

A Longitudinal Analysis of the Forgiveness Process in Romantic Relationships

A dissertation submitted in partial fulfillment of the requirements for the degree of  
Doctor of Philosophy at George Mason University

By

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Summer Semester 2009  
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## ACKNOWLEDGEMENTS

I would like to begin by thanking two undergraduate professors, Father Joseph Guido and Dr. Jack Colby, both of whom inspired a senior history major to change the focus of his educational goals and pursue a doctorate degree in psychology. My advisor, Dr. James E. Maddux, also deserves a special thanks. His hard work and commitment to my development helped me to succeed as a graduate student. Without his support and guidance, this dissertation project would not have been possible. In addition, I would like to thank the other members of my committee, Dr. Jon Mohr, Dr. Anastasia Kitsantas and Dr. Jeff Stuewig. I could not have asked for a more supportive, involved committee. Throughout the dissertation process, the committee provided me with valuable feedback which vastly improved the final product.

I would also like to thank the many friends who offered me their support and encouragement throughout this process. A special thanks to my friends and family whose constant support cannot be quantified. My mother, Mrs. Rita Volkmann, my brother Jonathon Volkmann, my aunts Ms. Susan Peruti, and Mrs. Betsy Marshall, my uncle Mr. Paul Volkmann, my grandmother Mrs. Carmella Peruti, my late grandfather, Mr. Frank “Flash” Peruti and my good friend Colin Hickey all have made a lasting impact on my development and served as sources of inspiration during different periods of my life.

My Oma, the late Mrs. Beatrice Volkmann, also deserves praise for the lasting impression she made on my life. The last thirty years of Mrs. Volkmann’s life were spent in two small towns in Western Pennsylvania. During the majority of this period, she was bedridden. Despite her medical difficulties, she maintained a full and active life that included authoring two books. A champion of the poor and disadvantaged, Mrs. Volkmann devoted the majority her life to furthering the cause of peace and well being for all men and women. Her enthusiasm, compassion and interests inspired both my decision to further my education in psychology and the choice of forgiveness as my dissertation topic.

A very special thanks to the one person, without whom, none of this would have been possible, my father/ unpaid editor Dr. Robert A. Volkmann. It is difficult to put into words the impact my father has had on my life. A tireless worker, my father excelled both in his work as a chemist and as a father. I will never know how he found the time to work nine hour days in a laboratory, coach soccer teams and read over his children’s homework. As a role model, my father has shaped the person I am today and the person I want to become in the future.

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## ABSTRACT

### A LONGITUDINAL ANALYSIS OF THE FORGIVENESS PROCESS IN ROMANTIC RELATIONSHIPS

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George Mason University, 2009

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The present study examined the effects of romantic relationship transgressions on victims' thoughts and feelings about their relationship over a two week period. The 157 participants experienced the transgression an average of 8.96 days ( $SD = 3.77$ ) prior to the collection of baseline data and 25.18 days ( $SD = 6.31$ ) prior to the collection of the follow-up data. The study examined the precursors of victims' forgiveness motivations following transgressions and the subsequent effects forgiveness has on the victims' relationship cognitions and emotions. Path analyses models found apology sincerity, responsibility attributions and empathy to independently predict concurrent forgiveness. In addition, forgiveness was an important predictor of relationship closeness, commitment and termination cognitions following a transgression. The implications of the results on transgression and forgiveness research are discussed along with future research directions

## CHAPTER 1

Human beings appear to have an innate desire to establish and maintain romantic relationships (Baumeister & Leary, 1995). Maintaining a relationship, however, can be a difficult task. Numerous external and internal factors can negatively impact romantic relationships. One factor that appears to affect romantic relationships is a transgression (Jones, Moore, Schratter & Negel, 2001). A transgression is an event that violates the norms of benevolence, loyalty, respect and trustworthiness, all of which support intimate relationships (Schratter, 2001). Common transgressions include sexual and emotional infidelities, as well as other events such as lying, teasing, failing to keep promises, and not spending time with a partner. At some point, almost all participants in a romantic relationship will be a perpetrator or a victim of a transgression. Transgressions threaten not only the psychological well-being of individuals in relationships but also the relationship as a whole. For this reason, it is important to understand the factors that affect transgressions and their impact on relationship maintenance or dissolution. One factor that appears to influence the impact transgressions have on relationships is forgiveness. The goal of this dissertation is to propose and test an integrative model of forgiveness that includes the precursors of forgiveness and the subsequent temporal effects that forgiveness has on relationships for victims of transgressions (see *Figure 1*).



## *Forgiveness*

In recent years, the concept of forgiveness has received increased attention in the field of psychology. One explanation for the rise in forgiveness research by social, clinical and personality psychologists is the positive interpersonal effects forgiveness appears to have on individuals. Cross sectional studies have demonstrated that forgiveness is positively related to life satisfaction (Brown & Phillips, 2005; Lawler-Row & Pieferi, 2006; Thompson et al., 2005); hope and self-esteem (Maltby, Day, & Barber, 2004; Toussaint, Williams, Musick, & Everson, 2001), while being negatively associated with depression (Berry, Worthington, O'Connor, Parrott & Wade, 2005; Brown 2003, Brown & Phillips, 2005; Exline, Yali & Lobel 1999), neuroticism (Berry et al., 2005; Berry, Worthington, Parrott, O'Connor & Wade 2001; McCullough & Hoyt 2002; Walker & Gorsuch 2002), anxiety (Exline et al., 1999; Orcutt, 2006, Thompson et al., 2005) and negative affect (Thompson et al., 2005).

In addition to the intrapersonal benefits forgiveness provides, it has also received an increase in attention from researchers because of its positive influence on interpersonal relationships. Cross-sectional and longitudinal studies have demonstrated that forgiveness is positively associated with marital longevity, relationship satisfaction and relationship commitment (Fennel, 1993; Finkel, Rusbult, Kumashiro, & Hannon, 2002; Paleari, Regalia, & Fincham, 2005; Tsang, McCullough & Fincham, 2006). The influence that forgiveness has on a relationship appears particularly pronounced when a transgression has taken place. Research has highlighted forgiveness as a critical factor that affects the repairing of relationships following a transgression (Hall & Fincham,

2006; Tsang et al., 2006, Gordon, Baucom, & Snyder, 2004; Fincham, Beach, & Davila, 2004).

### *Lay-people's conceptualizations of forgiveness*

As research on the topic of forgiveness has increased, so too have the controversies surrounding the definitions of this construct. Kearns and Fincham (2004) and later Friesen and Fletcher (2007), examined lay perspectives of forgiveness. Both groups of researchers have found that people believe forgiveness is multidimensional and can involve forgetting the event, condoning or accepting the transgressor's behavior, acting less negatively towards the transgressor, and reconciling with the transgressor. The Kearns and Fincham (2004) study also found that lay people do not always view forgiveness in positive terms. For example, people reported that forgiveness is related to "feelings of weakness," "being a push over," "giving the person permission to hurt you again," and "swallowing your pride" (Kearns & Fincham, 2004). The findings not only underscore the important elements of lay people's perspective on forgiveness, but also highlight the complex nature of forgiveness.

History has shown that religion plays a key role in western lay people's perception of forgiveness (Rye et al., 2000). Christianity, in particular, appears to impact lay people's perspectives on forgiveness in Western cultures (Marty, 1998). A central tenet of Christian doctrine is unconditional forgiveness. Thus, for many, forgiveness is often viewed as a religious act that requires compliance. While viewing forgiveness as a religious act is in contrast with most scholarly definitions of forgiveness, it nonetheless

does appear to be an important factor for researchers to examine when studying forgiveness (Worthington, 2005).

#### *Scholarly definitions of forgiveness*

One of the major difficulties surrounding forgiveness research is the lack of a consensus definition of forgiveness among scholars (Worthington, 2005). Despite the absence of an accepted definition of forgiveness, there are certain aspects of forgiveness on which the majority of researchers agree. For example, most believe that pardoning, excusing, condoning, and forgetting are not aspects of forgiveness (Rye & Pargament, 2002). Researchers also tend to agree that there are cognitive and affective components of forgiveness.

One point of contention amongst researchers is over the existence of a behavioral component of forgiveness. For example, Enright and Fitzgibbons (2000) propose that forgiveness involves replacing negative cognitions, emotions and *behaviors* with more positive cognitions, emotions and *behaviors*. Prominent forgiveness researchers such as Worthington and McCullough, on the other hand, focus their definitions of forgiveness on intentions and motivations and do not include actual behaviors as components of forgiveness. According to Worthington (2003), there are two separate types of forgiveness—decisional forgiveness (i.e. a change in a person's behavioral intentions) and emotional forgiveness (the replacement of negative emotions with more positive emotions). McCullough and colleagues (1997, 1998) have conceptualized their definition of forgiveness as pro-social changes in motivation. In their view, forgiveness involves a decrease in motivation to retaliate against the transgressor, a decrease in motivation to

avoid the transgressor, and an increase in motivation to reconcile with the transgressor (McCullough, Worthington, & Rachal, 1997; McCullough, Rachal, Sandage, Worthington, Wade-Brown, & Hight, 1998 ) McCullough and colleagues definition of forgiveness differs from Worthington's in that it does not take into account the intentions behind a person's forgiveness motivations.

For the purpose of this dissertation, forgiveness will be conceptualized using McCullough's definition of forgiveness. The decision to use McCullough's definition was made because the dissertation is building off of research that used McCullough's definition. In addition, a recent research article reports that a consensus is developing among scholars to define forgiveness using McCullough's definition (Orth, Berking, Walker, Meier & Znoj, 2008).

#### *Forgiveness is multidimensional*

While scholars and lay people believe that forgiveness is multidimensional, no consensus exists on the specific dimensions of forgiveness (Toussaint, Williams, Musick, & Everson, 2001). Because this study will use McCullough's definition of forgiveness, the three dimensions of forgiveness suggested by McCullough and colleagues will also be used: *benevolence* (the motivation to act in good will towards the transgressor), *avoidance* (the motivation to avoid or withdraw from the transgressor), and *retaliation* (the motivation to engage in retaliatory behaviors directed at the transgressor) (McCullough, Root & Cohen, 2006; Fincham et al., 2004, Fincham, 2000; Fincham & Beach, 2002; McCullough, Pargament, & Thoresen, 2000). The retaliation and avoidance dimensions were originally theorized by Wade (1989) and were later

incorporated by McCullough into his definition of forgiveness. The benevolence dimension of forgiveness is a recent addition to McCullough's definition and is based on the work of Fincham and colleagues (McCullough et al., 2006; Fincham, 2000; Fincham & Beach, 2002; Fincham, et al., 2004). The benevolence dimension further expands the scope of forgiveness by focusing on both the decrease in negative motivations and behaviors and the increase in positive motivations and behaviors toward the transgressor.

#### *Forgiveness as process*

The most widely accepted scholarly conceptualizations of forgiveness view it as a process (Fincham, Hall, & Beach, 2005). Unfortunately, the lack of consensus on the *definition* of forgiveness has led to a lack of consensus on the *process* of forgiveness. More than 25 forgiveness process models have been proposed by researchers (see Strelan & Covic, 2006 for a review). The majority of these process models share certain commonalities. For example, most models propose that the process of forgiveness unfolds in a stage-like manner whereby individuals must complete cognitive and emotional tasks in order to move to the next stage. A review of the stage theories by Strelan and Covic (2006) found that the following stages occur in most forgiveness models: "(a) initial feelings of anger and hurt (b) negative affective and cognitive consequences (c) an acknowledgment that previous strategies of dealing with the hurt are not working (d) a decision to either forgive or consider forgiving and (e) understanding of, or empathy for the offender (pp. 1063-1064)."

In addition to these commonalities, Strelan and Covic (2006) also describe five fundamental differences among the models: (a) the role of God in the forgiveness process

(b) the order in which the process of forgiveness unfolds (c) what constitutes the completion of a stage (d) whether forgiveness has an interpersonal component to it and (e) what constitutes the end of the forgiveness process.

*Dispositional or trait forgiveness*

There has been an increased effort by researchers to examine forgiveness as a disposition or trait. Dispositional forgiveness has been conceptualized as a tendency to consistently forgive interpersonal transgressions (Berry, Worthington, Parrott, O'Connor, & Wade, 2001; Brown, 2003; Emmons, 2000; Mullet, Houdbine, Laumonier, & Girard, 1998; Allemand, Amberg, Zimprich & Fincham, 2007). Mullet et al., (2003) proposed three aspects of dispositional forgiveness (a) enduring resentment (i.e. escaping the unforgiving state), (b) sensitivity to time and circumstances (i.e. reactivity to the circumstances of transgressions) and (c) overall tendency to forgive or avenge. Mullet et al. (2003) further suggested that each component of dispositional forgiveness should be examined separately. Other researchers, however, have examined dispositional forgiveness as a single factor (i.e. overall tendency to forgive, Berry et al., 2001). Researchers have yet to reach agreement on the components of dispositional forgiveness.

Despite the lack of consensus by researchers on the aspects of dispositional forgiveness, researchers have found correlations between dispositional forgiveness and Big Five Personality Taxonomy. For example, Walker and Gorsuch (2002), who conceptualized dispositional forgiveness as a single factor (i.e. tendency to forgive), found that trait forgiveness is negatively related to neuroticism. In addition, Berry et al.,

(2001), found that the tendency to forgive was positively correlated with conscientiousness ( $r = .24$ ) and agreeableness ( $r = .33$ ).

Mullet, Neto and Riviere (2005) reviewed the personality and dispositional forgiveness literature, examining the effect of enduring resentment suggested above by Mullet. This review reported that correlations between enduring resentment and agreeableness have ranged from  $-.10$  to  $.43$ . Enduring resentment also appears to be positively correlated to neuroticism with correlations ranging in score from  $.24$  to  $.39$ . Enduring resentment was, however, not consistently related to other aspects of the Big Five (e.g. extraversion, conscientiousness and openness) (Mullet et al., 2005).

In addition to Big Five personality factors, dispositional forgiveness has been associated with positive personality traits such as altruism (Ashton, Paunonen, Helmes, & Jackson, 1998) and gratitude, (McCullough, Emmons, & Tsang, 2002; Neto, 2007). People high in trait forgiveness are more altruistic and experience more gratitude than people who are low in trait forgiveness. Dispositional forgiveness was also inversely related to negative personality factors such as ruminative tendencies (McCullough, Bellah, Kilpatrick & Johnson, 2001) and vengefulness (Brown, 2003). Specifically, people high in dispositional forgiveness were less likely to ruminate and display vengeful attitudes following transgressions than individuals who were low in trait forgiveness. Lastly, a positive link between religiosity and dispositional forgiveness has also been uncovered. People high in trait forgiveness have reported being more religious and having greater religious involvement than individuals low in trait forgiveness (McCullough & Worthington, 1999, Mullet et al., 2003).

Recent research has also begun to explore the relationship between dispositional forgiveness and episodic forgiveness. Allemand et al. (2007) examined the relationship between dispositional forgiveness, episodic forgiveness, and relationship satisfaction for participants who have been involved in a romantic relationship for a minimum of six months and have been the victim of a transgression. They found that the link between dispositional forgiveness and episodic forgiveness was moderated by relationship satisfaction. Specifically, for individuals who reported higher levels of relationship satisfaction, there was a positive correlation between dispositional and episodic forgiveness, while for individuals who reported lower levels of relationship satisfaction this correlation was negative. Thus, it appears that episodic forgiveness is influenced primarily by the victims' satisfaction with their current relationship and not their episodic or trait forgiveness. Trait forgiveness appears only to influence episodic forgiveness when a victim is in a highly satisfying relationship. These results display need for additional research on dispositional forgiveness.

#### *Forgiveness and gender*

While research suggests that men and women react differently to transgressions (Gonzales, Haugen & Manning, 1994), limited work has been conducted on the relationship between forgiveness and gender. In general, most studies have found that gender does not have an effect on forgiveness (Macaskill, Maltby & Day 2002; Toussaint & Webb, 2005; Friesen, Fletcher, & Overall, 2005). There are, however, a few notable studies that found gender differences related to forgiveness (i.e. Orathinkal,



Vansteenwegen & Burggraeve, 2008, Kachadourian, Fincham & Davilla, 2004, Shackelford, Buss & Bennett, 2002).

A recent cross-sectional study found that married women were significantly more likely to forgive than married men ( $p < .005$ , *one-tailed*,  $d = .20$ ; Orathinkal, et al., 2008). In addition, Kachadourian, and colleagues (2004) examined the effects that the tendency to forgive and transgression severity have on forgiveness for married couples. Their research found that wives, who endorsed a greater tendency to forgive, were more likely to forgive their partner for a transgression regardless of the severity of the offense than were their husbands. Husbands, who endorsed a greater tendency to forgive, however, forgave their partners for only severe transgressions and not minor hurts (Kachadourian et al., 2004). This finding suggests that the perceived severity of an offense has a greater influence on forgiveness for male victims than it does for female victims.

Additional important research related to forgiveness and gender involves the effects the type of infidelity (i.e., emotional or sexual) has on forgiveness for males and females. Shackelford and colleagues (2002) found that men as compared to women found it more difficult to forgive sexual infidelities, while women as compared to men find it more difficult to forgive men for emotional infidelities. Cann and Baucom (2004) attempted to build off this research but found that the difficulty to forgive sexual and emotional infidelities did not vary by gender but rather by the degree of distress the victim experienced as a result of the transgression.

### *Forgiveness and culture*

There are also a few important findings from research examining culture and forgiveness. Research centered on the influence of religion and ethnicity on forgiveness found that both intentionality (i.e. the intention to forgive) and apology were strong predictors of forgiveness for both Christian and Muslims (Girard & Mullet, 1997). Research examining hypothetical scenarios involving gun violence and forgiveness, found Christians and Muslims were just as likely to forgive a member of their own religion or ethnicity as they were to forgive members of other religions (Azar & Mullet, 2001; Azar, Mullet, & Vinsonneau, 1999). These findings suggest that certain aspects of forgiveness are consistent across cultures and religions.

In contrast, some research suggests that there are cultural differences that can impact forgiveness. The major cultural differences examined have focused on comparing forgiveness patterns in individualistic and collectivistic societies. Research comparing Japanese (collectivistic) and American (individualistic) tendencies to forgive after being presented with a hypothetical situation in which they each were “victims,” found that the likelihood of Japanese victims forgiving the offenders was related to the stability (i.e. probability an offender will reoffend) of the offense and their relationship to the offenders while the likelihood of American victims forgiving was more affected by their perception of the offenders’ controllability of the offense (Takaku, Weiner, & Ohbuchi, 2001). Takaku’s research suggests that the probability an offender will reoffend has a greater influence on whether the victim will forgive the offender from collectivist cultures than it does on victims from individualist cultures. Conversely, the perception of

the offenders' control over the offense has more of an influence on victims forgiving the offenders for victims from individualistic cultures than it does for victims from collectivistic cultures. From an individualist versus collectivist cultural perspective, this result makes sense, in the fact that, individuals from individualist cultures appear to desire greater control over their environment and relationships while individuals from collectivist cultures tend to believe they have less control over their environment. The individuals from collectivist cultures tend to be more concerned with how they are viewed by other members in their society.

An additional interesting finding which demonstrates the impact culture has on forgiveness was conducted by Temoshok and Chandra (2000) who studied Indian women who had contracted AIDS. Their research found that 80% of the Indian women, who contracted AIDS, blamed their family of origin, while only 40% blamed their husbands. One explanation for these results offered by Temoshok and Chandra (2000) is that families were held more accountable because they were responsible for finding a proper mate for women. This result suggests that forgiveness in collectivistic societies involves more than just forgiving partners for transgressions but also may include forgiving families.

#### *Forgiveness reconciliation and the endpoint of the forgiveness process*

The relationship between forgiveness and reconciliation (i.e. renewing or restoring the relationship) remains a point of controversy in the field (Enright et al., 1991). While some have argued that reconciliation is an important component of forgiveness (Hargrave & Sells, 1997), most have insisted that forgiveness and

reconciliation are distinct concepts (Enright & Coyle, 1998; Enright & The Human Development Study Group, 1991; Fincham, 2000; Freedman, 2000). The argument against combining reconciliation and forgiveness is that relationships may reconcile following an offense without the victim forgiving the transgressor. Conversely, the fact that a victim cognitively and emotionally forgives the transgressor does not necessarily ensure the relationship will continue. While the controversy surrounding the relationship of reconciliation to forgiveness remains, the most prominent researchers (e.g., Enright, McCullough, and Fincham) maintain that reconciliation and forgiveness are two distinct concepts and that forgiveness may make reconciliation more likely. Consistent with these views, the current dissertation treats forgiveness and reconciliation as distinct concepts.

What constitutes the endpoint of forgiveness following a transgression is also a point of debate amongst researchers. Processes typically have both a beginning and an end. Researchers, however, have yet to reach a consensus as to what constitutes the endpoint of forgiveness. The following endpoints have been suggested: (a) consistent loving compassionate and benevolent responses of victims toward the transgressor (e.g. Ausberger, 1981; Benson, 1992; Brandsma, 1982; Coleman 1989; Cunningham, 1985; Donnelly, 1982; Enright et al., 1996), (b) reconciliation between the victim and the transgressor (Fitzgibbons, 1986; Hargrave, 1994, Pollard, Anderson, Anderson & Jennings, (1998), (c) victims no longer experiencing negative cognitions, emotions and or behavior towards the transgressor (Gordon & Baucom, 1998) and (d) victims volunteering and retaining forgiveness toward the transgressor (Worthington, 2001). As

a result of the lack of consensus over the endpoint of forgiveness, the present dissertation will focus on the changes in forgiveness motivation that occur over time.

*Transition to the current study,*

Up until this point, I have primarily focused on the concept of forgiveness. While there are still many aspects of forgiveness that are debatable (e.g. the process of forgiveness, the endpoint of forgiveness), a general consensus among researchers in the field is that forgiveness has a positive influence on relationship functioning (e.g. Fennel, 1993; Finkel, et al., 2002; Paleari, et al., 2005; Tsang, et al., 2006). Given the importance of forgiveness in romantic relationships, I will now review some post-transgression-related factors that are thought to influence forgiveness (i.e. perceived sincerity of apology, empathy for the transgressor and responsibility attributions) as well as variables that are influenced by forgiveness (i.e. relationship closeness and commitment and termination cognitions).

*Apology*

Sincere apologies facilitate the development of less vengeful attitudes towards the transgressor (Ohbuchi, Kameda, & Agarie, 1989) and provide victims with a reason to reconcile the relationship (Hargrave, 1994; Metts, 1992, 1994). McCullough et al. (1997) suggested that a sincere apology is negatively related to avoidance and retaliatory motivations while being positively related to benevolent motivations. More recent cross-sectional research has found that a sincere apology is a strong predictor of forgiveness in romantic relationships in which a hurtful event has taken place (Bachman & Guerrero, 2006). In addition, an experimental study that assessed the likelihood of victims

forgiving their partners following an imaginary sexual infidelity found that the forgiveness was more likely in response to a sincere apology. Victims of the imaginary infidelity study also reported that the process of forgiving would take less time if their partner sincerely apologized for the infidelity (Gunderson & Ferrari, 2008).

### *Empathy and forgiveness*

Empathy is “an other-oriented emotional response congruent with the perceived welfare of another” (Batson, 1990, p. 339). In addition to being affective, empathy also involves the ability to cognitively take the perspective of another (Batson & Shaw, 1991). Research has demonstrated that empathy is a vital component of forgiveness (McCullough et al., 1997; 1998). McCullough and colleagues’ (1997) hypothesized the empathy—forgiveness hypothesis which states that empathy decreases a victim’s motivation to avoid or seek revenge on a transgressor and increases the motivation to act in a benevolent manner towards the transgressor. Empathy influences the victim’s attitude toward the transgressor by allowing the victim to understand the transgressor’s (a) guilt or distress over his or her behaviors (b), feelings of isolation or loneliness related to the damaged relationship or (c) desire to restore or repair the relationship (McCullough et al., 2003).

Research has demonstrated that empathy positively correlates with forgiveness (Fincham, et al., 2002; McCullough et al., 1997, 1998; Worthington, et al., 2000). In addition, more recent research has found empathy to be a unique predictor of concurrent forgiveness such that victims of transgressions who reported experiencing less empathy also reported being less benevolent and more avoidant and vengeful towards their

partners. Conversely, victims who reported feeling greater empathy, also reported experiencing more benevolent and less avoidant and revenge motivations towards their partners (Paleari, et al., 2005).

McCullough and colleagues' (1997) empathy—forgiveness model states that receiving a sincere apology from a transgressor increases a victim's empathy for the transgressor which in turn decreases a victim's motivation to avoid and seek revenge on a transgressor while increasing the motivation to act in a benevolent manner towards the transgressor. The present study seeks to replicate and further explore the relationship between empathy, a sincere transgressor apology, and forgiveness. Given the strong relationship between the presence of a sincere apology, empathy and forgiveness, the expectation is that a sincere apology will both directly and indirectly (through empathy) influence victims' engagement in the forgiveness process.

#### *Responsibility attributions' influence on forgiveness*

Victims' attributions or explanations about their partners' behaviors appear to be another factor that affects engagement in the forgiveness process. The majority of research conducted on attributions and transgressions has focused on *responsibility attributions* (Bradbury & Fincham, 1992; Tsang et al., 2003; Freisen et al., 2005 Boon & Sulsky, 1997; Darby & Schlenker, 1982; Fincham, 2000; Weiner, Graham, Peter & Zmuidinas, 1991; Fincham, et al., 2002). Responsibility attributions assess the extent to which individuals hold their partner responsible for their behaviors (Bradbury & Fincham, 1990).

There is considerable debate amongst researchers regarding the components that comprise responsibility attributions. For example, Tsang et al. (2003) conceptualized three: 1 *intentionality* (i.e., how intentional a transgressor behavior was), 2 *blame* (i.e., how much is the transgressor to blame for the transgression) and 3 *knowledge of hurt* (i.e., how much knowledge did the transgressor have about the hurt he/she would cause the victim prior to the transgression). In contrast, Bradbury and Fincham (1990) theorized that there are only two components of responsibility attributions (i.e., blame and intentionality). Furthermore, some researchers have conceptualized blame and selfish motivation (i.e., how selfishly motivated were the transgressor's behaviors) as their own dimension of responsibility attributions (Friesen et al., 2004; Fincham et al., 2002). For the purpose of this dissertation, responsibility attributions will be defined as having three components—*intentionality*, *blame* and *selfish—motivation*.

Cross-sectional and longitudinal research suggests that the responsibility attributions victims make about transgressions are associated with and influence forgiveness (Hall & Fincham, 2006; Fincham et al., 2002; Fincham, 2002; Finkel, et al., 2002; McCullough, et al., 2003; Wohl & McGrath, 2007). Specifically, the less responsibility victims attribute to their partners for the transgression, the more likely they are to have greater motivations to forgive their partners. Conversely, the more responsibility victims attribute to their partners for the transgression, the less motivation they will have to forgive their partners (Hall & Fincham, 2006; Fincham et al., 2002; Fincham, 2002; Finkel, et al., 2002, McCullough et al., 2003). There are, however, inconsistencies in the literature regarding the effect gender has on the relationship



between responsibility attributions and forgiveness. Fincham and colleagues (2002) found that the responsibility attributions were a stronger predictor of forgiveness for females than males (Fincham et al., 2002). Friesen and colleagues (2005), however, were unable to replicate Fincham's results and found no significant differences for males and females. Subsequently, the current study proposes that regardless of their gender, victims' responsibility attributions about their partners' role in a transgression will influence the way victims forgive their partners.

*Apology, forgiveness and responsibility attributions*

In addition to providing victims with an opportunity to empathize with transgressors, apologies also offer the transgressor an opportunity to communicate information regarding the circumstance of the transgression and thereby, not only influence empathy and forgiveness, but also the responsibility victims attribute to their partners for the transgression. Experimental and cross-sectional research conducted by Struthers, Eaton, Santelli, Uchiyama and Shirvani (2008) has examined the relationship between apology, attributions, and forgiveness. Their findings suggested that the relationship between apology and forgiveness is moderated by the attributions victims make about the transgression. The presence of an apology actually hindered the development of forgiveness by victims of transgressions who view the transgressors' behaviors as highly intentional. Conversely, victims of transgressions who viewed the transgression as less intentional were thought to be more likely to forgive transgressors who apologized.

The research conducted by Sturthers and colleagues (2008) did not, however, take into account the sincerity of the apology offered by the transgressors. Past experimental research has suggested that *sincerity* is an important component of an apology (Zechmeister, Garcia, Romero, & Vas, 2004). Zechmeister and colleagues (2004) discovered that when highly aroused, individuals are less likely to forgive offenders if they perceive that they have received an *insincere* apology. Given the influence that the sincerity of an apology has on forgiveness, it appears likely that the sincerity of an apology may also influence how victims interpret the information communicated to them by the transgressor about the transgression. Accordingly, contrary to prior research which only examined the presence of an apology, it is anticipated that the relationship between apology sincerity and forgiveness will be partially mediated and not moderated by responsibility attributions. It is hypothesized that victims who receive more sincere apologies will view transgressors as less responsible for the transgressions and, in turn, have greater motivation to forgive transgressors than will victims who receive less sincere apologies.

#### *Changes in relationship closeness and commitment following a transgression*

An additional objective of the proposed dissertation is to examine the effects that forgiveness has on relationships. Following transgressions, victims often experience a reduction in feelings of commitment—the desire to persist in a relationship and closeness—how close a person feels to his/her partner (Tsang et al., 2006; Volkmann, Han, & Maddux, 2007; McCullough, et al., 1998). Research has demonstrated that each dimension of forgiveness influences the restoration of commitment and closeness for

victims of a transgression. Specifically, longitudinal and cross-sectional analyses have found that benevolent forgiving is associated with the restoration of closeness and commitment following a transgression (Tsang et al., 2006; Volkmann et al., 2007). Individuals, who are more benevolent following a transgression, report positive increases in feelings of commitment to the relationship and closeness to their partner (Volkmann et al., 2007). Conversely, victims who report being avoidant or retaliatory following transgressions, report decreases in feelings of commitment and closeness (Tsang et al., 2006; Volkmann et al., 2007). The proposed dissertation hypothesizes that victims' forgiveness motivations (i.e., benevolent motivations, avoidance motivation, and retaliation motivations) will influence changes in closeness and changes in commitment.

#### *Changes in commitment and closeness with termination cognitions*

Commitment and closeness following a transgression appears particularly important because they influence victims' desire to persist in their current relationship. Perceived reductions in feelings of commitment and closeness are associated with a greater endorsement of termination cognitions (i.e., desire to end the relationship, how close a person comes to terminating the relationship) (Volkmann et al., 2007) and are hypothesized to be related to relationship termination (Tsang et al., 2006). Conversely, increased feelings of commitment and closeness following a transgression have been associated with victims endorsing fewer relationship termination cognitions (Volkmann et al., 2007).

This study treats termination cognitions and relationship closeness and commitment as two distinct concepts. While there are similarities between people's

thoughts and desires to terminate their relationship and their relationship closeness and commitment, the relationship termination and termination cognitions are closer conceptually than the relationship closeness and commitment and termination cognitions. Because past research has demonstrated that relationship commitment is a strong predictor of relationship termination (Rusbult, Martz & Agnew, 1998), this study uses relationship closeness and commitment as predictors of termination cognitions instead as combining termination cognitions and relationship closeness and commitment into a single factor.

#### *Overview of the present study*

The goal of the current research is to add to the forgiveness literature by testing a path model that longitudinally examines the precursors of victims' forgiveness motivations following transgressions and the subsequent effects forgiveness motivations have on the victims' thoughts and feelings about their relationship. The path model (see Figure 2) illustrates the hypothesized links between sincere apology, empathy, responsibility attributions, forgiveness motivations, closeness and commitment, and termination cognitions. While all of these variables have been studied in the forgiveness literature, to date, no studies have examined the relationship between these variables in a single model.

#### *Time 1 hypotheses*

The hypothesized model (see Figure 2) suggests the following relationships between variables collected at time 1 (T1) (i.e. sincere apology, empathy, responsibility attributions, forgiveness motivations, closeness and commitment, and termination

cognitions). Based on past research conducted by McCullough et al. (1998), it is expected that T1 apology sincerity will both directly (path c) and indirectly, through empathy (paths a & d), and responsibility attributions (paths b & e) predict T1 forgiveness motivations. Consistent with McCullough's (1998) theory, it is expected that T1 empathy will predict T1 forgiveness motivations such that greater empathy will be related to greater forgiveness motivations. Research also suggests that responsibility attributions predict forgiveness motivations (Hall & Fincham, 2006; Fincham et al., 2002; Fincham, 2002; Finkel, et al., 2002), thus it is hypothesized that responsibility attributions will uniquely predict T1 forgiveness motivations (path e). Additionally, based on past research, it is expected that greater T1 forgiveness motivations will be related to greater T1 closeness and commitment (path h) and fewer T1 termination cognitions (path i). It is also expected that greater T1 closeness and commitment will predict fewer T1 termination cognitions (path p) (Tsang et al., 2006; Volkmann et al., 2007). Lastly, given the strong relationship between forgiveness motivations and relationship closeness and commitment and termination cognitions displayed in research conducted by Tsang and colleagues (2006) and Volkmann and colleagues (2007), it is hypothesized that any relationship from apology sincerity, empathy, and responsibility attributions to closeness and termination cognitions should be through T1 forgiveness motivations.

### *Time 2 hypotheses*

The model proposes the following relationships between the variables collected at time 2 (T2). Parallel to the time 1 hypotheses, T2 forgiveness motivations should predict

T2 closeness and commitment (path k) and T2 termination cognitions (path n). Additionally, T2 forgiveness motivations are expected to be indirectly related to T2 termination cognitions through T2 closeness and commitment (path k-o) while controlling for previous motivations (i.e. the stability coefficients). Specifically, greater forgiveness motivations should predict greater feelings of T2 closeness and commitment and fewer T2 termination cognitions. In addition, T2 closeness and commitment is thought to directly predict T2 termination cognitions, such that greater feelings of closeness and commitment should predict fewer termination cognitions.

*T1 → T2 longitudinal hypotheses*

Given the short distance between the baseline and the follow-up, all stability coefficients will be included. Based on past research, it is expected that: T1 forgiveness motivations will directly predict T2 forgiveness motivations (path j) (McCullough, Fincham, & Tsang 2003), T1 closeness and commitment will directly predict T2 closeness and commitment (path l) and T1 termination cognitions will directly predict T2 termination cognitions (path m). The hypothesized model proposes the following relationship between variables collected at time 1 and variables collected at time 2. As a result of the well established relationship between empathy and forgiveness (McCullough et al., 1997, 1998), it is hypothesized that greater T1 empathy will predict greater T2 forgiveness motivations even when controlling for T1 forgiveness motivations. Specifically, it is expected that T1 empathy will both directly (path f) and indirectly *via* T1 forgiveness motivations (path d & j) predict T2 forgiveness motivations.

In addition, responsibility attributions also appear to have a large influence on longitudinal changes in forgiveness (McCullough et al., 2003). Thus, it is expected that greater T1 responsibility attributions both directly (path g) and indirectly (paths e & j) through T1 forgiveness motivations will predict T2 forgiveness motivations such that more benign responsibility attributions at time 1 will promote greater T1 and T2 forgiveness motivations.

## CHAPTER 2

### Method

#### *Participants*

One hundred and fifty-seven students from a large public university were included in the present study. The sample was a subset of a larger longitudinal study. Participants were recruited from an undergraduate population through the use of an online recruitment website. The students received research credit for their participation and were required to complete an initial survey at time 1 and a two-week follow-up survey at time 2 to receive course credit. Overall, the sample was predominantly young ( $M = 21.49$ ,  $SD = 5.28$ ) and female (85.3% female, 14.7% male). Ethnicity varied amongst the sample and included 96 Caucasians, 24 Asian Americans, 16 African Americans, 11 Hispanic/Latinos and 10 participants who classified their ethnicity as “Other.” Participants were also asked to report their sexual orientation. Of the 157 individuals that completed the study, 145 reportedly were heterosexual, eight were homosexual and four were bisexual.

In order to participate in the study, students were required to have been in a romantic relationship for a minimum of three months. In addition, all participants had to have been the victim of a relationship transgression that they perceived as serious in the



two weeks prior to starting the study. The length of time in which individuals were in their current relationship varied across the sample ( $M = 23.85$  months,  $SD = 21.74$ , Range = 129.00). Participants represented a broad range of religious affiliations. While the majority of participants reported being Christians (67.9%), the remaining participants reported participation in the Muslim (9%), Jewish (1.3%) and Hindu (2.6%) faiths. Nine participants reported being Atheists. The majority of participants characterized their relationship as “dating” (127). Thirteen participants reported that they were married, eight reported that they were engaged and nine participants did not respond.

### *Materials*

*Apology Sincerity.* A one-item measure was created to determine participants’ perception of the sincerity of their partner’s apology for committing the transgression. Participants who received an apology from their partner rated the sincerity of the apology on a 7-point Likert scale (1 = “Not at all Sincere,” 7 = “Extremely Sincere”). A higher score indicated a greater perceived sincerity of the partner’s apology.

*Responsibility Attributions.* A modified three-item version of the *Relationship Attribution Measure* (RAM; Fincham & Bradbury, 1992) was used to assess victims’ responsibility attributions for the transgression. Participants who were victims of transgressions in the current study responded to a modified version of the RAM that assessed attributions related to the transgression they experienced instead of the usual four hypothetical stimulus events (Fincham & Bradbury, 1992). The scale was used in a similar manner by Hall and Fincham (2006) when they measured attributions related to infidelity. Victims of transgressions responded to the following items: “My partner’s

behavior was on purpose rather than unintentional” “My partner’s behavior was motivated by selfish rather than unselfish concerns” and “My partner deserves to be blamed for his/her behavior” on a 6-point Likert-type scale measure (1 = “disagree strongly,” 6 = “agree strongly”). The scores for the modified version of the RAM used by Hall and Fincham (2006) displayed average internal consistency ( $\alpha = .70$ ). In the present study, the RAM had adequate internal consistency ( $\alpha = .67$ ).

*Empathy.* The *Batson 8-item Empathy Scale* was used to measure the degree to which a victim felt empathy towards the offender (Batson, Bolen, Cross, & Neuringer-Benefiel, 1986; Batson, O’Quin, Fultz, Vanderplas, & Isen, 1983). Eight affect words (i.e. sympathy, empathy, concerned, moved, compassionate, warm, soft hearted and tender) were rated on a 6-point Likert scale (1 = “not at all,” 6 = “extremely”) to measure the victim’s feelings towards the transgressor. Higher scores represented greater empathy for the transgressor. Internal consistency reliabilities ranged from .87 to .92 while test-retest correlations ranged from .61 to .82 (Fincham et al., 2002, Wade & Worthington, 2003, McCullough et al., 1997, 1998). For the present study, the Empathy Scale displayed excellent internal consistency ( $\alpha = .91$ ).

*Forgiveness Motivations.* Forgiveness was measured using the *Transgression-Related Interpersonal Motivations* (TRIM) inventory. The TRIM is designed to measure motivations towards the benevolence, avoidance and retaliatory forgiveness dimensions by *victims* following a transgression. Benevolence (e.g., “I forgave him/her for what he/she did to me”) was measured using a 6-item subscale assessing an individual’s motivation and actions. An individual’s motivations and actions to avoid a transgressor

(e.g., “I tried to keep as much distance between us as possible”) was assessed using a 7-item subscale measure. And an individual’s motivation and actions to seek revenge (e.g., “I got even”) was assessed using a 5-item subscale measure. Individuals responded to all items on a five-point Likert scale which ranged from 1 = “strongly disagree” to 5 = “strongly agree”. The subscales of the TRIM have high internal consistency (i.e., alphas  $> .85$ ) and decent test-retest reliability (i.e.,  $r$ s ranging from .41 to .90 across data collected at 1, 3, 4, 7, and 9 weeks) (McCullough, Bono & Root, 2007). In addition, the TRIM also has good convergent validity with one-item measures of forgiveness and discriminant validity with measures of positive affectivity, negative affectivity, and social desirability (McCullough et al., 2001, McCullough, et. al, 2003; McCullough & Hoyt, 2002).

Correlations in the current study among the benevolence, avoidance and revenge scales were as follows: T1 avoidance & T1 benevolence =  $-.45$ ; T1 avoidance & T1 revenge =  $.44$ ; T1 benevolence and T1 revenge  $-.36$ ; T2 avoidance & T2 benevolence =  $-.49$ ; T2 avoidance & T2 revenge =  $.59$ ; T2 benevolence and T2 revenge  $-.42$ . As a result of the relatively high correlations between the scales, a factor analysis using a principal axis extraction with a varimax rotation was conducted to determine if *benevolence*, *avoidance* and *revenge* could be reduced to a single factor. The analysis revealed a single factor for forgiveness (T1 eigenvalue = 1.84, percentage of variance explained 61.22; T2 eigenvalue = 2.00, percentage of variance explained 66.65). As a result of this finding, the *avoidance* and *revenge* items were reversed, scored and summed together with *benevolence* items to yield one *total forgiveness motivations* score. Scores ranged from

19-95, with higher scores representing greater forgiveness. In the present study, *total forgiveness motivations* was shown to have adequate internal consistency for all items (T1  $\alpha = .65$ , T2  $\alpha = .70$ ). As a result of an uneven distribution of items, the forgiveness motivation scale used in the current study weighted avoidance motivations more heavily than benevolence and revenge motivations. In addition, benevolence motivations were weighted more heavily than revenge motivations.

*Interpersonal closeness and commitment.* Closeness and commitment were combined into a single scale. The item was composed of a one-item measure of closeness (i.e. the *Inclusion of Other in the Self Scale*, IOS; Aron, Aron, & Smollan, 1992) and a one-item measure of commitment. The IOS is a single-item measure that evaluates relationship closeness on a 7-point Likert scale. Participants were presented with seven pairs of circles that vary in the degree to which they overlap. The degrees of overlap range from complete separation (1) to almost complete overlap (7). Greater overlap represents greater feelings of closeness. The participants chose the pair of circles that best described their relationship.

The IOS has excellent construct validity and has demonstrated strong test-retest reliability after a two week interval ( $\alpha = .85$ ) (Aron, et al., 1992). The IOS also has convergent validity with longer measures of relationship closeness such as the Subjective Closeness Inventory ( $r = .77$ ; Aron, Melinat, Aron, Vallone, & Bator, 1997) and the Sternberg Intimacy Scale ( $r = .45$ ; Sternberg, 1988). In addition, the IOS is positively related to measures of relationship satisfaction ( $r = .69$ ), commitment ( $r = .67$ ), and investment ( $r = .55$ ) (Agnew, Van Lange, Rusbult & Langston, 1998; Rusbult et al.,

1998) and negatively related to the degree to which people believe their needs could be fulfilled in an alternate relationship (e.g., another dating partner, friends and family) ( $r = -.46$ ; Rusbult, et al., 1998).

Commitment to the romantic relationship was measured using a one-item measure of commitment. Participants responded on a seven-point Likert scale (1 = “Not At All Committed,” 7 = “Very Much Committed”) to the question: “How committed are you to your relationship right now?”. The single item commitment measure correlated highly with longer, more extensive measures of commitment that were used in the study (e.g. .68 with the Relationship Agenda Scale; Stanley & Howard, 1992).

In the present study, the closeness and commitment items were summed. Participant’s scores ranged from 2-15. A higher score represented greater closeness and commitment. In the current study, the *Closeness and Commitment* measure was shown to have good internal consistency (T1  $\alpha = .73$ , T2  $\alpha = .84$ ).

*Relationship termination cognitions.* A two-item measure was used to examine relationship termination cognitions. The scale took into account an individual’s desire for relationship termination (“How strongly do you desire to end this relationship currently?”) and how close he/she believes he/she is to relationship termination (“How close are you to ending this relationship?”) following a transgression. Participants responded on a seven-point Likert scale for both questions. Responses ranged from 1 = “Not At All” to 7 = “Very Strongly” for the first question and 1 = “Not At All Close” to 7 = “Very Close” for the second question. A higher score indicated stronger relationship termination cognitions. A modified version of the scale was used to retrospectively

examine relationship termination cognitions by Volkmann and colleagues (2007) and was found to have high internal consistency ( $\alpha = .87$ ). For the present study, relationship termination cognitions displayed excellent consistency (T1  $\alpha = .81$ , T2  $\alpha = .87$ ).

*Severity of transgression threat.* A one-item measure was used to determine a participant's perception of the severity of the partner-initiated transgression to the relationship. Participants responded on a seven-point Likert scale (1 = "Not At All Threatening to the Relationship," 7 = "Very Threatening to the Relationship"). A higher score indicated a greater perceived severity of transgression to the relationship.

*Hurt.* A one-item measure was used to determine how much hurt a participant experienced as a result of the partner-initiated transgression. Participants responded on a seven-point Likert scale (1 = "Very Little Hurt," 7 = "Most Hurt Ever Felt"). A higher score indicated greater hurt experienced as a result of the partner-initiated transgression.

### *Procedure*

Data were collected with a confidential web-based survey (surveymonkey) using the highest security standards (encrypted data transfer with no individual IP addresses collected). Once they agreed to participate, participants were provided an address to the website where survey responses were recorded.

Participants first completed background, trait, relationship history and demographic measures online. Next, participants were asked to describe a partner initiated transgression in a text box and to report on how much time had taken place between the transgression and their participation in the study. After describing the transgression, participants responded to measures designed to assess their feelings about

the transgression, their relationship and their partner. Participants were then anonymously contacted two-weeks after completing the baseline questionnaires *via* email and given a direct link to the follow-up survey. The baseline and follow-up data were linked using a random code the participants recorded both times they participated in the study.

## CHAPTER 3

### Results

#### *Descriptive statistics and correlations*

The mean number of days since the transgression occurred was 8.96 days ( $SD = 3.77$ ) prior to the collection of baseline data and 25.18 days ( $SD = 6.31$ ) prior to the collection of the follow-up data. The mean transgression severity rating reported by participants at time 1 was 4.90 ( $SD = 1.44$ ), which suggested that participants believed that the transgression was a moderate to severe threat to their relationship. Participants at time 1 also reported experiencing a considerable amount of hurt caused by the event ( $M = 4.92$   $SD = 1.21$ ). These results suggest that the transgression had a significant impact on the victim's thoughts and feelings about their partner and their romantic relationship. Table 1 displays descriptive statistics which include: the means and standard deviations for the measures used in the study as well as the correlations among the measures. All measures displayed a normal distribution with the exception of T2 termination cognitions which displayed a moderate skew (skewness = 1.30) towards low termination cognitions.

Bivariate correlations showed that T1 apology, empathy and responsibility attributions were significantly correlated concurrently with T1 forgiveness motivations  $r(157) = .45$ ;  $r(156) = .38$ ;  $r(157) = -.28$ ,  $ps < .01$ . Longitudinally T1 apology, empathy



correlated with T2 forgiveness motivations  $r(127) = .27$ ;  $r(127) = .27$ ;  $ps < .05$ ). Responsibility attributions were not significantly correlated with T2 forgiveness motivations  $r(127) p = .06$ . As expected, the strength of the correlation for all three variables became less over time. T1 apology, empathy and responsibility attributions were also all significantly correlated with T1 termination cognitions  $r(157) = -.16$ ;  $r(157) = -.29$ ;  $r(157) = .28$ ,  $ps < .05$ ); however, only apology was significantly correlated with T2 termination cognitions  $r(127) = -.28$   $p < .01$ ). In addition, bivariate correlations displayed stability over the two time points for forgiveness  $r(127) = .57$ ,  $p < .001$ ), relationship closeness and commitment  $r(127) = .47$ ,  $p < .001$ ) and termination cognitions  $r(127) = .30$ ,  $p < .01$ ).

### *Modeling strategy*

To test whether the relationships between apology sincerity, attributions, empathy, forgiveness, closeness and commitment and termination cognitions were consistent with the model described in Figure 1, a path analysis was conducted using the M-Plus version 5.1 software program (Muthén & Muthén, 2007). In order to determine if the hypothesized model should be accepted or rejected, the following goodness of fit tests were used: the chi-square statistic (Jöreskog & Sörbom, 1984), the Comparative Fit Index, (CFI; Bentler, 1990), the Tucker-Lewis Index (TLI; Bentler & Bonett, 1980), the Root-Mean-Square Error of Approximation (RMSEA; Browne & Cudeck, 1993) and the Standardized Root-Mean-Square Residual (SRMR; Bentler, 1995). In general, a lower chi-square statistic indicates a better fitting model. According to Hu and Bentler (1998), the chi-square statistic is extremely sensitive to sample size and thus should be used in

combination with the additional fit indices listed above. The CFI compares the existing model fit with the null model (i.e. a model that assumes the latent variables are uncorrelated). The TLI measures the proportion by which the hypothesized model improves the fit of the null model. Scores for both the CFI and the TLI can range from 0 to 1 with .95 or higher indicating a good fitting model. The RMSEA is an index of lack of fit. A value of .05 or lower is indicative of a good fit (Brown & Cudeck, 1993, Hu & Bentler, 1998). The SRMR is a measure of the standardized difference between the observed covariance and predicted covariance. Values of .06 or lower suggest a good fitting model (Hu & Bentler, 1998). In addition, to test indirect effects, M-plus software uses the Sobel test. Finally, although 157 participants completed the baseline measures, only 127 completed the follow-up measures. As a result of the attrition, the missing data were dealt with using maximum likelihood (ML) estimation.

In order to identify areas where data misfits the model, the M-plus software provides modification indices. These indices give the researcher an empirical basis to aid in the decision to add or remove additional paths from the hypothesized model. The indices display the expected drop in model fit chi-square statistics if a parameter that is currently fixed at zero is allowed to be freely estimated. It is important that the modification indices are used in conjunction with theory when modifying a model. A goal of path analysis is to produce a model that represents the observed relationships among the variables in the population. Blindly following the suggestions of modification indices in order to fit a model to a particular set of sample data decreases the likelihood of estimating true population parameters and increases the probability of committing a

type 2 error (McCoach, Black, & O'Connell, 2007). Thus, the modification indices were used in conjunction with theory to improve the hypothesized model.

Bootstrapped and non-bootstrapped results were similar and as a result, the results without bootstrapping are reported. The hypothesized model (see Figure 2) provided a good fit to the data  $\chi^2(19, N = 157) = 31.61, p = .04, CFI = .96, TLI = .93, RMSEA = .07$  (90% CI) and SRMR = .04. All pathways were significant with the exception of path g (responsibility attributions to T2 forgiveness) and path f (empathy to T2 forgiveness). Based on theory and the modification indices provided by M-plus, two additional pathways were added to the model post hoc: apology sincerity to T2 termination cognitions and responsibility attributions to T1 termination cognitions. With the addition of these two pathways, the model fit increased significantly  $\chi^2(2) = 8.02, p < .05$ . The second and final model (see Figure 3) provided an excellent fit to the data  $\chi^2(17, N = 157) = 23.59, p = .25, CFI=.98, TLI=.96, RMSEA=.05$  (90% CI) and SRMR=.04. The final model accounted for a large amount of variance in time 1 forgiveness and time 2 forgiveness, closeness and termination cognitions ( $R^2 = .31, .39, .49, .50$ ). The final path estimates and r-square values are presented in Figure 3. In addition, all of the direct and indirect effects are listed in Table 3.

#### *Time 1 hypotheses*

As hypothesized, sincere apology, empathy, and responsibility attributions all independently directly predicted T1 forgiveness. In addition, sincere apology also related indirectly to T1 forgiveness *via* empathy standardized estimate = .05,  $p = .05$ , but not responsibility attributions, standardized estimate = .03,  $p = .13$ . The hypothesized direct

paths from T1 forgiveness to T1 closeness and commitment and T1 forgiveness to T1 termination cognitions were also supported by the data. The pathway from T1 closeness and commitment to T1 termination cognitions approached significance standardized estimate =  $-.14$ ,  $p = .07$ .

*Time 1 → time 2 hypotheses*

The hypothesized direct paths from T1 forgiveness to T2 forgiveness and T1 closeness and commitment to T2 closeness and commitment were supported by the data. Contrary to our hypotheses, neither empathy nor responsibility attributions predicted T2 forgiveness, once T1 forgiveness was controlled for. In other words, while the bivariate correlations showed relationships between empathy and T2 forgiveness and responsibility attributions and T2 forgiveness, once stability was taken into account, neither empathy nor responsibility attributions were related to T2 forgiveness. As hypothesized, however, empathy and responsibility attributions indirectly predicted T2 forgiveness via T1 forgiveness (standardized estimate =  $.16$ ,  $p < .001$ , standardized estimate =  $-.10$ ,  $p < .05$ , for empathy and responsibility attributions respectively). Thus, an individual who reported having a large amount of empathy for the transgressor was more likely to have a high motivation to forgive at time 1, which in turn was related to high motivations to forgive at time 2. In addition, an individual who reported that his/her partner was highly responsible for the transgression was less motivated to forgive at time 1, which in turn was related to fewer forgiveness motivations at time 2. Interestingly, the data also did not support a direct path from T1 termination cognitions to T2 termination cognitions. This result suggests that while the bivariate correlation displayed a significant

relationship between termination cognitions at time 1 and time 2, once T2 forgiveness and T2 closeness and commitment were taken into account, termination cognitions at time 1 were not a statistically significant predictor of termination cognitions at time 2. Of note, the follow-up termination cognitions reported by participants displayed a moderate skew toward low termination cognitions. This result may have impacted the lack of relationship discovered in the data.

### *Time 2 hypotheses*

Consistent with our hypothesis, T2 forgiveness indirectly *via* T2 closeness and commitment predicted T2 termination cognitions (standardized estimate =  $-.14$ ,  $p < .001$ ). Subsequently, higher forgiveness motivations at time 2 predicted greater closeness and commitment at time 2, which, in turn, predicted fewer termination cognitions at time 2. In addition, as predicted, the direct path from T2 closeness and commitment to T2 termination cognitions was also supported by the data (see Figure 3 for standardized estimates).

### *Post Hoc Analyses*

In addition to hypothesized results, three interesting results were discovered in the data: (1) a significant indirect pathway from apology sincerity to T1 termination cognitions *via* T1 forgiveness (standardized estimate  $-.16$   $p < .001$ ); (2) a significant indirect pathway from apology sincerity to T2 termination cognitions *via* T1 forgiveness, T2 forgiveness and T2 closeness and commitment (standardized estimate  $-.03$   $p < .01$ ); (3) a significant indirect pathway from T1 forgiveness to T2 termination cognitions *via*

T1 closeness and commitment and T2 closeness and commitment (standardized estimate  
-.16  $p < .001$ ).

## CHAPTER 4

### Discussion

Over the past ten years, there has been a large increase in research on forgiveness of transgressions in romantic relationships. Research has found that sincerity of apology (McCullough et al., 1997; Bachman & Guerrero, 2006; Gunderson & Ferrari, 2008), empathy for the transgressor (McCullough et al., 1997; McCullough et al., 2003; Fincham et al., 2002) and the responsibility victims attribute to the transgressor for the transgression (Boon & Sulsky, 1997; Fincham, 2000; Fincham et al., 2002; Hall & Fincham, 2006) are important predictors of forgiveness. In addition, research also has examined the influence that forgiveness has on post-offense relationship variables (e.g. closeness and commitment and termination cognitions) and has found that victims who report a greater motivation to forgive, report greater relationship closeness and commitment and fewer termination cognitions than do individuals who report having less motivation to forgive (McCullough et al., 1997, 1998; Tsang et al., 2006; Volkmann et al., 2007). The present study sought to extend past research by longitudinally examining a model which included predictors of forgiveness (i.e. sincere apology, empathy, and responsibility attributions) as well as the effects of forgiveness on relationship closeness, commitment, and termination cognitions.

### *Predicting forgiveness*

In the present study, apology sincerity, empathy, and responsibility attributions were all significant, independent predictors of the motivation to forgive. Participants who reported receiving more sincere apologies from their partner, expressed greater emotional empathy for the offending party, assigned less responsibility to the transgressor and reported greater motivations to forgive their partners than did participants who received less sincere apologies, expressed less emotional empathy, and assigned greater responsibility to their partner for the transgression.

Apology sincerity also predicted forgiveness motivations indirectly *via* empathy. This result suggests that apology sincerity influences the relationship between emotional pathways (i.e. empathy) and forgiveness motivations. Thus, participants rated the apology from a transgressor as more sincere tended to report more empathy for the transgressor and a greater motivation to forgive the transgressor. Conversely, participants who received less sincere apologies from transgressors tended to have less empathy for the transgressors and less motivation to forgive to their partner. The link between apology sincerity, empathy and forgiveness motivations is consistent with the findings of McCullough and colleagues (1997). These results suggest that both indirect pathways (i.e. apology sincerity→empathy→forgiveness motivations) and the direct pathway (i.e. apology→forgiveness) are an important component of the forgiveness process.

The link between apology sincerity and concurrent forgiveness motivations via responsibility attributions was not supported by the data. This finding suggests that



apology sincerity does not significantly influence the relationship between the cognitive pathway (i.e. responsibility attributions) and forgiveness motivations. According to the results, it seems probable that the sincerity of an apology from a transgressor has a greater influence on forgiveness motivations via an emotional pathway than a cognitive pathway. Thus, it appears probable that the cognitive pathway that leads to forgiveness motivations (i.e. responsibility attributions → forgiveness motivations) is influenced by mechanisms not examined in the current study. Given the importance of cognition in forgiveness, this aspect of the forgiveness process warrants additional research.

The fact that both a direct link between apology sincerity and forgiveness motivations and an indirect link via empathy (an emotional pathway) was found in the current study suggests that, in addition to increasing forgiveness motivations by increasing the empathy a victim has for the transgressor, apology sincerity also increases forgiveness motivations through other unspecified mechanisms not examined in the current study. This partial mediation was in contrast to results reported by McCullough and colleagues (1997), who found that the relationship between apology sincerity and forgiveness motivations was fully mediated by empathy. Examining additional variables may help clarify the findings in the present study. One such variable to examine is the amount and frequency of transgressions experienced by participants. For example, Gunderson and Ferrari (2008) found that the frequency of infidelity influences the relationship between apology sincerity and forgiveness, such that only participants who read about experiencing an isolated incident of infidelity believed it would take less time

to forgive a partner when they received a sincere apology. Participants who imagined experiencing repeated infidelities did not report that a sincere apology would influence the forgiveness process. Subsequently, it appears that the relationship between apology sincerity and forgiveness motivations may have been influenced by the frequency of transgressions the participants experienced prior to taking part in the study. The results, however, do support cross-sectional and experimental research, which has found that a sincere apology is a strong predictor of forgiveness in romantic relationships in which a hurtful event has taken place (Bachman & Guerrero, 2006; Gunderson & Ferrari, 2008), thereby highlighting the importance of apology sincerity in the forgiveness process. It appears that more research is needed to elucidate the relationship between apology sincerity and forgiveness motivations.

The examination of additional factors specific to a participant's relationship that were either not included in the current study or not included as predictors of forgiveness motivations may also help explain the relationship between apology sincerity, responsibility attributions and forgiveness motivations found in the current study. Past research has found that victims of transgressions are more likely to forgive their partners if they are in close, satisfying and committed relationships (Fincham, 2000; Fincham & Beach, 2002; Fincham, et al., 2002; Paleari et al., 2005; Fincham & Kearns 2005; Friesen et al., 2005; McCullough et al., 1998). In addition, research has shown that marital quality influences responsibility attributions and forgiveness motivations. Thus, factors such as relationship closeness, satisfaction, and commitment, may have influenced the

results found in the current study and should be considered in future research projects that aim to examine the relationship between factors that predict forgiveness motivations.

#### *Longitudinal predictors of forgiveness*

The current study found that only baseline forgiveness motivations significantly predicted forgiveness motivations at the follow-up. This result suggests that in the current study, only participants' initial motivations to forgive their partners influenced their future motivations to forgive their partners. Contrary to what was predicted, the link between baseline empathy and follow-up forgiveness motivation was fully mediated by an individual's initial forgiveness motivations. Thus, the results suggest that empathy is not significantly related to the changes in forgiveness motivations that were reported by participants. These results support past longitudinal research conducted by McCullough and colleagues (2003), which also found that initial levels of empathy did not predict future forgiveness motivations when past levels of forgiveness motivations were taken into account. When analyzing the influence of empathy on forgiveness, McCullough, Fincham, and Tsang (2003) postulated that three separate concepts are needed to explain the temporal unfolding of forgiveness following a transgression: *forbearance* (i.e. victim's initial forgiveness motivations), *trend forgiveness* (i.e. the gradual increase in forgiveness motivations that occur over time), and *temporary forgiveness* (i.e. victim's day to day fluctuations in forgiveness motivations which would be expected on the basis of a victim's trend trajectory) (Wohl & McGrath, 2008; McCullough et al., 2003). Their research found that initial ratings of empathy were directly related to forbearance but not trend forgiveness or temporary forgiveness (McCullough et al., 2003). As a result, it

appears that empathy influences initial motivations to forgive but does not affect the changes in forgiveness motivations that occur over time when initial forgiveness motivations are accounted for. One explanation for the lack of a longitudinal relationship between the initial feelings of empathy victims have for transgressors and their future forgiveness motivations may be that empathy is only a component of the initial decision to begin the forgiveness process. As stated earlier, most forgiveness process models propose that people make a decision to forgive their partner (Strelan & Covic, 2006). Thus, it may be that empathy helps victims make the decision to forgive their partner but becomes less important over time. Future longitudinal research examining the influence of empathy and decisional forgiveness on the forgiveness process is needed to further clarify this result.

In addition, the link between initial ratings of responsibility attributions and follow-up forgiveness motivations was also fully mediated by baseline forgiveness motivation. This result was contrary to both previous hypotheses and past research which found that individuals who initially assigned less responsibility to their partners for the transgression were more willing to forgive over time than were individuals who assigned more responsibility to their partners (McCullough et al., 2003). According to the data, responsibility attributions were not related to the changes in forgiveness motivations reported by participants. Instead, the results suggested that responsibility attributions predicted a victim's initial motivation to forgive which, in turn, predicted future forgiveness motivations. This finding, while unexpected, highlights the large influence initial forgiveness motivations appear to have on future forgiveness motivations. One

explanation for this result may be that victims' responsibility attributions are likely to change over time. For example, following a transgression, transgressors who are interested in maintaining their relationship are likely to attempt to reduce the responsibility that victims assign to them for the transgression by explaining their behaviors and apologizing. On the other hand, if victims discover that transgressors lied about their role in the transgression, they may hold them more responsible for the transgression. Thus, the responsibility victims attribute to the transgressors for the transgression may change over time. To clarify the relationship between X and Y, future longitudinal research should examine the relationship between responsibility attributions and forgiveness motivations using statistical techniques (e.g. panel analysis) that account for the influence of changes in responsibility attributions on forgiveness motivations.

*What does forgiveness predict?*

The motivation to forgive, measured shortly after a transgression, predicted concurrent feelings of relationship closeness and commitment and termination cognitions. Participants who experienced greater motivation to forgive concurrently were more apt to have greater feelings of relationship closeness and commitment and experienced fewer termination cognitions. This result is consistent with research conducted by Volkmann et al., (2007) and Tsang et al., (2006), which found that victims of transgression who reported having greater forgiveness motivations experienced more feelings of relationship closeness and commitment than did victims who reported having fewer forgiveness motivations. The present findings also provide additional evidence for the relationship between termination cognitions and forgiveness found by Volkmann et al.,

(2007). The findings of the present study suggest that individuals who are highly motivated to forgive, experience fewer thoughts about terminating their relationship and desire less to end their relationship than do individuals who are less motivated to forgive. The motivation to forgive at baseline also predicted the motivation to forgive at the two-week follow-up. This finding is consistent with research that has shown that following a transgression, individuals' initial motivations to forgive generally predict their future forgiveness motivations (e.g. McCullough, et al., 2003; McCullough et al., 2007).

#### *Predictors of termination cognitions*

As predicted, concurrent forgiveness motivations and relationship closeness and commitment were independent predictors of termination cognitions both at the baseline and at the follow-up. The relationship between concurrent relationship closeness and commitment and termination cognitions at time one and the relationship between concurrent forgiveness and termination cognitions at time two only approached statistical significance. Nonetheless, these results taken in conjunction with past research (i.e. Tsang et al., 2006; Volkmann et al., 2007) suggest that individuals who report greater forgiveness motivations and higher feelings of relationship closeness and commitment experience fewer termination cognitions than those who reported fewer forgiveness motivations and less relationship closeness and commitment. Forgiveness motivations also indirectly influenced relationship termination cognitions *via* relationship closeness and commitment. The finding supports past longitudinal and cross-sectional research (Tsang et al., 2006; Volkmann et al., 2007) and suggests that victims' forgiveness motivations influence their feelings of relationship closeness and commitment. It also

suggests that feelings of closeness and commitment, in turn, affect victims' termination cognitions. Thus, these results suggest that victims, who are highly motivated to forgive their partners, generally experience an increase in feelings of relationship closeness and commitment following the transgression. The increased feelings of closeness and commitment then lead to a reduction in victims' thoughts and desires to terminate their relationship. On the other hand, victims who are less motivated to forgive their partners, experience a reduction in feelings of relationship closeness and commitment. The reduced feelings of closeness and commitment then lead to an increase in victims' thoughts and desires to terminate their relationship. According to these results and past research (Tsang et al., 2006 and Volkmann et al., 2007), the victims' motivation to forgive their partners appears to be important in repairing the relationship following a transgression because it influences both the victims' cognitions about relationship termination and their feelings of relationship closeness and commitment.

A more in-depth examination of the data reveals that victims of transgressions experience fewer termination cognitions over time. While the data displayed a relatively even distribution for termination cognitions reported at the baseline, the termination cognitions reported by participants at the follow-up displayed a moderate skew (i.e. the majority of participants reported experiencing few termination cognitions at the follow-up). This reduction may be explained by the theory of cognitive dissonance (Festinger, 1957), which contends that individuals experience distress or discomfort when their beliefs and behaviors do not match. To reduce this discomfort, people seek consistency by modifying either their beliefs or their behaviors to make them more consistent with

one another. According to this theory, victims of transgressions will experience cognitive dissonance if they maintain their relationship while experiencing a high degree of termination cognitions. To eliminate cognitive dissonance, victims have two options—either to leave the relationship or to reduce their termination cognitions. Because all of the victims in the present study maintained their relationships, they may have reduced their termination cognitions over time in order to reduce the discomfort that results from cognitive dissonance. To further test this theory, future research will need to include both the victims and the transgressors who maintained and who terminated their romantic relationships following a transgression. Dissonance theory predicts that victims, who maintain their relationship, will experience significantly fewer termination cognitions over time than will victims who do not maintain their relationship.

Contrary to prediction, a link between termination cognitions at baseline and termination cognitions at follow-up was not supported by the data of this study. The termination cognitions that individuals reported experiencing soon after the transgression were not related to the termination cognitions they reported experiencing approximately two-weeks after the transgression when their concurrent motivations to forgive and feelings of closeness and commitment were accounted for. Longitudinal research has found that relationship commitment is one of the strongest predictors of relationship termination, such that, individuals who are highly committed to their relationship are significantly less likely to terminate their relationship than individuals less committed to their relationship (Rusbult, et al., 1998; Bui, Peplau, & Hill, 1996; Rusbult, Drigotas, & Verette, 1994). In addition, cross-sectional research conducted by Hall and Fincham



(2006) found forgiveness to be an important predictor of relationship termination following an infidelity. Thus, it appears that the motivations to forgive and feelings of closeness and commitment individuals experience two-weeks after a transgression have a greater influence on their thoughts and desires to terminate their relationships than do the termination cognitions that they experience soon after a transgression (which appear to lessen over time for individuals who remain in their romantic relationship as stated above).

The results from the present study suggest that responsibility attributions are an independent predictor of termination cognitions. Thus, the more responsibility participants attributed to their partner for the transgression, the more likely they were to report experiencing more thoughts and desires to terminate their relationships. This result appears to run somewhat contrary to our predictions and cross-sectional research conducted by Hall and Fincham (2006), which found the relationship between infidelity and break-up was fully mediated by forgiveness. The fact that the link between responsibility attributions and termination cognitions was not fully mediated by forgiveness motivations suggests that when victims of transgression are considering whether or not to terminate their current relationship, they are taking into account both their motivation to forgive and how responsible they believe their partners were for the transgression. One explanation for this discrepancy is that termination cognitions are not predictive of relationship break-up. Thus, responsibility attributions following a transgression may greatly influence victims' thoughts and feelings related to relationship termination but not their actual behaviors.

*When does change occur?*

While forgiveness is generally viewed as a process, it is difficult to determine when the changes in forgiveness motivations occur. For example, the average length in time between a participant experiencing a transgression and taking part in the current study was approximately nine days. Participants may have experienced a significant amount of change in forgiveness motivations and relationship functioning prior to participating in the study. In addition, the current study only assessed participants at two time points (i.e. baseline and a two-week follow-up). Based on past research (McCullough et al., 2003 and Tsang et al., 2006) and the fact that forgiveness is a process, participants may have experienced additional changes in forgiveness motivations and relationship functioning after completing the study. Thus, the current study appears to provide only a foundation for further exploring the forgiveness process. In order to thoroughly examine the changes in forgiveness motivations and have a better understanding of the forgiveness process, researchers should examine relationship functioning prior to a transgression occurring and then assess participants' forgiveness motivations and relationship functioning on a daily basis (i.e. a daily diary study). Given that forgiveness is viewed as a process, the study should also be longitudinal. Although labor intensive, a longitudinal daily diary study that tracks participants prior to experiencing a transgression will provide a better understanding of factors that influence forgiveness motivations, when changes in forgiveness motivations occur, and the effects changes in forgiveness motivations have on relationship functioning. A study such as this may also help answer important questions such as: (a) is the forgiveness process truly

linear? (b) can a person begin the forgiveness process, leave it and come back to it, and finally? (c) is there really an endpoint to forgiveness?. Answers to these questions would help to further clarify the forgiveness process.

#### *Limitations and future directions*

Before addressing the implications of this investigation, some of the current study's limitations should be noted. Data for the present study were collected at only two time points. To truly measure change over time, two time points are generally considered less than optimal. In most research on forgiveness, a minimum of three time points is recommended when measuring changes in forgiveness (McCullough et al., 2003). As stated earlier, McCullough and colleagues (2003) postulated that there are three separate types of forgiveness related to time (i.e. forbearance, trend forgiveness and temporary forgiveness). A minimum of three time points would therefore be necessary for measuring trend forgiveness and temporary forgiveness. Because data were collected at only two time points, the present study was not able to assess trend and temporary forgiveness and, as a result, may have missed valuable information pertaining to the forgiveness process.

In addition, the current study combined benevolence motivations, avoidance motivations, and retaliation motivations into a single factor (i.e. forgiveness motivations). While past researchers have reduced benevolence, retaliation and avoidance motivations into two factors (i.e. unforgiveness and benevolence) (see Paleari et al., 2005), to our knowledge, researchers have never reduced benevolence, avoidance and retaliation motivations into a single factor. Thus, despite the fact that most of the findings are

consistent with previous research, caution should be used when interpreting the present results.

Additionally, more measurement work using confirmatory factor analysis or Item Response Theory (IRT) may be useful in determining if forgiveness motivations can be reduced into a single factor. Furthermore, one-item measures of apology sincerity, relationship commitment and relationship closeness were used in the current study. While it is not uncommon to find one-item measures of relationship closeness in the literature (see Aron et al., 1992; Aron et al., 1998; and Tsang et al., 2006), apology sincerity and relationship commitment are usually measured with a minimum of two items (e.g. Tsang et al., 1996, McCullough et al., 1997; 1998). Because longer, more extensive measures may have more accurately assessed relationship closeness, commitment and apology sincerity, results should be interpreted with caution.

The current study used an empathy measure to assess a person's emotional empathy for their partner. This is the same scale used by McCullough and colleagues (1997, 1998). The scale, however, does not account for the cognitive empathy victims have for their partners' role in the transgression. Because it has been theorized that empathy has both emotional and cognitive components (Batson & Shaw, 1991), both components should be assessed in future research.

Because all participants were still in their romantic relationships, we could assess and predict only termination cognitions and not actual termination. The extent to which the kinds of termination cognitions assessed in this study (i.e., desire to terminate, how

close one came to a termination end point) predict actual termination appears questionable and remains a topic for future research.

It should also be noted that there are some conceptual similarities between the termination cognitions and relationship closeness and commitment. For example, relationship closeness and committed could be considered to be the opposite of termination cognitions. Therefore, it may be expected that the two concepts would be highly negatively correlated. The current data suggests that there is a distinction between the two concepts. However, more research is needed to further clarify the relationship between closeness and commitment and termination cognitions.

Additionally, the lack of diversity in the sample appears to be a limitation in the current study. The participants in the current study were primarily Caucasian females raised in a Western culture in dating relationships. Past research suggests that the forgiveness process may be different for people from a collectivist culture (Takaku, et al., 2001). In addition, much of the research discussed in the current study was conducted on individuals in committed married relationships. Thus, the extent to which these results are generalizable to other samples can be questioned and need to be replicated.

It is also possible that that the relationships and lack of relationships found in the current study have been affected by mechanisms thought to influence forgiveness motivations (e.g. relationship satisfaction, self-esteem, religiosity, offense severity, and trust) that were not examined in the current study. A more thorough examination of variables thought to influence forgiveness motivations may provide a more in-depth

explanation of the relationships discovered in the data and may further elucidate the forgiveness process.

Participants who terminated their relationships between the baseline and follow-up data collection time points were not included in the current study because it was expected that their responses would skew the time two closeness and commitment data. The responses from these participants, however, may have provided additional information in regards to the forgiveness process. Thus, in order to thoroughly examine the forgiveness process and changes in forgiveness motivations, all individuals, including those whose relationship ended should be included.

Lastly, according to MacCallum and colleagues (1993), alternative models are often similar to the models presented in manuscripts in regards to goodness of fit and provide meaningful alternative explanations of the data. As a result, there may be important alternative models that were not explored in the current study. Thus, the forgiveness literature would benefit from future research that examines additional and or alternative explanations for the data presented.

#### *Implications and conclusions*

Despite these limitations, the present study supports and extends research on forgiveness and relationship functioning in several ways. First, the research supports previous research that found apology sincerity, empathy and responsibility attributions to be significant predictors of concurrent forgiveness (McCullough et al., 1997, Fincham et al., 2002, Paleari et al., 2005). In addition, the effects of initial forgiveness motivations on future levels of relationship closeness, commitment and termination cognitions

supports and extends prior cross-sectional and longitudinal research (Tsang et al., 2006, Volkmann et al., 2007). The strong concurrent and temporal effects that apology sincerity has on variables related to transgressions and relationship restoration (e.g. empathy, responsibility attributions, forgiveness, relationship closeness, commitment, and termination cognitions) found in the current study and in recent research (i.e. Bachman & Guerrero, 2006; Gunderson & Ferrari 2008) highlights an important area of exploration in future forgiveness and transgression-related research. With a few exceptions (e.g. Baumeister, Stilwell, & Wotman, 1990; Stillwell & Baumeister, 1997; Schutz, 1999; Kearns & Fincham, 2005, Friesen et al., 2005), the majority of research on forgiveness for transgressions has focused on the victim of the transgression. The effects of apology sincerity on the victims' post-transgression feelings about their partners and their relationships highlight the need to explore transgression from both an inter- and intra-personal perspective. Examining dyads using hierarchical linear modeling techniques may provide researchers with a more thorough understanding of the relationship between restoration of relationship closeness and commitment and termination processes following a transgression. Additionally, examining transgressions from an inter- and intra-personal perspective may help in developing more effective clinical interventions.

Because transgressions in romantic relationships are all but unavoidable, a better understanding of the cognitive processes that occur for victims following a transgression appears to be an important area of exploration. The present study provides some empirical support for important predictors of forgiveness and the subsequent effects that

forgiveness motivations have on victims' thoughts and feelings about their relationship, as well as, a better foundation for future transgression-related research. A greater understanding of how and why people in close relationships forgive their partner's transgressions may facilitate the development of or aid in the modification of clinical interventions and forgiveness process models.



Table 1 *Means, Standard Deviations and Bivariate Correlations for Main Variables.* Notes. \*  $p < .05$ . \*\*  $p < .01$ . All  $p$ -values were two-tailed.

	1	2	3	4	5	6	7	8	9
1. T1 Apology Sincerity	1	-.16*	.16*	.45**	.23**	.36**	.18*	-.16*	-.28**
2. T1 Responsibility Attributions		1	-.24**	-.28***	-.17	-.13	-.09	.29**	.10
3. T1 Empathy			1	.38**	.27**	.07	.14	-.28**	-.08
4. T1 Forgiveness Motivations				1	.57**	.49**	.36**	-.53**	-.36**
5. T2 Forgiveness Motivations					1	.29**	.47**	-.28**	-.38**
6. T1 Closeness and Commitment						1	.32**	-.37**	-.36**
7. T2 Closeness and Commitment							1	-.25**	-.67**
8. T1 Termination Cognitions								1	.30**
9. T2 Termination Cognitions									1
Observed Ranges	1 - 7	1-7	0-5	37-86	36-85	3-13	3-14	2-12	2-12
Possible Ranges	1-7	1-7	0-5	19-95	19-95	2-14	2-14	2-14	2-14
Ns	157	157	157	157	127	127	127	127	127
Means (SDs)	5.37 (.12)	4.23 (1.46)	1.93 (1.24)	64.85 (9.36)	68.61 (9.33)	10.56 (2.61)	10.87 (2.60)	8.02 (3.63)	4.01 (2.68)

Table 2 R-Square values for observed variables in the best fitting model.

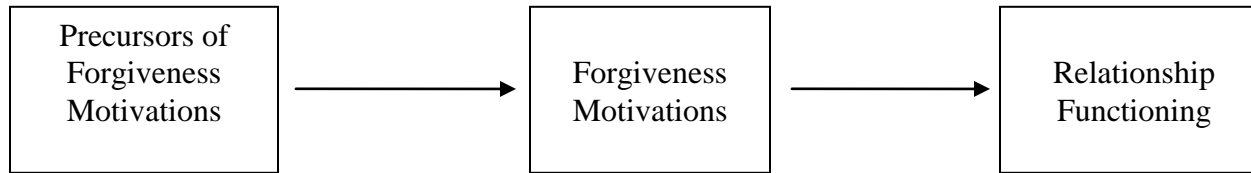
	Standardized Estimate	Standard Error	Est./S.E.	p-value
Time1 Responsibility Attributions	.03	.03	1.07	.29
Time 1 Empathy	.04	.03	1.24	.31
Time 1 Forgiveness Motivations	.31	.06	5.08	<.001
Time 2 Forgiveness Motivations	.39	.07	5.66	<.001
Time 1 Closeness and Commitment	.24	.06	4.00	<.001
Time 2 Closeness and Commitment	.49	.07	7.49	<.001
Time 1 Termination Cognitions	.31	.06	5.01	<.001
Time 2 Termination Cognitions	.50	.06	7.80	<.001

Table 3 *Total (T), direct (D), and indirect (I) effects of variables from the path analysis (\* discrepancy due to rounding error)*

Predictor Variable	2	3	4	5	6	7	8	9
1. T1 Apology	T = .16 D = .16 I = .00	T = .17 D = .17 I = .00	T = .45 D = .38 I = .07	T = .22 D = .00 I = .22	T = -.24 D = .00 I = -.24	T = .28 D = .00 I = .28	T = .20 D = .00 I = .20	T = -.28* D = -.11 I = -.17
2. T1 Responsibility Attributions		T = .00 D = .00 I = .00	T = -.16 D = -.16 I = .00	T = -.08 D = .00 I = -.08	T = .23* D = .16 I = .08	T = -.09 D = .00 I = -.09	T = .07 D = .00 I = .07	T = .07 D = .00 I = .07
3. T1 Empathy			T = .27 D = .27 I = .00	T = .13 D = .00 I = .13	T = -.13 D = .00 I = -.13	T = .21 D = .05 I = .16	T = .13 D = .00 I = .13	T = -.11 D = .00 I = -.11
4. T1 Forgiveness Motivations				T = .49 D = .00 I = .49	T = -.48 D = -.41 I = -.07	T = .61 D = .61 I = .00	T = .43 D = .00 I = .43	T = -.37 D = .00 I = -.37
5. T1 Closeness and Commitment					T = -.13 D = -.13 I = .00	T = .00 D = .00 I = .00	T = .58 D = .58 I = .00	T = -.34 D = .00 I = -.34
6. T1 Termination Cognitions						T = .00 D = .00 I = .00	T = .00 D = .00 I = .00	T = .10 D = .10 I = .00
7. T2 Forgiveness Motivations							T = .25 D = .25 I = .00	T = -.27 D = -.13 I = -.14

Table 3 Total (*T*), direct (*D*), and indirect (*I*) effects of variables from the path analysis continued

	Predictor Variable	2	3	4	5	6	7	8	9
8.	T2 Closeness and Commitment								T = -.57 D = -.57 I = .00
9.	T2 Termination Cognitions								



*Figure 1.* Abbreviated description of the hypothesized model being examined in the current study.

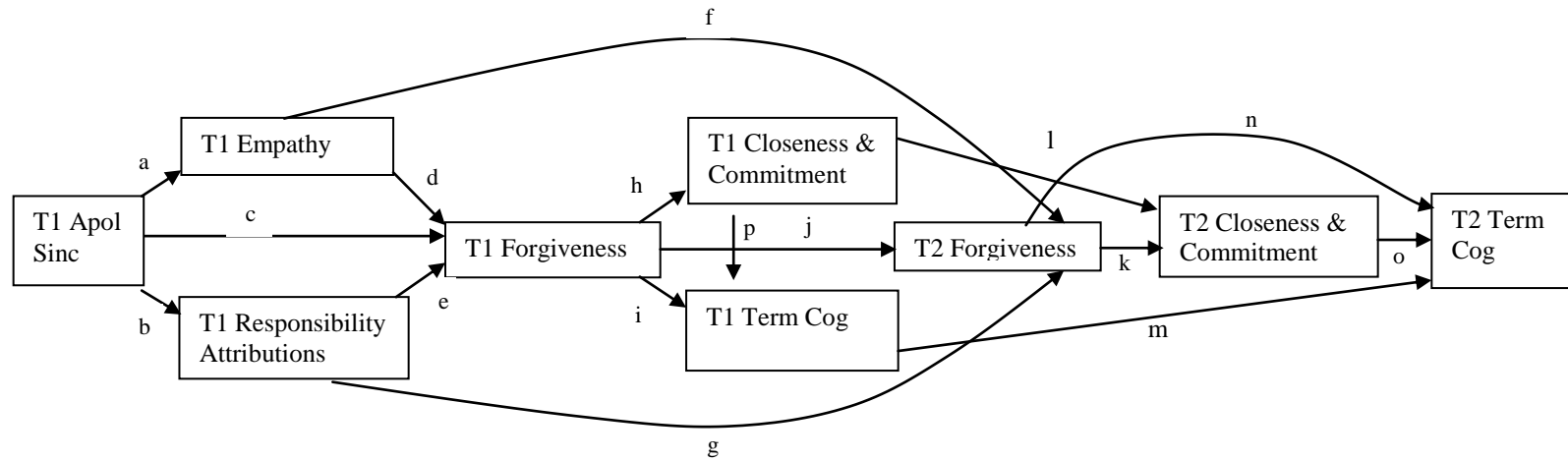


Figure 2. Hypothesized model of relationships' sincere apology, empathy, responsibility attributions, T1 forgiveness, T1 closeness and commitment, T1 termination cognitions, T2 forgiveness, T2 closeness and commitment, T2 termination cognitions.

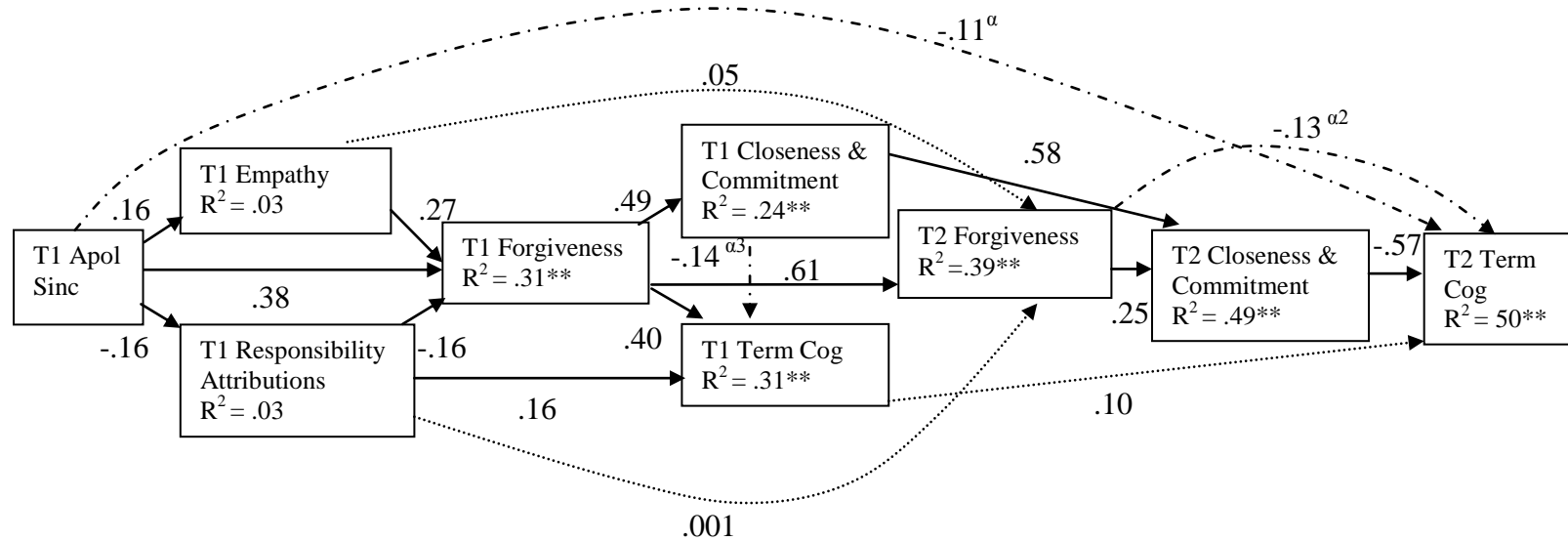


Figure 3. Best fitting model of relationships' sincere apology, empathy, responsibility attributions, T1 forgiveness, T1 closeness and commitment, T1 termination cognitions, T2 forgiveness, T2 closeness and commitment, T2 termination cognitions. Solid lines represent coefficients that are statistically significant beyond the  $p < .05$  level. Dotted lines represent statistically insignificant coefficients. Dash-dotted lines represent coefficients that approach statistical significance (i.e.  $\alpha$  = the pathway from apology sincerity to T2 termination cognitions  $p = .08$ ;  $\alpha2$  = pathway from T2 forgiveness motivations to T2 termination cognitions  $p = .08$ ;  $\alpha3$  = pathway from T1 closeness and commitment to T1 termination cognitions  $p = .07$ ). The correlation between T1 empathy and T1 responsibility attributions was  $-.22$ ,  $p < .01$ . T1 Apolo Since = T1 Apology Sincerity, T1 Term Cog = T1 Termination Cognitions, T2 Term Cog= T2 Termination Cognitions.

## APPENDIX

### *List of Measures*

#### *Demographics questionnaire*

1. What is your age? \_\_\_\_\_
2. What is your sex? Male Female
3. What is your race/ethnicity?  
Asian-American/Pacific Islander  
White/Caucasian  
Hispanic Latino  
African American  
Other (please specify) \_\_\_\_\_
4. What is your sexual orientation?  
Heterosexual  
Homosexual  
Bisexual
5. What is your religious affiliation?  
Christian  
Jewish  
Muslim  
None  
Other \_\_\_\_\_
6. Who do you currently live with?  
Parents  
Romantic Partner  
With roommates  
Alone  
Other \_\_\_\_\_



*Demographics questionnaires continued*

7. How would you categorize your current romantic relationship?

Dating

Married

Engaged

Other \_\_\_\_\_

8. How long have you been in your current romantic relationship?

Months: \_\_\_\_\_

9. How many serious romantic relationships have you had in the past?

10. Are you sexually active in your relationship? Yes No

11. In your lifetime, how many serious romantic relationships have you been in? \_\_\_\_\_

*Description of transgression*

You will be asked to describe a relationship-threatening event that was initiated by your partner that negatively impacted your relationship.

Think of a time when your partner did and/or said something to you that you perceived to be a threat to the relationship. Please describe what occurred in as much detail as possible:

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How long ago did this event occur?

\_\_\_\_\_ years \_\_\_\_\_ months \_\_\_\_\_ days

*Transgression related items:*

1. *Apology sincerity:*

Item 2 rated on a 7-point scale (1 \_ *not at all sincere* and 7 \_ *extremely sincere*).

1. Did your partner apologize? (yes/no)
2. How sincere was the apology?

2. *Relationship commitment:*

Item are rated on a 7-point scale (1 \_ *not at all* and 7 \_ *extremely*).

1. How committed were you to maintaining the relationship with your partner  
RIGHT NOW?

3. *Termination cognitions:*

Items are rated on a 7-point scale (1 \_ *not at all* and 7 \_ *extremely*).

1. How close did you come to ending the relationship after this occurred?
2. How strongly did you desire to end the relationship after this occurred?

4. *Hurt*

Item are rated on a 7-point scale (1 \_ *not hurtful at all* and 7 \_ *most hurt I have ever felt*).

1. How painful was the threatening event to you when it occurred?

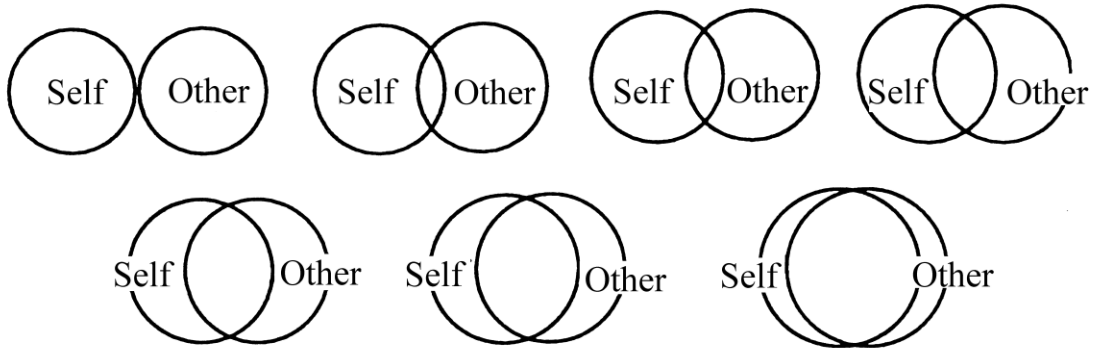
5. *Severity of transgression threat*

Item are rated on a 7-point scale (1 \_ *not at all threatening to the relationship* and 7 \_ *very threatening to the relationship*).

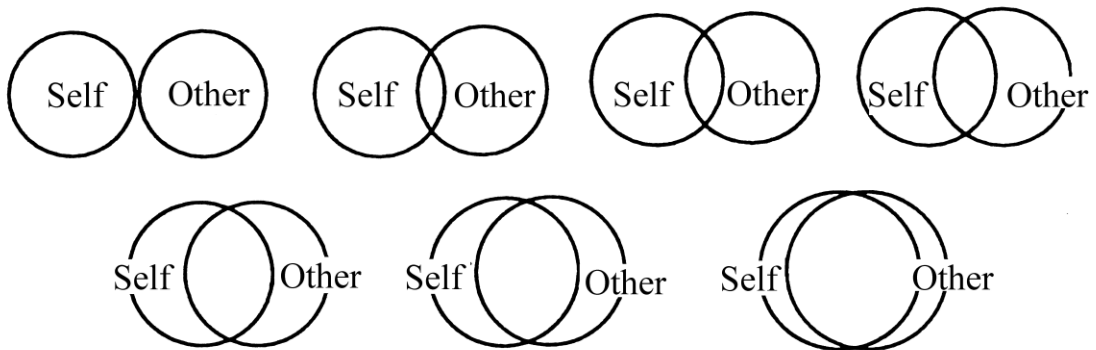
1. Please rate how severe of a threat was this event was to your relationship?

*Inclusion of other in self scale*

1. Please indicate which picture below that best describes your **current** relationship with your partner RIGHT NOW.



2. Please indicate which picture below that best describes your **desired** relationship with your partner.



*Transgression-related interpersonal motivations inventory—18-item version*

For the following questions, please indicate your past thoughts and feelings about the person who hurt you; that is, we want to know how you feel about that person after the relationship threatening event occurred. Next to each item, circle the number that best describes your past thoughts and feelings.

Items are rated on a 5-point scale (1 \_ *strongly disagree*, 2 \_ *disagree*, 3 \_ *neutral*, 4 \_ *agree*, and 5 \_ *strongly agree*).

1. I made him/her pay.
2. I tried to keep as much distance between us as possible.
3. Even though his/her actions hurt me, I had goodwill for him/her.
4. I wished that something bad would happen to him/her.
5. I lived as if he/she doesn't exist, isn't around.
6. I wanted us to bury the hatchet and move forward with our relationship.
7. I didn't trust him/her.
8. Despite what he/she did, I wanted us to have a positive relationship again.
9. I wanted him/her to get what he/she deserves.
10. I found it difficult to act warmly toward him/her.
11. I avoided him/her.
12. Although he/she hurt me, I put the hurts aside so we could resume our relationship.
13. I got even.
14. I forgave him/her for what he/she did to me.
15. I cut off the relationship with him/her.
16. I released my anger so I could work on restoring our relationship to health.
17. I wanted to see him/her hurt and miserable.
18. I withdrew from him/her.

*Responsibility attributions measure*

Items are rated on a 7-point scale (1 \_ *strongly disagree*, 4\_ *neutral*, and 7 \_ *strongly agree*).

1. My partner's behavior was on purpose rather than unintentionally.
2. My partner's behavior was motivated by selfish rather than unselfish concerns.
3. My partner deserves to be blamed for his/her behavior.

*Empathy scale*

Please rate your feelings for your partner after the threatening event occurred:  
Items are rated on a 5-point scale (1 \_ *not at all*, 3\_ *neutral*, and 5 \_ *extremely*).

1. Sympathetic
2. Empathetic
3. Concerned
4. Moved
5. Compassionate
6. Warm
7. Soft-hearted
8. Tender

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## CURRICULUM VITAE

Jeffrey R. Volkmann graduated from Robert E. Fitch Senior High School, Groton, Connecticut in 1998. He received his Bachelor of Arts in history from Providence College, Providence, Rhode Island in 2002. After receiving his degree Jeffrey was employed as a research assistant at Brown University's Alcohol and Addiction Center for two years. In 2004 he entered the clinical psychology doctoral program at George Mason University, Fairfax, Virginia. During his time at George Mason University, Jeffrey maintained a heavy teaching load. He was the instructor for five different courses (15 separate sections) and the lab instructor for two different courses (5 separate sections). Jeffrey Volkmann received his master's degree in psychology at George Mason University, Fairfax, Virginia in 2006. While working towards his doctorate in clinical psychology, Jeffrey Volkmann also held clinical positions at a mental health center and two separate university counseling centers.