

Should you have any ethical concerns about this study please contact Dr. Avi Parush, Chair of the Carleton University Ethics Committee for Psychology Research, at 520-2600 ext. 6026; avi_parush@carleton.ca For any other concerns about this research or how the study was conducted, please contact Dr. Janet Mantler, Chair of the Department of Psychology, at 520-2600 ext. 4173; psychchair@carleton.ca

Purpose and Task Requirements: We are interested in your perceptions concerning interpersonal relations and conflicts. We will ask you to think about a friend and then place that friend into a conflict situation we will have you read. Afterward, you will complete a questionnaire concerning your opinions, as well as some basic demographic information about yourself. By participating in this study you are greatly assisting us to obtain basic knowledge about social issues. Be assured that your name will not be associated in any way with the research findings. Completion of this study should not take more than 30 minutes of your time and you will be given .5% toward your final grade in Introductory Psychology.

Potential risk/discomfort: We can anticipate no physical discomfort to you as a result of your participation in this study. You may, however, experience some stress when thinking about a conflict between you and your friend. Your participation is solicited but is completely voluntary. At the end of this session, you will be provided with information about the aims of our study. The information collected in this study will be used only by the study investigators. Questions about this study should be directed to either of the researchers listed above.

Anonymity/Confidentiality: All information collected in this study will remain confidential. All questionnaires collected by the researcher will be kept secure and confidential, and will be used only by the study investigators. We will be asking you for your name and student number, in order to assign your credit for participation. However, your name and student number will not be associated in any way with your data, and all your responses will be anonymous.

Right to Withdraw: Your participation in this study is entirely voluntary. At any point during the study you have the right not to complete certain questions or to withdraw with no penalty whatsoever.

I have read the above description of the study entitled “Interpersonal Relations and Conflict” The data collected will be used for research and/or teaching purposes. By clicking the “Yes” link below, I indicate that I am at least 18 years of age and that I agree to participate in the study, and this in no way constitutes a waiver of my rights.

Yes – I grant consent

No – I do not grant consent

Debriefing

Thank you for participating in this study! This post-survey information is provided to inform you of the exact nature of the research you just participated in.

What are we trying to learn in this research?

The purpose of this research is to determine if the timing of an apology will affect the outcome of interpersonal conflicts. More specifically, will individuals accept apologies that come “too late” and forgive the transgressor? We are also interested in determining if there are other factors involved that may influence this relationship

Past research has shown that apologizing is important when seeking forgiveness for an interpersonal transgression and that there are factors that can influence the effectiveness of an apology. Studies have found that forgiveness is two times more likely to occur when apologies are offered than when not and that early apologies are not as effective as those that occur after some time has passed.

In our study, some participants read a scenario in which they were asked to imagine themselves experiencing a conflict with a friend and receiving either a late apology, an early apology, or an apology shortly after the transgression. The scenarios were created by the researchers, to examine the differences in apology timing effectiveness. We wanted to see if forgiveness would vary based on the type of conflict and the apology timing. We were also interested in how other factors, such as empathy and relationship closeness may impact this relationship.

Was the incident I read about real?

No. As noted in the above section, neither of the events described in the scenarios actually occurred. These were created by the researchers specifically for the purpose of this study. However, it is possible that you may have experienced a similar situation with a friend in the past. If you are feeling distressed by the scenario and would like to talk to someone about the situation you have experienced, there are a number of highly qualified people at Health Services who can help and we suggest that you make an appointment with the Carleton University Health and Counselling Services, 520-6674.

The last piece of information we would like you to consider is that sometimes people who take part in psychology studies continue to believe that the information provided in the session is true, even though they have been told that the information provided was false. Psychologists have found that the best way to eliminate this possibility is simply to make participants aware that this might occur. In this study, some participants might continue to believe the information we provided about the transgression to be true. We want to remind you again that the researchers composed the hypothetical scenario you read and the contents of that are not based in fact.

What are our hypotheses and predictions?

I expect that participants will be more likely to forgive an apology that is “just right” than one that is “too late” or “too early”. Additionally, it is hypothesized that empathy will mediate the relationship between timing and forgiveness and so, as the temporal distance between the transgression and the apology increases, empathy will decrease, leading to a corresponding decrease in willingness to forgive.

Why is this important to scientists or the general public?

This research will contribute to psychologists’ knowledge and understanding of interpersonal relations in conflicts. Specifically, findings from this study will shed light on how people react to transgressions committed against them by a friend, and what factors affect their willingness to forgive in these situations.

What if I have questions later?

If you have any further questions about this project or concerns about how it was conducted please contact Erinn Squires (email: esquires@connect.carleton.ca), or Dr. Michael Wohl (Department of Psychology Carleton University, email: michael_wohl@carleton.ca, 520-2600 ext. 2908).

For ethical concerns regarding your treatment as a participant during this study, please contact Dr. Avi Parush, Chair of the Carleton University Ethics Committee for Psychology Research, at 520-2600 ext. 6026; avi_parush@carleton.ca. For any other concerns about this research, you may contact Dr. Janet Mantler, Chair of the Department of Psychology, at 520-2600 ext. 4173; psychchair@carleton.ca

Is there anything that I can do if I found this experiment to be emotionally draining?

We realize that the scenarios or some of the questions about them may have produced feelings of anxiety. If as a result of participating in this study you are currently feeling any anxiety or distress, or if you experience any such feelings in the future, we suggest that you make an appointment with the Carleton University Health and Counselling Services, 520-6674.

Thank you for participating in this study! We greatly appreciate your participation, but we ask that you refrain from discussing this study with potential participants (i.e., other PSYC 1001/1002 students) because their responses may be influenced.

Hypothetical Scenario

Try to imagine the described situation as clearly as possible and answer all questions based on how you would feel if the friend you mentioned above did this to you.

Your friend calls you up and says, "Hey, as Tuesday is your Birthday, why don't we go for dinner Tuesday night... 7:00pm, my treat! I'll pick you up!" When Tuesday night arrives, your friend does not show. As a result, you stay at home by yourself on your Birthday and order something in.

Optimally Timed Apology

The next day your friend calls and apologizes for not showing up the day before.

Immediate Apology

Your friend calls you later that night and apologizes for not showing up that night.

Late Apology

Two weeks later your friend calls and apologizes for not showing up that day.

Demographics Questionnaire

In order to assign you credit for your participation, we require your name and student number. This information will be separated from the rest of your questionnaire data, and will not be associated with your responses in any way. This information will be held in strict confidentiality, and will not be used for any purpose other than to assign you credit for participating.

Name: _____

Student #: _____

Age _____

Sex _____

What is your first language? _____

What is your ethnic/racial background? _____

In this study you will be asked to answer questions about your friendship with one friend. This person should not be a romantic partner and should also not be a relative. When reading the scenario and answering the questions, please keep this friend in mind.

Indicate your friend's first name here: _____

Circle your friend's gender here: Male or Female

Indicate how long you have been friends: _____

Using the scale below, indicate how close you feel you are with this friend:

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

Using the scale below, indicate how committed you feel you are to this friend:

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

Please circle the picture below that best describes your relationship with this friend.

BIDR Version 6 - Form 40A

Using the scale, write a number beside each statement to indicate how true it is.

1. My first impressions of people usually turn out to be right.
2. It would be hard for me to break any of my bad habits.
3. I don't care to know what other people really think of me.
4. I have not always been honest with myself.
5. I always know why I like things.
6. When my emotions are aroused, it biases my thinking.
7. Once I've made up my mind, other people can seldom change my opinion.
8. I am not a safe driver when I exceed the speed limit.
9. I am fully in control of my own fate.
10. It's hard for me to shut off a disturbing thought.
11. I never regret my decisions.
12. I sometimes lose out on things because I can't make up my mind soon enough.
13. The reason I vote is because my vote can make a difference.
14. My parents were not always fair when they punished me.
15. I am a completely rational person.
16. I rarely appreciate criticism.
17. I am very confident of my judgments.
18. I have sometimes doubted my ability as a lover.
19. It's all right with me if some people happen to dislike me.
20. I don't always know the reasons why I do the things I do.
21. I sometimes tell lies if I have to.
22. I never cover up my mistakes.
23. There have been occasions when I have taken advantage of someone.
24. I never swear.
25. I sometimes try to get even rather than forgive and forget.
26. I always obey laws, even if I'm unlikely to get caught.
27. I have said something bad about a friend behind his/her back.
28. When I hear people talking privately, I avoid listening.
29. I have received too much change from a salesperson without telling him or her.
30. I always declare everything at customs.
31. When I was young I sometimes stole things.
32. I have never dropped litter on the street.
33. I sometimes drive faster than the speed limit.
34. I never read sexy books or magazines.
35. I have done things that I don't tell other people about.
36. I never take things that don't belong to me.
37. I have taken sick-leave from work or school even though I wasn't really sick.
38. I have never damaged a library book or store merchandise without reporting it.
39. I have some pretty awful habits.
40. I don't gossip about other people's business.

Apology Outcome Items - Experiment 1

Think about the above situation. The items below concern your impressions or opinions of your friend's behaviour. Circle one response for each of the following questions.

1. Please rate your impression of this person on the following three personality traits:

a) Sincere

1	2	3	4	5	6	7
Not						Very
Like them						Like Them

b) Responsible

1	2	3	4	5	6	7
Not						Very
Like them						Like Them

c) Careless

1	2	3	4	5	6	7
Not						Very
Like them						Like Them

2. Was an apology received? Yes or No (if no, proceed to question 3)

3. If an apology was received, how would you perceive its timing?

1	2	3	4	5	6	7
Too Early			Just Right			Too Late

4. How sincere was this apology?

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

5. If there was no apology offered, would it be too late if the person who wronged you apologized today? Yes or No? Why?

6. To what extent do you feel the person who wronged you would be to blame for the conflict?

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

7. To what extent do you feel that the conflict would be over or would be resolved?

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

8. How serious of a conflict is this? (i.e., how badly would this affect your friendship)?

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

9. Would you say that the main cause of the event reflected an aspect of:

1	2	3	4	5	6	7
The Situation						Your Friend

10. How wrong do you think it would be for your friend to do this?

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

11. How hurt would you be by this situation?

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

12. To what extent do you think that the cause of the event had something to do with your friend:

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

13. How responsible was your friend for the event:

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

14. How realistic do you think this transgression is?

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

15. In light of the above transgression, please answer the following questions:

a. Indicate how close you feel you would be with this friend *now*:

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

b. Indicate how committed you would feel to this friend *now*:

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

c. Please circle the picture below that would best describe your relationship with this friend *now*:

1	2	3	4	5	6	7
Not sorry						Extremely sorry

1	2	3	4	5	6	7
Did Not Influence						Completely Influenced

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

1	2	3	4	5	6	7
Not controllable by your friend						Controllable by your friend

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

State Forgiveness Scale

Directions: Please read each statement carefully and consider how well it applies to you. On the seven point scale below each item, indicate your reaction, from 1 = *strongly disagree* to 7 = *strongly agree*:

1. I have forgiven this person.

1	2	3	4	5	6	7
Strongly						Strongly
Disagree						Agree

2. I feel angry toward this person.

1	2	3	4	5	6	7
Strongly						Strongly
Disagree						Agree

3. Even though his/her actions hurt me, I do not feel ill-will toward him/her.

1	2	3	4	5	6	7
Strongly						Strongly
Disagree						Agree

4. I dislike this person.

1	2	3	4	5	6	7
Strongly						Strongly
Disagree						Agree

5. I feel warmly toward this person.

1	2	3	4	5	6	7
Strongly						Strongly
Disagree						Agree

6. I hope this person gets what's coming to them for what they did to me.

1	2	3	4	5	6	7
Strongly						Strongly
Disagree						Agree

7. If I saw this person again, I would try to avoid interacting with him/her.

1	2	3	4	5	6	7
Strongly						Strongly
Disagree						Agree

Empathy Scale

Please rate each of the following six emotion words as to how much you are currently feeling the emotion towards your friend from 0 = *not at all* to 6 = *extremely*

1. Sympathetic

0	1	2	3	4	5	6
Not at all						Extremely

2. Concerned

0	1	2	3	4	5	6
Not at all						Extremely

3. Moved

0	1	2	3	4	5	6
Not at all						Extremely

4. Compassionate

0	1	2	3	4	5	6
Not at all						Extremely

5. Tender

0	1	2	3	4	5	6
Not at all						Extremely

6. Empathic

0	1	2	3	4	5	6
Not at all						Extremely

Right to Withdraw: Your participation in this study is entirely voluntary. At any point during the study you have the right not to complete certain questions or to withdraw with no penalty whatsoever.

I have read the above description of the study entitled “Interpersonal Relations and Conflict” The data collected will be used for research and/or teaching purposes. By clicking the “Yes” link below, I indicate that I am at least 18 years of age and that I agree to participate in the study, and this in no way constitutes a waiver of my rights.

Debriefing

Thank you for participating in this study! This post-survey information is provided to inform you of the exact nature of the research you just participated in.

What are we trying to learn in this research?

The purpose of this research is to determine if the timing of an apology will affect the outcome of interpersonal conflicts. More specifically, will individuals accept apologies that come “too late” and forgive the transgressor? We are also interested in determining if there are other factors involved that may influence this relationship

Past research has shown that apologizing is important when seeking forgiveness for an interpersonal transgression and that there are factors that can influence the effectiveness of an apology. Studies have found that forgiveness is two times more likely to occur when apologies are offered than when not and that early apologies are not as effective as those that occur after some time has passed.

In our study, all participants were asked to describe in detail, transgressions that have occurred in their lives. This is in order for us to examine the differences in apology timing effectiveness on the forgiveness process. We wanted to see if forgiveness would vary based on the type of conflict and the apology timing. We were also interested in how other factors, such as empathy and relationship closeness may impact this relationship.

Describing personal experiences.

If you are feeling distressed from discussing this personal experience and would like to talk to someone about the situation you have experienced, there are a number of highly qualified people at Health Services who can help and we suggest that you make an appointment with the Carleton University Health and Counselling Services, 520-6674.

What are our hypotheses and predictions?

I expect that participants will be more likely to forgive an apology that is “just right” than one that is “too late” or “too early” and also that participants will report higher levels of forgiveness for a less severe transgression. Furthermore, I believe that there will be an interaction between apology timing and transgression severity such that, forgiving will be least likely for a severe transgression in which no apology is given. Additionally, it is hypothesized that empathy and closeness will mediate the relationship between timing and forgiveness and so, as the temporal distance between the transgression and the

apology increases, empathy will decrease, as will closeness, leading to a corresponding decrease in willingness to forgive.

Why is this important to scientists or the general public?

This research will contribute to psychologists' knowledge and understanding of interpersonal relations in conflicts. Specifically, findings from this study will shed light on how people react to transgressions committed against them by a friend, and what factors affect their willingness to forgive in these situations.

What if I have questions later?

If you have any further questions about this project or concerns about how it was conducted please contact Erinn Squires (email: esquires@connect.carleton.ca), or Dr. Michael Wohl (Department of Psychology Carleton University, email: michael_wohl@carleton.ca, 520-2600 ext. 2908).

For ethical concerns regarding your treatment as a participant during this study, please contact Dr. Avi Parush, Chair of the Carleton University Ethics Committee for Psychology Research, at 520-2600 ext. 6026; avi_parush@carleton.ca. For any other concerns about this research, you may contact Dr. Janet Mantler, Chair of the Department of Psychology, at 520-2600 ext. 4173; psychchair@carleton.ca

Is there anything that I can do if I found this experiment to be emotionally draining?

We realize that describing your personal experience or some of the questions about this may have produced feelings of anxiety. If as a result of participating in this study you are currently feeling any anxiety or distress, or if you experience any such feelings in the future, we suggest that you make an appointment with the Carleton University Health and Counselling Services, 520-6674.

Thank you for participating in this study! We greatly appreciate your participation, but we ask that you refrain from discussing this study with potential participants (i.e., other PSYC 1001/1002 students) because their responses may be influenced.

Real Life Transgression Instructions

Instructions 1: Please think of a situation at some point in the past in which you experienced a major conflict with a friend. You then explained to your friend how their actions made you feel, they digested this information, and came to realize that they were wrong. They then apologized to you for their actions. Visualize in your mind the events and the interactions that occurred between you and this friend. Visualize your friend and recall the events that occurred. Please describe the conflict in as much detail as possible.

Instructions 2: Please think of a situation at some point in the past in which you experienced a minor conflict with a friend. You then explained to your friend how their actions made you feel, they digested this information, and came to realize that they were wrong. They then apologized to you for their actions. Visualize in your mind the events and the interactions that occurred between you and this friend. Visualize your friend and recall the events that occurred. Please describe the conflict in as much detail as possible.

Instructions 3: Please think of a situation at some point in the past in which you experienced a major conflict with a friend. Although you had expressed how you felt and got a chance to discuss the conflict, your friend never apologizes for the act. Visualize in your mind the events and the interactions that occurred between you and this friend. Visualize your friend and recall the events that occurred. Please describe the conflict in as much detail as possible.

Instructions 4: Please think of a situation at some point in the past in which you experienced a minor conflict with a friend. Although you had expressed how you felt and got a chance to discuss the conflict, your friend never apologizes for the act. Visualize in your mind the events and the interactions that occurred between you and this friend. Visualize your friend and recall the events that occurred. Please describe the conflict in as much detail as possible.

Instructions 5: Please think of a situation at some point in the past in which you experienced a major conflict with a friend. Although you had not expressed how you felt and did not get a chance to discuss the conflict, they immediately said they were sorry. Visualize in your mind the events and the interactions that occurred between you and this friend. Visualize your friend and recall the events that occurred. Please describe the conflict in as much detail as possible.

Instructions 6: Please think of a situation at some point in the past in which you experienced a minor conflict with a friend. Although you had not expressed how you felt and did not get a chance to discuss the conflict, they immediately said they were sorry. Visualize in your mind the events and the interactions that occurred between you and this friend. Visualize your friend and recall the events that occurred. Please describe the conflict in as much detail as possible.

Instructions 7: Please think of a situation at some point in the past in which you experienced a major conflict with a friend. Although your friend said they were sorry,

this occurred well after the transgression, long after expressing how you felt and having a chance to discuss the conflict. Visualize in your mind the events and the interactions that occurred between you and this friend. Visualize your friend and recall the events that occurred. Please describe the conflict in as much detail as possible.

Instructions 8: Please think of a situation at some point in the past in which you experienced a minor conflict with a friend. Although your friend said they were sorry, this occurred well after the transgression, long after expressing how you felt and having a chance to discuss the conflict. Visualize in your mind the events and the interactions that occurred between you and this friend. Visualize your friend and recall the events that occurred. Please describe the conflict in as much detail as possible.

Demographics Questionnaire

In order to assign you credit for your participation, we require your name and student number. This information will be separated from the rest of your questionnaire data, and will not be associated with your responses in any way. This information will be held in strict confidentiality, and will not be used for any purpose other than to assign you credit for participating.

Name: _____

Student #: _____

Age _____

Sex _____

What is your first language? _____

What is your ethnic/racial background? _____

If yes, can you describe what led you to change your mind and forgive them? Please describe in detail:

7. If there was no apology offered, would it be too late if the person who wronged you apologized today? (Please circle) Yes or No? Why?

8. To what extent do you feel the person who wronged you is to blame for the conflict?

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

9. To what extent do you feel that the conflict is over or has been resolved?

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

10. How serious of a conflict was this?

1	2	3	4	5	6	7
Not at all						Very serious
Serious						

11. Would you say that the main cause of the event reflected an aspect of:

1	2	3	4	5	6	7
The Situation						Your Friend

12. How wrong do you think it was for your friend to do this?

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

13. How hurt were you by this situation?

1	2	3	4	5	6	7
Not at all						Extremely hurt
Hurt						

14. To what extent do you think that the cause of the event had something to do with your friend:

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

15. How responsible was your friend for the event:

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

16. 11. How responsible do you feel you were?

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

17. How long (days/weeks/months) has it been since the conflict occurred? Please be specific.

18. How much time elapsed between the conflict and your friend apologizing? Please be specific.

19. To what extent do you feel that you stated your point of view regarding the conflict?

1 2 3 4 5 6 7

Not at all Very Much

20. Indicate the degree to which you perceive your friend as having understood your feelings and point of view regarding the transgression.

1 2 3 4 5 6 7

Not at all Very understood

21. Did you discuss the conflict with your friend? (Please circle)

Yes No

22. If the conflict was discussed, please rate the extent to which you discussed it:

Not at all A great deal

1 2 3 4 5 6 7

23. In light of the transgression with your friend, please answer the following questions:

a. Indicate how close you feel you are with this friend:

Not close at all Very close

1 2 3 4 5 6 7

b. Indicate how committed you feel you are to this friend:

Not at all committed Very committed

1 2 3 4 5 6 7

c. Please circle the picture below that would best describe your relationship with this friend:

24. Indicate how sorry you believe your friend was for this transgression.

1	2	3	4	5	6	7
Not sorry					Extremely sorry	

25. How painful for you was this transgression?

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

26. Please indicate on the scale below how the timing of the apology influenced the extent to which you did or did not forgive your friend.

1	2	3	4	5	6	7
Did Not Influence					Completely Influenced	

27. Please indicate with a an X the answer that best describes your relationship after this transgression

☐ We remained friends and were as close as we were before.

☐ We remained friends, but we were not as close as we were before the event.

☐ We did not remain friends.

28. Please indicate how strongly you agree or disagree with the following statement:

"I felt the need to end this relationship."

1	2	3	4	5	6	7
Strongly Disagree		Neither agree nor disagree			Strongly Agree	

29. Was the main cause of the event something that was:

1	2	3	4	5	6	7
Not controllable by your friend					Controllable by your friend	

30. To what extent do you think your friend had control over the event:

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

31. How accountable was your friend for the event:

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

State Forgiveness Scale

Directions: Please read each statement carefully and consider how well it applies to you. On the seven point scale below each item, indicate your reaction, from 1 = *strongly disagree* to 7 = *strongly agree*:

1. I have forgiven this person.

1	2	3	4	5	6	7
Strongly						Strongly
Disagree						Agree

2. I feel angry toward this person.

1	2	3	4	5	6	7
Strongly						Strongly
Disagree						Agree

3. Even though his/her actions hurt me, I do not feel ill-will toward him/her.

1	2	3	4	5	6	7
Strongly						Strongly
Disagree						Agree

4. I dislike this person.

1	2	3	4	5	6	7
Strongly						Strongly
Disagree						Agree

5. I feel warmly toward this person.

1	2	3	4	5	6	7
Strongly						Strongly
Disagree						Agree

6. I hope this person gets what's coming to them for what they did to me.

1	2	3	4	5	6	7
Strongly						Strongly
Disagree						Agree

7. If I saw this person again, I would try to avoid interacting with him/her.

1	2	3	4	5	6	7
Strongly						Strongly
Disagree						Agree

Empathy Measure

Please rate each of the following six emotion words as to how much you are currently feeling the emotion towards your friend from 0 = *not at all* to 6 = *extremely*

7. Sympathetic

0	1	2	3	4	5	6
Not at all						Extremely

8. Concerned

0	1	2	3	4	5	6
Not at all						Extremely

9. Moved

0	1	2	3	4	5	6
Not at all						Extremely

10. Compassionate

0	1	2	3	4	5	6
Not at all						Extremely

11. Tender

0	1	2	3	4	5	6
Not at all						Extremely

12. Empathic

0	1	2	3	4	5	6
Not at all						Extremely