COMMUNICATING FORGIVENESS WITHIN
ADULT SIBLING RELATIONSHIPS

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Dedication

To my family and friends whose constant support, love and reinforcement have been immeasurable. Specifically, I would like to thank my Mother, Atara, who has always stood behind every decision I make, who has encouraged every academic endeavor I have pursued, and who has provided me with the assurance, confidence and motivation to excel at every task I have been faced with. Her ability to see my passion for learning has encouraged me to take on challenges and succeed at them. Mom, I love you more than words can express. I would like to thank my Father, Zeev, who may not understand the extent of my academic endeavors, however has always supported my desire for education and my passion for learning. Dad, thank you for always encouraging me to do what I love. To my brothers, specifically Gill and Dan, who have always supported my educational decisions and experiences and have dealt with some of my irritable moments during academic hardships. I love you both. I would also like to thank my close friend Anita who assisted me in the qualitative methods section of this thesis, her unbelievable confidence in me, and her never-ending motivation and support throughout my thesis process. Finally, I would like to thank my best friend Nicole, who has been a constant role model in her scholarly accomplishments and challenges she has pursued in her own life. Nicole has been one of the most motivational, encouraging and supportive people in my life and I know very well that I would not be the person I am today without her. She has enabled me to see what I truly am capable of, and has constantly encouraged me to challenge myself in anything I pursue. Nicole, I love you like a sister.
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The purpose of this study was to examine the role of communicating forgiveness within adult sibling relationships. Specifically, this study investigated the relationship between seeking forgiveness and attachment style, the relational outcomes of forgiveness, and forgiveness as a relational maintenance strategy. A total of 172 participants were surveyed in order to acquire as many participants as possible with adult siblings. Forgiveness seeking communication was represented by Kelley’s (1998) typology of forgiveness tactics which included explicit acknowledgment, indirect tactics, and compensational-conditional tactics. In addition to Kelley’s typology, a choice of “do nothing” was included to enable participants to express no forgiveness seeking tactic.

Generally, the findings indicated that a significant relationship emerged between secure attachment style and the communication forgiveness tactics. The more positive individuals’ attitude toward forgiveness the more relational satisfaction they experience in their adult sibling relationship. Furthermore, results indicated that individuals who use more positive relational maintenance strategies in their adult sibling relationships are more likely to use one of the three communication forgiveness message types of explicit acknowledgment, indirect tactics, and/or compensational-conditional tactics when seeking forgiveness from their adult sibling. In addition, the findings indicated that attitude toward forgiveness is a mediator in the relationship of forgiveness message type
and two of the three attachment styles (avoidant and secure). Lastly, an analysis of open-ended responses revealed that individuals sought out forgiveness from their adult siblings most often in incidences where verbal aggressive messages occurred.

Findings indicate that actively seeking forgiveness using one of Kelley’s (1998) forgiveness tactics is related to secure attachment style, however avoidant and anxious-ambivalent attachment styles were not related to the forgiveness seeking tactics. Investigations of why these attachment styles are not directly linked to the communication forgiveness message tactics should be examined in future research efforts.
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CHAPTER I

INTRODUCTION

Forgiveness is a central topic among religious scholars, social scientists, and recently, communication scholars (Hope, 1987; Kelley & Waldron, 2008; McCullough & Worthington, 1999). Past forgiveness literature has examined the role of forgiveness in romantic partners, friendships and parent-child relationship; however, forgiveness literature is limited in adult sibling relationships. Investigating forgiveness in adult sibling relationships may provide valuable insight into long term family relationships. A sibling relationship are one of the few involuntary relationships (Bevan & Stetzenback, 2007; Fitzpatrick & Badzinski, 1994; Hess, 2000), as well as one of the longest relationships individuals will have (Noller, 2005).

One way of examining the role of communicating forgiveness and adult sibling relationships is from Attachment Theory framework. Attachment Theory, developed by Bowlby (1969) provides a descriptive and explanatory framework for understanding interpersonal relationships between human beings, developed from the bond between a child and their primary caregiver beginning during infancy. Prior research indicates that attachment style may affect the relationship one has with their siblings throughout their life (Feeney & Humphreys, 1996; Noller, 2005; Trinke & Bartholomew, 1997). Sibling
relationships are characteristically viewed as an attachment relationship (Noller, 2005), and therefore how one communicates forgiveness in these types of relationships may be dependent on an individual’s attachment style.

In addition, there is considerable research that supports the connection of relational satisfaction and forgiveness (Fincham, 2000; Fincham, & Davila, 2005; Kachadourian), however most of the prior research is limited to marriages and romantic relationships. One could expect that these findings could extend relational satisfaction and forgiveness to other family dyads such as sibling relationships. It is also pertinent given the lifelong relationship of siblings that understanding the role of forgiveness as a relational maintenance behavior is worthy of examination.

Therefore, this study focuses on the role of communicating forgiveness between adult siblings and the relationship this may have on one’s attachment style. In addition, this study will examine the impact of communicating forgiveness on relational satisfaction in the adult sibling relationship. Lastly, this study will examine how communicating forgiveness may be used as a relational maintenance strategy.
CHAPTER II
LITERATURE REVIEW

The following literature review discusses the conceptual and theoretical distinctions of communicating forgiveness, followed by an overview of adult sibling relationships. In addition, a review of adult sibling relationships and attachment style are presented. Finally, research on relational satisfaction and relational maintenance strategies are presented and their possible relationship to communicating forgiveness within adult sibling relationships.

Conceptualization of Forgiveness

There are multiple conceptualizations of forgiveness among scholars. Several scholars focus on the relational aspect of forgiveness. Enright, Santos, and Al-Mabuk (1989) define forgiveness as “the ability to overcome negative emotions of judgments of a transgressor, not by denying these emotions or judgments, but by viewing the transgressor with compassion, benevolence, and love” (p.96). Similar to this definition, Younger, Piferi, Jobe, and Lawler (2004) define forgiveness as a relational process of releasing negative affect in order to preserve or maintain a relationship.

Others define forgiveness as motivation-based. McCullough, Worthington, and Rachal (1997) define forgiveness as “the set of motivational changes whereby one becomes a) decreasingly motivated to retaliate against an offending relationship partner;
b) decreasingly motivated to maintain estrangement from the offender; and c) increasingly motivated by conciliation and goodwill for the offender, despite the offender’s hurtful actions” (p. 321-322). Fincham, Paleari, and Regalia (2002) define forgiveness similarly as “a transformation in which motivation to seek revenge and to avoid contact with the transgressor is lessened and prosocial motivation toward the transgressor is increased” (p. 27).

In addition to relational and motivational aspects of defining forgiveness, other scholars prefer definitions that emphasize forgiveness as a coping mechanism or a relational maintenance strategy (Kelley & Waldron, 2006; Waldron & Kelley, 2008; Younger, et al., 2004). For example, Hargrave (1994) argues that “forgiving demands that the victim enter back into the relationship with the very people that hurt him or her unjustly” (p. 345).

Researchers have argued that the reason for the lack of consensus on defining forgiveness is related to its close tie with other concepts such as reconciliation (i.e. restoration of relationships), condoning (i.e. dealing with the offense or just putting up with it), or excusing (i.e. legitimizing the offended act) (Enright & Fitzgibbons, 2000; Kelley & Waldron, 2006). Most scholars concur that forgiveness is most often conceptualized and examined from the offended party’s perspective rather than the individual seeking forgiveness (Enright & The Human Development Study Group, 1991; Fincham, & Beach, 2002; McCullough, Worthington, & Rachal, 1997). In addition, forgiveness is said to be a process in which one will release the negative affect attributed to others’ painful actions (Waldron & Kelley, 2008; Younger, et al., 2004).
Originally, communication scholars Kelley and Waldron (2006) defined forgiveness as a “relational process whereby harmful conduct is acknowledged by one or both partners; the harmed partner extends undeserved mercy to the perceived transgressor; one or both partners experience a transformation from negative to positive psychological states, and the meaning of the relationship is renegotiated, with the possibility of reconciliation” (p. 305). They continue to define forgiveness seeking as being marked by communication that accepts the responsibility, expresses genuine remorse, and asks the listener for mercy that only a wounded party can provide. In 2008, Waldron and Kelley expanded this definition as, “Forgiveness is a means by which distressed partners can negotiate improvements in relational justice, create a renewed sense of optimism and well-being, and potentially recover lost intimacy and trust” (p. vii).

These conceptualizations of forgiveness, offered by Kelley and Waldron, are appropriate for investigating sibling relationships from a communication perspective. Therefore, for the purpose of this study, forgiveness is defined as a relational process whereby harmful conduct is acknowledged by one partner; the harmed partner extends undeserved mercy to the perceived transgressor; one partner experiences a transformation from negative to positive psychological states, distressed partners can negotiate improvements in relational justice, and the meaning of the relationship is renegotiated, with the possibility of reconciliation.
**Attitude toward Forgiveness**

Research on interpersonal forgiveness has progressed within the past decade; however an imperative question remains whether there are stable individual differences in the tendency to forgive others and individual’s attitudes toward forgiveness (Brown & Phillips, 2004). Researchers have begun to re-examine the issue of dispositional forgiveness across situations and relationships (e.g., Berry, Worthington, Parrot, O’Connor, & Wade, 2001; Brown, 2003; DeShea, 2003; Emmons, 2000; Tangney, Boone, Dearing, & Reinsmith, 2002). The most commonly used method of measuring dispositional forgiveness is by presenting respondents with offense vignettes and requesting their reports on how they believe they would respond to the hypothetical situations (Berry et al., 2001; Brown & Phillips, 2003). This approach is considered an improvement over earlier attempts to measure trait forgiveness, due to the lack of consensus on conceptualizing forgiveness. Brown and Phillips (2004) concluded in their study of dispositional forgiveness, “As a number of theorists have posited, individual differences in forgiveness do appear to exist and may enhance our ability to predict the aftermath of interpersonal offenses” (p. 635). Brown’s (2003) measure of pro-forgiveness attitudes (the Attitudes Toward Forgiveness Scale, or ATF) captures the essence of forgiveness as a general tendency and enables researchers to measure individual attitudes toward the action of forgiveness.

**Communication Forgiveness Research**

Kelley’s (1998) analysis of forgiveness narratives concluded that individuals forgive in three ways. The first type of forgiveness is direct forgiveness in which forgivers explicitly tell the offenders they are forgiven (i.e., “I forgive you”), or the
offender explicitly seeks forgiveness (i.e. explicit apology). This often occurs in
discussion about the transgression. Direct forgiveness confronts the conflict directly and
acknowledges the harmful act. The second type of forgiveness is indirect forgiveness,
where individuals do not clearly tell the offender they are forgiven, or the offender does
not explicitly apologize. Rather, forgiveness is “just understood” (Kelley, 1998, p. 264).
Indirect forgiveness strategy tactics include humor, nonverbal displays or relational
normalcy after the transgression (Kelley & Waldron, 2005). Indirect forgiveness is
believed to be used as a conflict minimization strategy when the “preservation of the
relationship is more important than rectifying the relational transgression” (Kelley &
Waldron, 2005, p. 738). The third type of forgiveness is called conditional forgiveness,
which attaches stipulations to the granting of forgiveness (i.e., “I forgive you if you
promise to never do this again”), or when seeking forgiveness (i.e., “Please forgive me, I
promise I will never do it again”). “Conditional forgiveness is used when individuals
desire relational repair yet want to make it explicitly clear that repeated behavior will not
be tolerated” (Merolla, 2008, p. 116).

Kelley (1998) identified more than twenty forgiveness-seeking tactics from
romantic partners, family members, friends and co-workers. The most frequent tactics of
forgiveness reported from this study include explicit acknowledgment (i.e. apology or
remorse), nonverbal assurance (i.e. eye contact, hug), compensation (i.e. gifts or repeated
efforts), explanation (i.e. discussion of the offense, reasons for the offense), and humor
(i.e. joking). These main types are listed by the frequency in which the behavior type was
used most in Kelley & Waldron’s (2005) study.
Kelley and Waldron (2005, 2008) also identify two factors that influence the forgiveness process: situational elements and motivational factors. Situational elements determine what communicative choices one makes as well as the relational outcome. These issues are dependent on the type of relationship and the severity of the transgression (Kelley & Waldron, 2005). For example, a mother and daughter may be less likely to terminate their relationship after a severe transgression, whereas acquaintances or friends may very well end the relationship. Motivational factors of forgiveness refer to restoring emotional well-being to themselves or their partners in order to rebuild the damaged relationship (Waldron & Kelley, 2008). For example, individuals may extend forgiveness in a situation where they are unclear who is at fault in order to preserve the relationship, since the relationship is more important than the actual transgression.

Most of the prior research on communicating forgiveness is within romantic relationships and friendships. Merolla (2008) built upon Kelley and Waldron’s work and investigated forgiveness in both friendships and dating relationships. He investigated the degree that individuals experience negative affect after they communicate forgiveness to another person (Merolla, 2008). Overall, he found that indirect forgiveness granting was used most often (47%), direct forgiveness was the second tactic used most frequently (42%) and conditional forgiveness was only used 12% of the time. However, some differences were found between friends and dating couples in conditional forgiveness. Conditional forgiveness was used more often in dating relationships than friendships and indirect forgiveness was used more frequently among friends than dating partners. The more severe the transgression, the more negative affect was present after the forgiveness
granting. In addition, conditional forgivers reported higher negative affect than did direct or indirect forgivers.

Sidelinger and Booth-Butterfield (2007) found that the value one places on the relationship with one’s partner is a predictor of forgiveness and jealousy in romantic relationships. Specifically, they concluded that the more one perceives the other to have a high mate value; they were more forgiving of the partner’s transgression and individuals who experience more satisfying relationships experience less jealousy (Sidelinger & Booth-Butterfield, 2007).

Bachman and Guerrero (2002) examined the relationship between forgiveness, apology and communicative responses to hurtful events. This study investigated how forgiveness varies depending on the type of hurtful event. They found that de-escalation, integrative communication and distributive communication were the best predictors of forgiveness in this study. De-escalation refers to ending the relationships, threatening to date others, or letting the relationships disintegrate. Integrative communication refers to openly talking about the relational issue to increase understanding and solve the problem, and distributive communication is confronting, insulting or yelling at the partner. However, only integrative communication was positively associated with forgiveness. These findings illustrate the nature of forgiveness, and the dependency it has on openly communicating about the issue and the ability communication has to solve relational problems.

Building upon Kelley’s (1998) work, Kelley and Waldron in 2005 investigated forgiveness-seeking communication and the relational outcomes. They interpreted forgiveness-seeking communication approaches with reference to face management,
uncertainty reduction and rule negotiation approaches to relational recovery. They found that behaviors that exhibited face-management characteristics were associated the most with positive relational changes. In addition, explicit acknowledgment includes behaviors that threaten positive face of the person requesting forgiveness and grants the offended partner the power to forgive or not to forgive (Kelley & Waldron, 2005). They concluded that nonverbal assurance was linked with positive relational change and reducing uncertainty regarding the offenders’ sincerity and commitment to improving their behavior. This study linked communication theory with forgiveness. It proves that forgiveness can be a face-threatening or a face saving act, depending on who is granted face, as well as forgiveness’ ability to reduce uncertainty.

Past forgiveness research illustrates the growing field of interest to communication scholars as well as the importance of communicating forgiveness and the relational consequences. As the research indicates, most of the forgiveness studies have looked at romantic partners or friendships. To date, little research is available in understanding forgiveness in sibling relationships, particularly adult sibling relationships. This study will attempt to expand this research to look at forgiveness in the adult sibling relationship. Adult sibling relationships are characterized as intimate (like romantic relationships), but non sexual (like friendships). Thus the role of forgiveness may be helpful in understanding the sibling relationship and the relational outcomes of forgiving.

**Adult Sibling Relationships**

“Siblings form communication relationships with one another that are unlike any other relationship” (Myers, 1998, p. 309). Most research is conducted within family communication, and tends to look at the family as a whole instead of the sibling dyad.
Pike, Manke, Reiss, and Plomin (2000) described that many researchers have tended to “treat the family as a monolithic unit” (p. 96) and focus on variables related to the family as a whole instead of the varying experiences of siblings in the same family (Noller, 2005). Fitzpatrick and Badzinski (1994) claim that 80% of individuals spend at least one third of their lives with their siblings. This significant life long relationship suggests that how sibling dyads request forgiveness is worthy of investigation.

A sibling relationship is often described as an involuntary relationship (Bevan & Stetzenback, 2007; Fitzpatrick & Badzinski, 1994; Hess, 2000). A non-voluntary relationship is defined as “a relationship in which the actor believes he or she has no viable choice but to maintain it, at least present and in the immediate future” (Hess, 2000, p. 460). Relationships that are voluntary can end at any time; however, due to the involuntary nature of the sibling relationship, it is rare that they are terminated. Even siblings who have not spoken for a great amount of time (i.e. years or longer) still seem to have an emotional connection to one another (Noller, 2005). For the most part, the relationship between siblings is the longest relationship individuals will have and involves the siblings relating to one another and “provide one another with support, guidance, and companionship, as well as intense emotional experiences” (Noller, 2005, p. 2). Bevan and Stetzenbach (2007) describe sibling relationships as one in which, as children, shares their most intense social experiences.

Within the last thirty years, most of the research regarding sibling relationships comes from western industrialized countries (Noller, 2005). In western countries, most siblings live together in the same home, grow up with one another and have daily interactions. Deater-Deckard, Dunn, and Lussier (2002) offer several reasons to study
sibling relationships. First, siblings are an important and constant agent in most children’s lives, particularly in early and middle childhood, which is a time that is considered to be a crucial developmental stage. Second, siblings often serve as support to one another during difficult times, such as divorce, remarriage, family illness, or major life events. Lastly, sibling relationships are typically ambivalent, in addition to warmth, there are considerable amounts of negativity and conflict, even more so than in friendships.

Siblings play various roles to their brothers and sisters, such as the role of a friend, manager, teacher and competitor (Martin, Anderson, Burant, & Weber, 1997). In addition, individuals turn to their siblings for companionship, affection, comfort, and friendship (Martin, et al., 1997). Therefore, communication is an important aspect when conflict arises in sibling relationships and may be the most effective tool to seek forgiveness.

**Sibling Research**

Siblings have been studied in a variety of contexts. For example, age, development, characteristics of siblings, and sex of siblings have been investigated by scholars. The majority of research on siblings is either when siblings are children/adolescents or the elderly. A large portion of the sibling research investigates the quality of sibling relationships in childhood, sibling temperament, family constellation variables such as birth order, and the parent-child relationship (Riggio, 2000).

Of the research examining adult sibling relationships, most of the research investigates the quality of the relationship in older siblings and includes investigations of care-taking behavior, social support and siblings as friends in later life (Cicirelli, 1989; Connidis, 1994; Goetting, 1986; Gold, 1989; Riggio, 2000; Wilson, Calsyn, & Orlofsky,
The general findings of these studies reveal that elderly siblings help one another in a time of crisis (Cicirelli, 1989; Conidis, 1994) and that elderly individuals turn to their siblings for psychological support and companionship (Scott, 1983). Studies of siblings in their middle to late adulthood indicate that siblings generally feel close and accept one another (Bedford, 1989; Gold, 1989).

Goetting (1989) developed a description of the “developmental tasks of siblingship” over three life stages of life cycle: childhood and adolescence, early and middle adulthood, and old age (p. 301). Siblings develop companionship and emotional support during the childhood and adolescence. During early and middle adulthood, siblings continue their support and companionship and assist one another in taking care of elderly parents, and possibly the estate if the parents are deceased. Lastly, in old age, siblings remain companions to each other, provide support and share reminiscences about the past and may resolve any previous sibling conflict or rivalry. “These stages illustrate that throughout the life span, siblings persist in supporting and caring for each other and function as on-call aides and supporters” (Stewart, Kozak, Tingley, Goddard, Blake, & Cassel, 2001, p. 301).

Sibling research has focused on sex differences in relationship closeness. Bedford (1989) found that women seem to be more aware of their underlying feelings toward sisters than are men to their brothers. The past literature on sibling relationships has provided valuable insight into the involuntary nature of the relationship in addition to findings regarding age of siblings, development of sibling relationships, quality of the relationship and gender differences.
Attachment Theory

Attachment theory was first developed by Bowlby (1969, 1973, 1980) in his collection of famous work Attachment and Loss Vol. 1-3. He described attachment as the child’s understanding of the relationship with its primary caregiver, and the primary caregiver’s ability to attend to the child’s needs and wants (Bowlby, 1969). The child’s experience in early infancy with the primary caregiver creates internal working models that the child bases its relationships toward other people (Bowlby, 1969; Collins & Read, 1990; Guerrero & Bachman, 2006; Guerrero & Jones, 2003). “During adolescence and adult life a measure of attachment behavior is commonly directed not only towards persons outside the family but also towards groups and institutions other than the family” (Bowlby, 1969, p. 207). Therefore, the attachment style that is associated with the working models developed from infancy and on is an essential, innate part of an individual and who that individual becomes in their adult life and in their interpersonal relationships.

Three general assumptions that are consistent with Bowlby’s (1969) original theory of attachment are still embraced today by scholars. The first and most fundamental assumption is that attachment with others is an innate function of human behavior, which starts during infancy and continues throughout life. Attachment behavior characterizes human beings from “the cradle to the grave” (Bowlby, 1979, p. 129). The second assumption is that attachment is formed from biological forces and social interaction (Guerrero, 2008). Finally, the third assumption recognizes that attachments include cognitive, emotion and behavior and is activated when humans are in need of protection and/or experience distress (Bowlby, 1969; Guerrero, 2008).
Ainsworth, Blehar, Waters, and Wall (1978) expanded Bowlby’s work and created the first taxonomy to distinguish between individual attachment styles based on their research which investigated how children become securely attached to their caregivers and how insecure children use defense mechanisms when they lack the attention and affection from their primary caregivers (Collins & Read, 1990; Guerrero, 2008; Mikulincer & Nachshon, 1991). These attachment styles were labeled: secure, avoidant, and anxious/ambivalent. In this study by Ainsworth et al., (1978) secure children responded to the strange situation by first becoming distressed, but then adapted to the environment without the caregiver. When the caregiver returned, the child became happy again. Avoidant children were indifferent when the caregiver left as well as when they returned, and anxious/ambivalent children were extremely distressed when the caregiver departed, but was relieved as well as angry when the caregiver returned (Guerrero, 2008).

Bartholomew and Horowitz (1991) propose four attachment groups that take Bowlby’s (1973) internal representations of the self and other. They developed four cells (or types) that represent each attachment style. These include secure, preoccupied, fearful-avoidant, and dismissive avoidant. Secure attachment indicates a sense of lovability and worthiness and an expectation that other people are generally responsive and accepting. Preoccupied attachment indicates a sense of unlovability and unworthiness of self and a positive evaluation of others. Fearful-avoidant attachment is where individuals have a negative view of the self and a negative view of others, and dismissive-avoidant represents individuals who have a positive view of themselves and a negative view of others (Bartholomew & Horowitz, 1991; Guerrero, 2008; Searle &
Meara, 1999). These attachment style types begin the work of how we view attachment and provides us with a framework that measures individual’s attachment style.

**The Sibling Relationship and Attachment Style**

Researchers have explored the possibility that sibling relationships are a type of attachment relationship (Noller, 2005). Attachment Theory, based on the work of Bowlby (1969) consider attachment figures fulfill five functions: first, they can be used as a safe haven during times of distress, second, they may function as a secure foundation when an individual is venturing independently, third, they share a strong emotional tie, fourth, they desire to be in close proximity with the person, and lastly, they would mourn the loss of the person (Trinke & Bartholomew, 1997). Trinke and Bartholomew (1997) investigated the attachment styles of siblings by ranking romantic partners and siblings on the five characteristics of attachment. They found that although only 8% of the participants rated their sibling as their primary attachment figure, 58% reported being attached to at least one of their siblings. In addition, Feeney and Humphreys (1996) found that sibling relationships serve the critical functions of attachment relationships, as they rated high on providing closeness, comfort and security to their sibling. Doherty and Feeney (in press) concluded that sibling relationships met the criteria for full-blown attachment in a larger study of attachment of adults across the life span (Noller, 2005). “Around 22% of participants reported being attached to at least one sibling, and attachment tended to be stronger for singles and single parents than for those in dating, child-rearing, or empty-nest relationships” (Noller, 2005, p. 6). Therefore, Riggio (2000) concluded that early life experiences with our caregiver as well as our siblings are a predictor of our attachment to siblings in middle and old age.
Research indicates that an individual’s attachment style may affect the type of relationship one has with their sibling later in life (Feeney & Humphreys, 1996; Noller, 2005; Trinke & Bartholomew, 1997). Since past research indicates that a sibling relationship meets the criteria for an attachment relationship, understanding how one’s attachment style may affect the way forgiveness is communicated, and the effects this may have on the relational satisfaction.

*Attachment Style and Forgiveness*

Attachment style, described by Bowlby (1969) is described as the bond between a child and their primary caregiver, and the child’s understanding of the relationship with their primary caregiver. These early life experiences with the primary caregiver become internal working models that the child bases its relationships toward other people (Bowlby, 1969; Collins & Read, 1990; Guerrero & Jones, 2003; Guerrero & Bachman, 2006). One of the general assumptions of Attachment Theory is that attachment is formed from biological forces and social interaction (Guerrero, 2008). For example, these behavioral inborn traits may lead to certain attitudes which, in turn, may lead to certain behaviors, which may ultimately affect the relationship. Specifically, the ability or desire to seek forgiveness during conflict may rely on the attachment style of the individual. In addition, the attachment style of the individual who desires to seek forgiveness may determine the type of forgiveness seeking communication message used.

Past literature supports the notion that attachment styles are thought of as a stable personality trait (Gillath, Hart, Noftle, & Stockdale, 2008; Kirkpatrick & Hazan, 1994; Simpson, Collins, Tran, & Haydon, 2007; Waters, Weinfield, & Hamilton, 2000), however Bowlby’s original theory suggests that the working models and dynamic
behavioral systems play an important role to attachment styles (Gillath, et al., 2008). In particular, the mental representations of self and other are reflections of actual experiences of one’s close relationships, and these representations are revised and updated as individuals enter into new relationships and develop new experiences (Bowlby, 1969; Bowlby, 1982; Gillath, et al., 2008).

Therefore, it is pertinent to investigate the relationship between attachment style and forgiveness-seeking communication, as well as the overall attitude toward forgiveness to determine whether individuals with different attachment styles use different types of forgiveness seeking communication or have more positive attitudes toward forgiveness. In addition, without knowing if attachment style is a stable trait, how this is related to forgiveness seeking communication is worthy of investigation. Furthermore, it is important to determine whether attachment style and forgiveness are independent of one another or if there is an interactional perspective.

**Relational Satisfaction**

Relational satisfaction is defined and “involves one’s position in the relationship, a partner’s meeting of one’s needs, and level of contentment with one’s relationship (compared to others)” (Emmers-Sommers, 2004, p. 402). The past literature suggests that the more time spent together and how continuous interaction is between partners will lead to positive relational outcomes such as satisfaction and intimacy (Emmers-Sommers, 2004). In addition, communication quality and quantity have been positively associated with relational outcomes (Emmers-Sommers, 2004).

Several studies document a positive association between relationship satisfaction and forgiveness (e.g. Fincham, 2000; Kachadourian, et al., 2005; Paleari, Regalia, &
Fincham, 2005). A significant amount of the literature on forgiveness and relational satisfaction is within romantic relationships and marital satisfaction (e.g., Fincham & Beach, 2007; Flora & Segrin, 2000; Paleari, et al., 2005; Sanderson & Karetsky, 2002). For example, McNulty (2008) found that spouses who engaged in less frequent negative behavior, forgiveness led to a lower decline in satisfaction over time and less forgiveness led to a greater reduction in satisfaction. However, for spouses married to partners who frequently engaged in negative behavior, increased forgiveness appeared to be harmful to the relationship over time and decreased forgiveness appeared to be beneficial over time. Meaning that individuals who upset their spouses less by engaging in fewer negative behaviors and, therefore did not need to request forgiveness, the more they experienced relational satisfaction in their relationship.

The way people resolve conflict reveal much about the satisfaction one has in the relationship. “Individuals who are more invested in and satisfied with their relationship use more constructive strategies of conflict resolution, such as open discussion and compromise, and are less likely to engage in destructive strategies” (Sanderson & Karetsky, 2002, p. 318).

Although much research has investigated relational satisfaction, forgiveness, and conflict resolution/conflict management, it mostly has been investigated within friendships and romantic relationships. The application building upon what we know about relational satisfaction and forgiveness from friendships and romantic relationships may further our understanding of forgiveness in interpersonal relationships.
Role of Relational Maintenance Strategies

“Relational maintenance behaviors are the actions and activities used to sustain desired relational definitions” (Myers, 2001, p. 19). Researchers have generally agreed upon the five relational maintenance behaviors used across relational contexts. These five relational maintenance behaviors are positivity, openness, assurances, networks, and sharing tasks (Canary & Stafford, 1992). Positivity refers to communicating in a way that is cheerful, cooperative, enjoyable and optimistic. Openness involves self-disclosure of one’s feelings about the relationship. Assurance indicates a desire to remain involved and committed to the relationship. Networks are mutual memberships/affiliations to which both parties belong. Lastly, sharing tasks refers to the unique tasks of the relationship (Canary & Stafford, 1992). Past research indicates that the use of these relational maintenance strategies is considered to be constructive, rewarding, and proactive to the relationship (Canary & Stafford, 1994; Guerrero, Eloy, & Wabnik, 1993).

Most of the research on relational maintenance has been centered on voluntary relationships, such as marriage (Dainton, Stafford & Canary, 1994; Flora & Segrin, 2003; Stafford & Canary, 2006), and friendships or romantic relationship (Dainton & Stafford, 1993; Guerrero & Bachman, 2006; Haas & Stafford, 1998). Among friends positivity and networks are used more frequently, whereas positivity, openness, assurances, and tasks are used more among romantic partners and married couples.

Although researchers are aware of the relational maintenance strategies used in voluntary relationships (i.e., friendships, romantic relationships) little is known about the relational maintenance strategies that are used in involuntary relationships, such as sibling relationships. Myers (2001) explored the role of relational maintenance strategies
in sibling relationships that focused on sibling liking and examining whether male or female siblings differ in their use of relational maintenance strategies. Results from this study indicate that siblings report using tasks the most, positivity the second most, assurance the third most, and networks and openness the least. They found that sibling’s use of relational maintenance behaviors would be positively correlated with sibling liking was supported. Sibling liking was predicted by positivity, networks and tasks. In addition, they found that female siblings would use relational maintenance behaviors more often than male siblings. Lastly, the hypothesis that predicted female-female sibling dyads would use relational maintenance behaviors more frequently than male-male or cross-sex sibling dyads was also supported. Perhaps by examining forgiveness as a relational maintenance strategy we will gain further understanding of adult sibling relationships and their use of relational maintenance strategies, specifically using forgiveness messages as a relational maintenance strategy.

Research Questions

The majority of the prior research examined forgiveness within religion and social sciences; and only recently among communication scholars. In addition, forgiveness has been primarily investigated through the transgressor’s point of view, and has not been explored through the forgiveness-seeker’s perspective. Due to the established research of forgiveness within romantic relationships and friendships (i.e. Bachman & Guerrero, 2002; Kelley, 1998; Kelley & Waldron, 2005; Merolla, 2008; Sidelinger & Booth-Butterfield, 2007), little is known about communicating forgiveness as it has not been examined within families, specifically adult sibling relationships. However, sibling relationships and attachment style have been examined. The results indicate that early life
experiences with our primary caregiver as well as our siblings is a predictor of one’s attachment to siblings in middle and old age (Riggio, 2000). It remains pertinent to examine how communicating forgiveness to siblings may be determined by one’s attachment style.

Similarly, how one seeks forgiveness from adult siblings may be dependent on attachment style; may affect the overall relational satisfaction in the relationship. In addition, examining relational maintenance behaviors used within the sibling relationship, based on previous literature, seeking forgiveness may suggest being used as a maintenance strategy.

Understanding sibling relationships and the issues that cause the desire to seek forgiveness may provide us with insight to better understand sibling conflicts. Although no literature to date addresses topics of sibling conflicts and the desire to seek forgiveness, other conflict scholars have examined forgiveness within marriage and romantic relationships, as well as violence studies. In addition aggressive messages have been studied within sibling relationships (Martin et al., 1997), however not within the framework of forgiveness. Based on the reviewed studies, the following research questions advanced:

RQ1: What is the relationship between the four communication forgiveness types and attachment style?

RQ2: Does one’s attitude toward forgiveness influence relational satisfaction in adult sibling relationships?

RQ3: What is the relationship between the four communication forgiveness message types and relational maintenance strategies?
RQ4: Is attitude toward forgiveness a mediating factor in the relationship of forgiveness type and attachment style?

RQ5: Is attitude toward forgiveness a moderator in the relationship of forgiveness type and attachment style?

RQ6: What are the reported incidences that siblings request forgiveness?
CHAPTER III

METHODS

Purpose

Specifically, this study investigated the role of forgiveness and its influence on relational satisfaction as well as the role of attachment style and forgiveness seeking message choice. Attitude toward forgiveness was also examined and lastly the reported conflict incidences that siblings then requested forgiveness from their brothers and sisters.

Participants

The present study utilized a convenience sample that consisted of college students enrolled in various undergraduate communication courses at a mid-western university. The total sample consisted of 180 participants, of which eight cases were deleted because their sibling did not meet the age criterion (n=172).

The participants’ ages ranged from 18 to 58 (\(M = 23.93, \text{SD} = 7.249\)), with 2.9% of participants who did not report their age. Within the sample, 55.8% were female and 44.2% were male. The racial/ethnic distribution was reported as follows: 51.2% were White/Caucasian, 16.3% African American, 9.3% European/Caucasian, 6.4% Black,
4.1% Middle Eastern, 2.9% Multi-racial, 2.3% Hispanic, 4.1% reported being “other”, and 3.5% did not to report their ethnicity.

Among the participants in the sample, in terms of their income bracket, 27.9% reported under $25,000, 16.9% reported between $25,000 and $39,000, 12.2% reported between $40,000 and $49,000, 21.5% reported between $50,000 and $74,000, 9.9% reported between $75,000 and $99,999, 5.8% reported over $100,000, 5.8% did not report their income bracket (Income 1-6, n=162, M =2.85, Mdn = 3.00).

Participants’ Siblings

Participants in the sample reported having 1 to 13 siblings (M = 2.76, SD = 1.99). Among the participants in the sample, 50.6% reported that their referent sibling was female, 47.1% reported that their referent sibling was male, and 2.3% did not report the sex of their referent sibling. The participants reported their referent sibling’s age range from 18 years old to 60 years old (M = 25.40, SD = 8.01), with 2.3% of the participants not reporting their referent sibling’s age.

Procedures

Upon receiving written IRB approval and oral consent from professors, the researcher entered undergraduate communication courses and asked students if they wanted to volunteer to participate in the study. Although some of the professors offered extra credit for student participation, a number of students volunteered without any incentive. The students were told that in order to participate, they had to be currently 18 years of age or older and that they had to have an adult sibling who were at least 18 years of age.
The students who met the above criteria and who agreed to participate in the study were then given informed consent forms. These informed consent forms were reviewed and signed by the participants, who were told that they could discontinue completing the surveys at anytime. Participants were informed that their identity would remain completely confidential, and to ensure this, the informed consent forms were removed from the survey prior to entering the data into the computer system. They were told that the surveys would take about 15-20 minutes to complete. After participants completed their surveys, they were collected and the informed consent form was removed from the surveys.

*Instruments* (See Appendix)

*Attitude Toward Forgiveness Scale (ATF-6)*

This self-report scale was created by Berry, Worthington, Parrott, O’Connor and Wade (2001) and measures the level of their general attitudes about the merits of forgiveness. The measure consists of 6 Likert-type items, in which responses in the present study ranged from 1 “strongly disagree” to 7 “strongly agree.” The negatively worded items were reversed and all items were then summed which created the composite Attitude Toward Forgiveness Scale. The ATF scale was utilized to determine the level (low, moderate, high) of the participant’s attitude toward forgiveness, one of the independent measures. Berry et al. (2001) reported an internal reliability of .69. The present study found the internal reliability of the summed ATF scale to be (α) = .68 (see Table I).
Table I

*Descriptive Statistics for Attitude Toward Forgiveness Scale (ATF)*

<table>
<thead>
<tr>
<th>Number of items</th>
<th>M</th>
<th>SD</th>
<th>(α)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.) “I believe Forgiveness is a moral virtue”</td>
<td>1</td>
<td>5.31</td>
<td>1.65</td>
</tr>
<tr>
<td>10.) “Justice is more important than mercy” (Flip)</td>
<td>1</td>
<td>3.94</td>
<td>1.49</td>
</tr>
<tr>
<td>11.) “It is admirable to be a forgiving person”</td>
<td>1</td>
<td>5.61</td>
<td>1.47</td>
</tr>
<tr>
<td>12.) “I have no problem at all with people Staying mad at those who hurt them” (Flip)</td>
<td>1</td>
<td>3.45</td>
<td>1.60</td>
</tr>
<tr>
<td>13.) “Forgiveness is a sign of weakness” (Flip)</td>
<td>1</td>
<td>2.30</td>
<td>1.65</td>
</tr>
<tr>
<td>14.) “People should work harder than they Do to let go of the wrongs they have suffered”</td>
<td>1</td>
<td>4.50</td>
<td>1.62</td>
</tr>
<tr>
<td><strong>Total ATF</strong></td>
<td><strong>6</strong></td>
<td><strong>29.77</strong></td>
<td><strong>5.86</strong></td>
</tr>
</tbody>
</table>

*Adult Attachment Scale (AAS- 18)*

This self-report instrument was created by Hazan and Shaver (1987) to measure one’s attachment style. The measure consisted of 18 Likert-type items, in which responses ranged from 1 “not at all like me” to 5 “very much like me.” Participants scored each of these items according to how characteristic it was of themselves. The AAS scale was operationalized as a general measure of an adult’s attachment style. Initially, the polarities of the negatively worded items were reversed and all items were then summed to create the AAS-18 measure. The AAS-18 was utilized to determine the attachment style (Secure, Avoidant, and Anxious-Ambivalent) of the participants which was utilized as an additional independent measure in the present study. Collins and Read
(1990) reported the internal consistency as \((\alpha) = .73\), whereas the present study found the internal consistency at \(\alpha = .40\) for secure, \(\alpha = .64\) for avoidant, \(\alpha = .59\) for avoidant, and \(\alpha = .63\) for the overall Adult Attachment Scale (see Table II).

Table II

*Descriptive Statistics for Adult Attachment Scale (AAS)*

<table>
<thead>
<tr>
<th>Number of items</th>
<th>in scale</th>
<th>M</th>
<th>SD</th>
<th>((\alpha))</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secure</td>
<td>6</td>
<td>19.05</td>
<td>3.52</td>
<td>.40</td>
</tr>
<tr>
<td>(item #'s 17, 18, 21, 27, 28, 31)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avoidant</td>
<td>6</td>
<td>19.36</td>
<td>4.24</td>
<td>.64</td>
</tr>
<tr>
<td>(item #'s 15, 16, 19, 29, 30, 32)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anxious/Ambivalent</td>
<td>6</td>
<td>13.57</td>
<td>4.00</td>
<td>.59</td>
</tr>
<tr>
<td>(item #'s 20, 22, 23, 24, 25, 26)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total AAS-18 scale</td>
<td>18</td>
<td>51.95</td>
<td>7.83</td>
<td>.63</td>
</tr>
</tbody>
</table>

*Relational Satisfaction Scale (RSS- 7)*

This self-report scale was created by Hendrick (1988) consisting of seven Semantic differential items in which responses ranged from 1 “low satisfaction” to 5 “high satisfaction.” For the present study, the term “partner” was altered to “sibling” to measure the relational satisfaction among sibling relationships and to maintain uniformity throughout the various measures. Initially, the polarities of the negatively worded items were reversed and then all items were summed to create a dependent measure, the Relational Satisfaction Scale. Therefore, high scores indicated high relationship satisfaction. Hendrick (1988) reported reliability estimates across several studies to be
within the range of $\alpha = .73$ and $\alpha = .93$. The present study found the RSS to be $\alpha = .87$ (see Table III).

Table III

*Descriptive Statistics for Relational Satisfaction Scale*

<table>
<thead>
<tr>
<th>Number of items in scale</th>
<th>$M$</th>
<th>$SD$</th>
<th>$(\alpha)$</th>
</tr>
</thead>
<tbody>
<tr>
<td>33.) How well does your sibling meet your needs?</td>
<td>1</td>
<td>3.51</td>
<td>1.20</td>
</tr>
<tr>
<td>34.) In general, how satisfied are you with your relationship?</td>
<td>1</td>
<td>3.66</td>
<td>1.18</td>
</tr>
<tr>
<td>35.) How good is your relationship compared to most?</td>
<td>1</td>
<td>3.62</td>
<td>1.20</td>
</tr>
<tr>
<td>36.) How often do you wish you didn’t have this person as a sibling? (Flip)</td>
<td>1</td>
<td>1.60</td>
<td>1.10</td>
</tr>
<tr>
<td>37.) To what extent has your relationship met your original expectations?</td>
<td>1</td>
<td>3.49</td>
<td>1.13</td>
</tr>
<tr>
<td>38.) How much do you love your sibling?</td>
<td>1</td>
<td>4.64</td>
<td>.78</td>
</tr>
<tr>
<td>39.) How many problems are there in your Relationship? (Flip)</td>
<td>1</td>
<td>2.54</td>
<td>1.25</td>
</tr>
<tr>
<td>Total RSS</td>
<td>7</td>
<td>26.87</td>
<td>5.89</td>
</tr>
</tbody>
</table>

*Relational Maintenance Strategy Scale (RMSS)*

This self-report instrument was created by Canary and Stafford (1992) to assess relational maintenance behaviors in romantic relationships. The measure consisted of 29 Semantic differential items, responses of which ranged from 1 “not at all like me” to 7 “very much like me.” This measure was used to assess the frequency of relational maintenance behaviors used by the participant in their relationship with the referent sibling. For the present study, the term “partner” was altered to “sibling” to measure the
relational maintenance strategies among sibling relationships and to maintain uniformity throughout the various measures.

The RMSS-29 was utilized to determine the level of the participants’ relational maintenance behaviors within their sibling relationship. Canary and Stafford (1992) determined 7 different dimensions of relational maintenance strategies, and were maintained for this study. Canary and Stafford (1992) reported the internal consistency to range from $\alpha = .68$ to $\alpha = .91$. For the present study, internal consistency at $\alpha = .81$ for assurances, $\alpha = .85$ for affection, $\alpha = .92$ for positivity, $\alpha = .83$ for openness, $\alpha = .93$ for social networking, $\alpha = .86$ for task sharing, $\alpha = .95$ for support and comfort, and $\alpha = .96$ for the overall Relational Maintenance Strategy Scale (see Table IV).

Table IV

*Descriptive Statistics for Relational Maintenance Strategy Scale (RMSS)*

<table>
<thead>
<tr>
<th>Subscales</th>
<th>in scale</th>
<th>$M$</th>
<th>$SD$</th>
<th>$(\alpha)$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assurances (item #’s 40-43)</td>
<td>4</td>
<td>18.32</td>
<td>6.23</td>
<td>.81</td>
</tr>
<tr>
<td>Affection (item #’s 44-47)</td>
<td>4</td>
<td>16.45</td>
<td>6.33</td>
<td>.85</td>
</tr>
<tr>
<td>Positivity (item #’s 48-53)</td>
<td>6</td>
<td>29.81</td>
<td>8.20</td>
<td>.92</td>
</tr>
<tr>
<td>Openness (item #’s 54-58)</td>
<td>5</td>
<td>21.32</td>
<td>7.34</td>
<td>.83</td>
</tr>
<tr>
<td>Social Networking</td>
<td>4</td>
<td>16.30</td>
<td>7.20</td>
<td>.93</td>
</tr>
<tr>
<td>(item #’s 59-62)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Task Sharing</td>
<td>2</td>
<td>10.07</td>
<td>3.29</td>
<td>.86</td>
</tr>
<tr>
<td>(item #’s 63-64)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support and Comfort</td>
<td>4</td>
<td>21.24</td>
<td>6.34</td>
<td>.95</td>
</tr>
<tr>
<td>(item #’s 65-68)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Continuing Table IV

| Total RMSS-29 scale | 29 | 133.48 | 36.75 | .96 |

*Communication Forgiveness Message Types*

Kelley (1998) distinguished “indirect” and “direct” forgiveness-seeking approaches. Direct approaches refer to verbally acknowledging that they had committed a wrongful act. Indirect approaches refer to either implicit or nonverbal requests for forgiveness (e.g., using humor, acting as if everything is normal). This two-category system of seeking forgiveness was expanded by Kelley and Waldron (2005) to include compensation/conditional tactics to seek forgiveness, which refers to the offender’s willingness to abide by the partner’s wishes in exchange for forgiveness.

For the purpose of this present study, the narratives representing direct, indirect and compensation/conditional forgiveness-seeking tactics, as well as the choice “did nothing,” were presented for participants to choose which tactic they used to seek forgiveness from their adult sibling. Instructions were provided for the participants to think of a time when both themselves and their siblings were adults (at least 18 years of age or older) and a conflict or a situation arose where the participant sought forgiveness. They were also instructed to refer to this same sibling (referent sibling) throughout the survey. The participants were instructed to choose one of the four choices that best describes the way you attempted to seek forgiveness from your adult sibling. They were asked to circle the answer that best reflects the way they sought and communicated forgiveness to their referent adult sibling.

In addition to Kelley’s (1998) and Kelley and Waldron’s (2005) forgiveness message types, I developed and included a question measuring the magnitude of the
wrongful act that desired them to seek forgiveness was measured on a scale from 1
indicated “not severe at all” to 5 indicated “extremely severe.” In addition, for this thesis,
I also developed and added a question measuring how responsible the participant felt
they were for the wrongful act was measured on a scale from 1 “indicates all my fault,” 2
“mostly my fault,” 3 “shared fault,” 4 “mostly my sibling’s fault,” and 5 “all my sibling’s
fault.”

An open-ended question was asked for the participants to describe the
event/incident that caused the desire for forgiveness. A blank sheet of paper was included
for the participants to have adequate amount of writing space to provide details for the
transgression that occurred between them and their referent sibling. In addition, an open-
ended question also asked how long ago this event occurred, and provided participants
with an area to write out this answer. Lastly, participants were asked how different their
relationship is today from their relationship as a child on a Likert-type scale where 1
indicates “not different at all” and 7 indicates “very different.”

Open-ended Responses

Each participant was asked to describe the event/incident that caused the desire
for forgiveness. Participants were given a blank sheet of paper to write out the responses
to this question. After analyzing all of the responses on the survey instruments, responses
to the open-ended questions were reviewed in order to discover reoccurring
events/incidents that caused the desire for forgiveness between adult siblings. Based on
the responses to this question, the responses were content-analyzed to create categories of
the incidences in which siblings sought forgiveness.
Eleven categories were created that best represented the responses from the open-ended questions. These categories are as follows: verbal aggression defined as attacking the self concept of others to inflict psychological pain; unclear boundaries defined as verbally crossing the line of unspoken boundaries that inflict pain on another; physical aggression which is defined as behaviors aimed at causing physical harm or pain; stole/borrow without asking defined as taking another’s property without permission; damaged property which is to damage or break another’s property that cannot be repaired; lying which is defined as telling an untruth or pretending with intent to deceive or a statement that deviates from or perverts the truth; disregard (includes rejection, ignore, and abandon) is defined as refusing another or their ideas as inferior or to not pay attention to another person or to leave behind or to leave someone who is in need or is counting on you; disapproval which is a feeling of disliking something or what someone is doing; betrayal which is defined as being false or disloyal to or to reveal against one’s desire or will or to give aid or information to an enemy of; borrow/steal and damage is defined as taking another’s property without permission and breaking their property that cannot be repaired; and other which includes all cases that do not fall within the above categories.

Verbal aggression was further broken down into subcategories using Infante, Sabourin, Rudd and Shannon’s (1990) verbal aggressive message typology. These subcategories are described as, “character attacks, competence attacks, background attacks, physical appearance attacks, maledictions, teasing, ridicule, threats, swearing, and nonverbal emblems” (Infante, Riddle, Horvath, & Tumlin, 1992, p. 117). The definitions of the subcategories are as follows: character attacks are verbal attacks that
are directed against a person rather than his/her arguments, competence attacks are defined as verbal attacks directed at another person’s ability to do something, background attacks are verbal attacks directed at another person’s ethnic, racial or cultural background, physical appearance attacks are verbal attacks directed at another person’s physical appearance, malediction is defined as speaking evil of; to curse another person, teasing is an act of harassing someone playfully or maliciously; provoking someone with persistent annoyances, ridicule is defined as a deliberate, malicious belittling, to make an object of laughter, threats are a declaration of an intention to inflict harm on another, swearing is defined as profane or obscene expression usually of surprise or anger and nonverbal emblems are non-verbal messages that have a verbal counterpart. Background attacks were excluded from the subcategories as it is not applicable to sibling relationships. Therefore, nine of the ten subcategories were used in this study.

These categories were created by two researchers where agreement was made for each category that it clearly represented the reported incidences. After these categories were established, the two coders reviewed the responses in reference to the categories. Upon agreement on the categories that best represented the responses, two additional coders categorized the responses into the appropriate category that best represents the transgression that caused the desire for forgiveness. Inter coder reliability was 76%. Research scholars in social sciences differ on what they believe constitutes an acceptable level of inter coder reliability (Neuendorf, 2002). Ellis (1994, p. 91) indicates a “widely accepted rule of thumb” of reliability coefficients exceeding .75 to .80 to be indicative of high reliability. Banerjee, Capozzoli, McSweeney, and Sinha (1999) have proposed the following criteria proposed for Cohen’s kappa: “.75+ indicating excellent agreement
beyond chance; .40 to .75, fair to good agreement beyond chance; and below .40, poor agreement beyond chance” (Neuendorf, 2002, p. 143). Therefore, the inter coder reliability for this present study is within acceptable standards.
CHAPTER IV
RESULTS

The first research question asked:

RQ1: What is the relationship between the four communication forgiveness types and attachment style?

A one-way analysis of variance (ANOVA) was conducted to determine the relationship between attachment style and the communication forgiveness message type chosen. Three separate ANOVA’s were run, one for each attachment style (Secure, Avoidant, and Anxious/Ambivalent) since the attachment styles were not found to be intercorrelated. The analysis resulted in approaching significance for Secure attachment style $F(3, 167) = 2.65, p = .051$. These results indicate that those who use explicit acknowledgment ($M=19.45, SD = 3.20$), or indirect tactics ($M=19.64, SD = 3.05$), have more secure attachment styles, with those who use compensation-conditional ($M=18.59, SD = 3.26$) forgiveness tactics having a bit less secure style, and those who chose “do nothing” ($M=17.71, SD = 4.54$) the lowest (see Table V).
Table V

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>95,929</td>
<td>3</td>
<td>31,976</td>
<td>2.649</td>
<td>.051</td>
</tr>
<tr>
<td>Within Groups</td>
<td>2015.697</td>
<td>167</td>
<td>12.070</td>
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<td></td>
</tr>
<tr>
<td>Total</td>
<td>2111.626</td>
<td>170</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The analysis for Avoidant attachment style indicated that communication forgiveness message types did not significantly differ on this attachment style $F (3, 166) = 2.04, p = .110$ (see Table VI).

Table VI

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
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<td>108.019</td>
<td>3</td>
<td>36.006</td>
<td>2.043</td>
<td>.110</td>
</tr>
<tr>
<td>Within Groups</td>
<td>2925.092</td>
<td>166</td>
<td>17.621</td>
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</tr>
<tr>
<td>Total</td>
<td>3033.112</td>
<td>169</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The analysis for Anxious/Ambivalent attachment style indicated that communication forgiveness message type did not significantly differ on this attachment style $F (3, 163) = .707, p = .549$ (see Table VII).

Table VII

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>34.041</td>
<td>3</td>
<td>11.347</td>
<td>.707</td>
<td>.549</td>
</tr>
<tr>
<td>Within Groups</td>
<td>2616.774</td>
<td>163</td>
<td>16.054</td>
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</tr>
<tr>
<td>Total</td>
<td>2650.814</td>
<td>166</td>
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<td></td>
</tr>
</tbody>
</table>

The second research question asked:

RQ2: Does attitude toward forgiveness influence relational satisfaction in adult sibling relationships?
A Pearson’s correlation was used to test the relationship between one’s attitude toward forgiveness and relational satisfaction. There was a significant correlation between attitude toward forgiveness ($M = 29.77$, $SD = 5.86$) and relational satisfaction ($M = 26.87$, $SD = 5.89$). A significant positive linear relationship was revealed $r (165) = .175, p = .024$. Results indicate that the more positive people’s attitude toward forgiveness is, the more relational satisfaction they experience in their adult sibling relationship. Inspection of the scatterplot revealed no indication of a nonlinear relationship (see Table VIII).

Table VIII

<table>
<thead>
<tr>
<th>Relational satisfaction scale</th>
<th>Pearson Correlation</th>
<th>Sig. (2-tailed)</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATFscale</td>
<td>.175*</td>
<td>.024</td>
<td>165</td>
</tr>
</tbody>
</table>

*Correlation is significant at the 0.05 level (2-tailed).

The third research question asked:

**RQ3:** What is the relationship between the four communication forgiveness message types and relational maintenance strategies?

A one-way multivariate analysis of variance (MANOVA) was conducted to determine if differences between the four communication forgiveness types (explicit acknowledgment, indirect tactics, compensation-conditional forgiveness, did nothing) were reflected in differing relational maintenance strategies across the seven dimensions: assurances, affection, positivity, openness, social networking, task sharing, support and comfort. The MANOVA procedure was utilized due to the moderate and high intercorrelations between dependent variables.
The Box’s M was examined, and found to be significant, indicating a violation of the assumption of equivalent covariance matrices across cells. Given that Pillai’s Trace is the omnibus test most resistant to violations of test assumptions, this statistic should be looked at with particular emphasis. MANOVA results indicated significant differences among the communication forgiveness message types on the dependent variables, Pillai’s Trace = .391, $F(21, 448.498) = 3.41, p = .000$, multivariate $\eta^2 = .130$. Given the significance of the omnibus test, analysis of variance (ANOVA) was performed on each dependent variable as a subsequent test to MANOVA (see Table IX).

Table IX

<table>
<thead>
<tr>
<th>MANOVA Multivariate Tests</th>
<th>Value</th>
<th>Sig.</th>
<th>Partial Eta Sq.</th>
<th>Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forgiveness message type</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pillai’s Trace</td>
<td>.391</td>
<td>.000</td>
<td>.130</td>
<td>1.000</td>
</tr>
<tr>
<td>Wilks’ Lambda</td>
<td>.653</td>
<td>.000</td>
<td>.132</td>
<td>1.000</td>
</tr>
<tr>
<td>Hotelling’s Trace</td>
<td>.465</td>
<td>.000</td>
<td>.134</td>
<td>1.000</td>
</tr>
<tr>
<td>Roy’s Largest Root</td>
<td>.260</td>
<td>.000</td>
<td>.206</td>
<td>.999</td>
</tr>
</tbody>
</table>

All seven ANOVA’s revealed significant differences among the four groups (see Table X). Post Hoc tests were run in order to detect specific intergroup differences.

Differences in communication forgiveness message type were significant for assurances (overall $F(3, 162) = 5.56, p = .001$, partial $\eta^2 = .093$) with explicit acknowledgment, indirect tactics, and compensation-conditional significantly different from “did nothing” (see Table XII for Scheffe post hoc results). Differences in communication forgiveness message type were significant for affection (overall $F(3, 162) = 10.41, p = .001$, partial $\eta^2 = .162$) with explicit acknowledgment, indirect tactics, and compensational-conditional significantly different from “did nothing”. Differences in communication forgiveness
message type were significant for positivity, (overall $F (3, 162) = 7.55, p = .001$, partial $\eta^2 = .123$) with explicit acknowledgment, indirect tactics, and compensation-conditional significantly different from “did nothing”. Differences in communication forgiveness message type were significant for openness with explicit acknowledgment and indirect tactics, significantly different from “did nothing”, but compensation-conditional was not significantly different from explicit acknowledgment, indirect tactics and “did nothing” (overall $F (3,162) = 6.31, p = .001$, partial $\eta^2 = .105$). Differences in communication forgiveness message type were significant for social networking with explicit acknowledgment and indirect tactics were significantly different from “did nothing”, but compensation-conditional was not significantly different from explicit acknowledgment, indirect tactics, and “did nothing” (overall $F (3, 162) = 8.22, p = .001$, partial $\eta^2 = .132$). Differences in communication forgiveness message type were significant for task sharing with explicit acknowledgment and indirect tactics were significantly different from “did nothing”, but compensation-conditional was not significantly different from explicit acknowledgment, indirect tactics, and “did nothing”, (overall $F (3, 162) = 4.47, p = .005$, partial $\eta^2 = .076$). Lastly, differences in communication forgiveness message type were significant for support and comfort (overall $F (3, 162) = 8.10, p = .001$, partial $\eta^2 = .130$) with explicit acknowledgment, indirect tactics and compensation-conditional significantly different from “did nothing” (see Table X).
Table X

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>F(df)</th>
<th>Sig.</th>
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</thead>
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<td>RMS- assurances</td>
<td></td>
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<tr>
<td>Explicit Acknowledgment</td>
<td>54</td>
<td>18.56</td>
<td>a</td>
<td>6.16</td>
<td>.01</td>
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<tr>
<td>Indirect Tactics</td>
<td>55</td>
<td>19.65</td>
<td>a</td>
<td>5.57</td>
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</tr>
<tr>
<td>Compensation or Conditional</td>
<td>22</td>
<td>19.91</td>
<td>a</td>
<td>6.13</td>
<td></td>
</tr>
<tr>
<td>Did Nothing</td>
<td>35</td>
<td>14.71</td>
<td>b</td>
<td>6.56</td>
<td></td>
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<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RMS- affection</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Explicit Acknowledgment</td>
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<td>17.33</td>
<td>a</td>
<td>6.66</td>
<td>.01</td>
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<td>17.36</td>
<td>a</td>
<td>5.24</td>
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<tr>
<td>Compensation or Conditional</td>
<td>22</td>
<td>19.55</td>
<td>a</td>
<td>5.39</td>
<td></td>
</tr>
<tr>
<td>Did Nothing</td>
<td>35</td>
<td>11.80</td>
<td>b</td>
<td>5.52</td>
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</tr>
<tr>
<td>Total</td>
<td>166</td>
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<td>6.29</td>
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<tr>
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<td></td>
<td></td>
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<tr>
<td>RMS- positivity</td>
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<td>30.63</td>
<td>a</td>
<td>7.72</td>
<td>.01</td>
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<tr>
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<td>a</td>
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<td></td>
</tr>
<tr>
<td>Compensation or Conditional</td>
<td>22</td>
<td>33.09</td>
<td>a</td>
<td>6.14</td>
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</tr>
<tr>
<td>Did Nothing</td>
<td>35</td>
<td>24.49</td>
<td>b</td>
<td>9.47</td>
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<tr>
<td>Total</td>
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<td>29.84</td>
<td></td>
<td>8.22</td>
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<tr>
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<td></td>
<td></td>
</tr>
<tr>
<td>RMS- openness</td>
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<tr>
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<td>23.59</td>
<td>a</td>
<td>6.97</td>
<td>.01</td>
</tr>
<tr>
<td>Indirect Tactics</td>
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<td>a</td>
<td>7.72</td>
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<tr>
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<td>21.23</td>
<td>a,b</td>
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<tr>
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<td>17.00</td>
<td>b</td>
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<tr>
<td>Total</td>
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<tr>
<td>RMS- social networking</td>
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<td>17.06</td>
<td>a</td>
<td>7.23</td>
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<td>6.18</td>
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<td>14.55</td>
<td>a,b</td>
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<td>11.89</td>
<td>b</td>
<td>7.26</td>
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<tr>
<td>Total</td>
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<td>7.23</td>
<td></td>
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<td>RMS- task sharing</td>
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<td>a,b</td>
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<td>8.31</td>
<td>b</td>
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<td>Total</td>
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<tr>
<td>RMS- support and comfort</td>
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<td>22.74</td>
<td>a</td>
<td>5.49</td>
<td>.01</td>
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<td>21.77</td>
<td>a</td>
<td>5.86</td>
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Continuing Table X

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATF scale</td>
<td>86.957</td>
<td>1</td>
<td>86.957</td>
<td>7.416</td>
<td>.007</td>
<td>.043</td>
</tr>
<tr>
<td>Forgiveness message type</td>
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<td>24.311</td>
<td>2.073</td>
<td>.106</td>
<td>.037</td>
</tr>
<tr>
<td>Error</td>
<td>1922.887</td>
<td>164</td>
<td>11.725</td>
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</tr>
<tr>
<td>Total</td>
<td>2082.778</td>
<td>168</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. a,b For each DV separately, those not sharing a letter are significantly different on the Scheffe post hoc test, $p < .05$.

The fourth research question asked:

RQ4: Is attitude toward forgiveness a mediating factor in the relationship of forgiveness type and attachment style?

A one-way ANCOVA was conducted to determine whether one’s attitude toward forgiveness is a mediator in the relationship of forgiveness message type and attachment styles (Secure, Avoidant, and Anxious/Ambivalent). Three separate ANCOVA’s were run, one for each attachment style (Secure, Avoidant, and Anxious/Ambivalent) since the attachment styles were not found to be intercorrelated. The results indicate that attitude toward forgiveness is a significant covariate in the model (i.e. it is significantly related to secure) and its inclusion results in a less significant contribution of forgiveness type to secure, thus indicating that ATF is a mediator in the relationship of forgiveness message type and secure attachment style, $F (1, 168) = 7.416, p = .007$, partial $\eta^2 = .043$ (see Table XI).

Table XI

Dependent Variable: Secure
The results indicate that attitude toward forgiveness is a significant covariate in
the model (i.e. it is significantly related to avoidant) and its inclusion results in a less
significant contribution of forgiveness type to avoidant, thus indicating that ATF is a
mediator in the relationship of forgiveness message type and avoidant attachment style, $F$
$(1, 167) = 6.22, p = .014, \text{ partial } \eta^2 = .037$ (see Table XII).

Table XII

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
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<td>107.092</td>
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<td>107.092</td>
<td>6.221</td>
<td>.014</td>
<td>.037</td>
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<tr>
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<td>28.822</td>
<td>1.674</td>
<td>.175</td>
<td>.030</td>
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<tr>
<td>Error</td>
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<td>163</td>
<td>17.215</td>
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</tr>
<tr>
<td>Total</td>
<td>2999.682</td>
<td>168</td>
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<td></td>
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</tr>
</tbody>
</table>

The results indicate that attitude toward forgiveness is not a significant covariate
in the model (i.e. it is not significant to anxious/ambivalent), and its inclusion does not
result in a less significant contribution of forgiveness type to anxious/ambivalent, thus
indicating that ATF is not a mediator in the relationship of forgiveness message type and
anxious/ambivalent attachment style, $F$(1, 164) = .080, $p = .778$, partial $\eta^2 = .000$ (see
Table XIII).

Table XIII

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
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<td>1</td>
<td>1.295</td>
<td>.080</td>
<td>.778</td>
<td>.000</td>
</tr>
<tr>
<td>Forgiveness message type</td>
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<td>11.735</td>
<td>.722</td>
<td>.540</td>
<td>.013</td>
</tr>
<tr>
<td>Error</td>
<td>2601.650</td>
<td>160</td>
<td>16.260</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2601.650</td>
<td>164</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The fifth research question asked:

RQ5: Is attitude toward forgiveness a moderator in the relationship of forgiveness type and attachment style?

A two-way ANOVA was conducted to determine whether one’s attitude toward forgiveness is a moderator in the relationship of forgiveness message type and attachment styles (Secure, Avoidant, and Anxious/Ambivalent). Attitude toward forgiveness groups were divided into equal halves and represented the entire sample that was recoded prior to the analyses. Those who scored below the median on their responses were recoded as 1 (low attitude toward forgiveness), and those that scored above the median on their responses were recoded as 2 (high attitude toward forgiveness). Three separate ANOVA’s were run, one for each attachment style (Secure, Avoidant, and Anxious/Ambivalent) since the attachment styles were not found to be intercorrelated.

Results indicated that there was not a significant interaction between attitude toward forgiveness groups and forgiveness message type, with the dependent variable: secure attachment style $F(3, 168) = 1.973, p = .120$ (see Table XIV).

Table XIV

Dependent Variable: Secure

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>$F$</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>NewATFgroups</td>
<td>21.624</td>
<td>1</td>
<td>21.624</td>
<td>1.823</td>
<td>.179</td>
</tr>
<tr>
<td>Forgiveness message types</td>
<td>53.440</td>
<td>3</td>
<td>17.813</td>
<td>1.502</td>
<td>.216</td>
</tr>
<tr>
<td>newATFgroups * Forgiveness message types</td>
<td>70.208</td>
<td>3</td>
<td>23.403</td>
<td>1.973</td>
<td>.120</td>
</tr>
<tr>
<td>Error</td>
<td>1909.301</td>
<td>161</td>
<td>11.859</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2054.57</td>
<td>168</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
In addition, results indicated that there was not a significant interaction between attitude toward forgiveness groups and forgiveness message type, with the dependent variable: avoidant attachment style $F(3, 167) = .695, p = .556$ (see Table XV).

Table XV

Dependent Variable: Avoidant

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>$F$</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>NewATFgroups</td>
<td>43.154</td>
<td>1</td>
<td>43.154</td>
<td>2.425</td>
<td>.121</td>
</tr>
<tr>
<td>Forgiveness message types</td>
<td>102.703</td>
<td>3</td>
<td>34.234</td>
<td>1.924</td>
<td>.128</td>
</tr>
<tr>
<td>newATFgroups * Forgiveness message types</td>
<td>37.104</td>
<td>3</td>
<td>12.368</td>
<td>.695</td>
<td>.556</td>
</tr>
<tr>
<td>Error</td>
<td>2847.573</td>
<td>160</td>
<td>17.797</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>3030.534</td>
<td>167</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Lastly, results show that there was not a significant interaction between attitude toward forgiveness groups and forgiveness message type, with the dependent variable: anxious/ambivalent attachment style $F(3, 164) = .711, p = .547$ (see Table XVII).

Table XVI

Dependent Variable: Anxious-Ambivalent

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>$F$</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>NewATFgroups</td>
<td>4.576</td>
<td>1</td>
<td>4.576</td>
<td>.280</td>
<td>.597</td>
</tr>
<tr>
<td>Forgiveness message types</td>
<td>35.258</td>
<td>3</td>
<td>11.753</td>
<td>.719</td>
<td>.542</td>
</tr>
<tr>
<td>newATFgroups * Forgiveness message types</td>
<td>34.871</td>
<td>3</td>
<td>11.624</td>
<td>.711</td>
<td>.547</td>
</tr>
<tr>
<td>Error</td>
<td>2566.100</td>
<td>157</td>
<td>16.345</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2640.805</td>
<td>164</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The sixth research question asked:

RQ6: What are the reported incidences that siblings request forgiveness for?

A qualitative analysis was used to analyze the open-ended responses. Results indicated majority of the incidences that caused siblings a desire for forgiveness was
verbal aggression (19.8%). Disregard (rejection, ignore, and abandon) was the second 
most frequent reason to seek forgiveness (11.6%), closely following were unclear 
boundaries and disapproval (both at 11.0%). Individuals who stole/borrowed without 
permission were 8.1% of the incidents, betrayal had a frequency of 7.6%, and physical 
aggression was 7.0% of the cases. Damaged property was 5.8% of the cases whereas 
stealing/borrowing without asking and damaging the property taken was 2.9% of the 
cases. 9.3% of the cases were not applicable to seeking forgiveness, and 4.7% were 
categorized as other, which indicates the incident not applying to any of the above 
mentioned categories (see Table XVII).

Majority of the incidents that siblings reported seeking forgiveness was verbal 
aggression. Using Infante et al.’s (1990) categories of verbal aggressive message types, 
character attack had the highest frequency of 7.0%. Teasing and ridicule were both at 
2.3%. Competence attack had a frequency of 1.2% and both threats and swearing had a 
frequency of 0.6% (see Table XVIII).

Table XVII

<table>
<thead>
<tr>
<th>Incident categories</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verbal aggression</td>
<td>19.8</td>
</tr>
<tr>
<td>Disregard (rejection, ignore, and abandon)</td>
<td>11.6</td>
</tr>
<tr>
<td>Unclear boundaries</td>
<td>11.0</td>
</tr>
<tr>
<td>Disapproval</td>
<td>11.0</td>
</tr>
<tr>
<td>Not applicable to seeking forgiveness</td>
<td>9.3</td>
</tr>
<tr>
<td>Stole/borrow without permission</td>
<td>8.1</td>
</tr>
<tr>
<td>Betrayal</td>
<td>7.6</td>
</tr>
<tr>
<td>Physical aggression</td>
<td>7.0</td>
</tr>
<tr>
<td>Damaged property</td>
<td>5.8</td>
</tr>
<tr>
<td>Other</td>
<td>4.7</td>
</tr>
<tr>
<td>Stole &amp; damaged property</td>
<td>2.9</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Table XVIII

<table>
<thead>
<tr>
<th>Types of Verbal aggression</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Character attack</td>
<td>7.0</td>
</tr>
<tr>
<td>Teasing</td>
<td>2.3</td>
</tr>
<tr>
<td>Ridicule</td>
<td>2.3</td>
</tr>
<tr>
<td>Competence attack</td>
<td>1.2</td>
</tr>
<tr>
<td>Physical appearance attack</td>
<td>0.6</td>
</tr>
<tr>
<td>Threats</td>
<td>0.6</td>
</tr>
<tr>
<td>Swearing</td>
<td>0.6</td>
</tr>
</tbody>
</table>
CHAPTER V
DISCUSSION

Research Question One:

Research question one investigated the relationship between Kelley’s (1998) three communication forgiveness message types (explicit acknowledgement tactics, indirect tactics, compensational-conditional tactics) and the added category “do nothing” tactic and the three attachment styles (secure, avoidant, and anxious/ambivalent). The results revealed that adult siblings who used explicit acknowledgment tactic (i.e. “I am sorry”) or indirect tactics (i.e. not explicitly seeking forgiveness, using humor, nonverbal displays) have more secure attachment styles than those who used compensational-conditional forgiveness tactics (i.e. “I am sorry, I promise I will never do it again”), “Do nothing” message type had the least secure attachment style.

Overall, a significant relationship was discovered between secure attachment style and one of the forgiveness message types, explicit acknowledgment. However, no relationship was found between forgiveness message types and avoidant and anxious-ambivalent attachment styles. Furthermore, no relationship was found between “Do nothing” message type and attachment styles. The following is a discussion of these findings.
Although previous literature does not indicate an inherent causal relationship between forgiveness and attachment style, these findings could offer support that there may indeed be one. Further evidence may be needed to investigate this relationship. Having said this, however, one could speculate that perhaps attachment style does influence one’s forgiveness message type. There are several implications from these findings. First, adult siblings who have higher secure attachment style (i.e. indicates a sense of lovability and worthiness and an expectation that other people are generally responsive and accepting) seek forgiveness differently than those with a less secure attachment style. Individuals with higher secure attachment styles use more explicit acknowledgment and indirect tactics to seek forgiveness from their adult sibling than compensational-conditional tactics. Additionally, adult siblings who possess avoidant attachment styles (i.e. where individuals have a negative view of the self and a negative view of others) or anxious/ambivalent attachment styles (i.e. sadness and anxiety in relationships with conflict) do not differ on their forgiveness-seeking communication messages. This is not surprising since both attachment styles are considered to be insecure.

Similar to previous researcher findings (Feeney & Humphreys, 1996; Noller, 2005; Riggio, 2000; Trinke & Bartholomew, 1997) sibling’s attachment style is an important factor in communicating forgiveness. For example, Feeney and Humphreys (1996) found siblings reported high on providing closeness, comfort and security to their siblings; therefore, sibling relationships serve the important functions of attachment relationships. In addition, Noller (2005) reported that approximately 22% of respondents described being attached to at least one sibling. These findings expand our understanding
of forgiveness and attachment style in that previously mentioned work was limited to forgiveness granting and this study provides insight into forgiveness seeking and its relationship to attachment style. These results add insight to the role of attachment in sibling relationships, in that secure individuals are more likely to use explicit acknowledgment and indirect forgiveness seeking tactics more often than other forgiveness seeking strategies. In addition, this study reinforces that secure individuals are better able to seek forgiveness which will positively affect the relationship one has with their sibling, whereas individuals with insecure attachment styles (i.e. avoidant and anxious/ambivalent) are unable to seek forgiveness as effectively.

Further support of these findings is found by Collins and Read (1990) where they discuss the dimensions that are measured by the Adult Attachment Scale within romantic relationships and concluded that, “these dimensions can be seen as guiding principles that determine how the attachment system manifests itself in adult relationships and how the beliefs and expectations that are fundamental to feelings of security in adulthood, such as whether a partner will be responsive and available when needed, or whether one is comfortable with close contact and intimacy, and confidence about whether a partner will continue to be loving” (p. 650). These findings are similar within adult sibling relationships and the desire to seek forgiveness. Individuals with secure attachment styles are more likely to use forgiveness seeking tactics which convey confidence, security, responsiveness as well as intimacy in the relationship such as explicit acknowledgment and indirect forgiveness seeking tactics. Whereas individuals with avoidant and anxious-ambivalent attachment styles are less likely to use these forgiveness seeking tactics and use less direct forms of forgiveness seeking such as compensational-conditional tactics or
choosing to do nothing. Therefore, sibling relationships are similar to romantic relationships in that they are affected by an individual’s attachment style and their attachment style may determine the kind of communication used within the relationship which ultimately affects the amount of intimacy and closeness within the relationship.

Perhaps understanding the involuntary nature of sibling relationships can offer further explanation to these findings. Sibling relationships are often described as an involuntary relationship, in which the siblings believe he or she has no choice but to maintain the relationship, and it is rare that these relationships are terminated (Hess, 2000). Since indirect forgiveness is believed to be used as a conflict minimization strategy when the “preservation of the relationship is more important than rectifying the relational transgression” (Kelley & Waldron, 2005, p. 738), one can interpret why this forgiveness seeking tactic is used among adult siblings more often than the compensational-conditional tactic. Perhaps the involuntary nature of sibling relationships supports for siblings frequent use of explicit acknowledgement and indirect tactics for seeking forgiveness.

The additional category “Do nothing” was added to Kelley’s three communication forgiveness message types for the purpose of this study. All of the prior studies using Kelley’s communication forgiveness message types investigated granting forgiveness, whereas this study examined forgiveness-seeking communication. Since this study utilized Kelley’s forgiveness message types, it was important to add this category “do nothing” to allow participants to express if they chose not to seek forgiveness. Therefore, the results of this study will include the analysis of the participants who chose “do nothing” as it is important in drawing conclusions to this study.
In conclusion, research question one’s findings offer further explanation for the relationship between attachment style and forgiveness message types. Kelley and other scholars have focused on granting forgiveness, where this study focused on seeking forgiveness. By adding the seeking aspect and its connection to attachment, we now have insight to not only how an individual seek forgiveness, but also the role of attachment style and its influence on forgiveness-seeking strategy choice. Further examination of the non-significant relationships between avoidant and anxious-ambivalent attachment styles and forgiveness message types is needed. In addition, further research is needed to better understand the role attachment styles in forgiveness message types.

**Research Question Two:**

The second research question investigated if a relationship exists between attitude toward forgiveness and relational satisfaction in adult sibling relationships. The results found a positive relationship between one’s attitude toward forgiveness and relational satisfaction. Specifically, the results indicate that the more positive individual’s general attitude toward forgiveness, the more relational satisfaction they experience in their adult sibling relationship.

Although this study is unique to sibling relationships it is considered a long term interpersonal relationship. Similar long term relationships such as marriage and romantic relationships found a relationship between relational satisfaction and forgiveness (Fincham & Beach, 2007, McCullough, Rachal, Sandage, Worthington, Brown, & Hight, 1998). Specifically, Fincham and Beach (2007) reported that forgiveness predicts later marital satisfaction. And, McCullough et al. (1998) proposed that there is a greater likelihood of confession and apology in satisfied intimate relationships which will lead to
forgiveness, than unsatisfied intimate relationships. These findings of individual’s attitude toward forgiveness and relational satisfaction within adult sibling relationships indicate that sibling relationship satisfaction is similar to romantic relational satisfaction. Perhaps the level of commitment present in both romantic relationships and sibling relationships leads to more forgiveness as well as relational satisfaction. This study reinforces the link between the already existing literature of forgiveness and relational satisfaction within romantic relationships and extends it to sibling relationships.

Research Question Three:

The third research question examined the relationship between the four communication forgiveness types and relational maintenance strategies. Specifically, this research question was conducted to determine if differences between the communication forgiveness message types (explicit acknowledgment, indirect tactics, compensational-conditional forgiveness, and do nothing) were reflected in differing relational maintenance strategies across the seven dimensions assurances, affection, positivity, openness, social networking, task sharing, support and comfort. The results indicate that individuals who use more positive relational maintenance strategies in their adult sibling relationship are more likely to use one of the three communication forgiveness message types of explicit acknowledgment, indirect tactics, and/or compensational-conditional tactics when seeking forgiveness from their adult sibling.

Analysis of forgiveness messages as relational maintenance strategies indicate two predominant patterns. The first pattern shows that explicit acknowledgment tactic (i.e. “I am sorry”), indirect tactics (i.e. using humor to seek forgiveness), and compensational-conditional tactics (i.e. “I am sorry, I will never do it again”) are separate
from the “do nothing” tactic on the relational maintenance strategies of assurance, affection, positivity, and support/comfort. These findings reinforce what relational maintenance strategies indicates, a desire to remain involved and committed to the relationship. For example, saying “I am sorry” or “I am sorry, it will never happen again” will provide assurance and support/comfort to the adult sibling that this relationship is important and worth maintaining. Therefore, actively seeking forgiveness using explicit acknowledgment, indirect tactics and/or compensational-conditional tactics prove to be a strategy that resembles one’s commitment to the relationship.

Siblings who reported using positive relational maintenance strategies such as assurance, affection, positivity, and support and comfort in their relationship with their adult siblings are more likely to use forgiveness-seeking strategies. These findings support the idea that individuals who express these relational maintenance strategies to their sibling (assurance, affection, positivity, and support and comfort) are qualities that are necessary for forgiveness-seeking. For example, to actively seek forgiveness provides assurance and comfort and support to the sibling that you acknowledge the wrong-doing; in addition it provides positivity by admitting to the wrong-doing and the willingness to remedy the conflict. This suggests that seeking forgiveness will maintain the longevity and commitment to the relationship and may improve the way in which siblings communicate with one another. This is similar to Myers (2001) findings that found positivity and assurance was used most frequently in sibling relationships.

The second pattern that emerged shows that siblings who reported using positive relational maintenance strategies such as openness, social networking, and task sharing use more explicit acknowledgment tactics and indirect tactics and continue to be separate
from the “do nothing” tactic. This pattern deviates from previous findings from Myers (2001) that indicated task sharing and social networking were used as frequently in sibling relationships as positivity and assurance.

A possible explanation for the low usage of task sharing and social networking may be due to living arrangement differences. As adults, social networks and task sharing may be hindered because adult siblings usually do not live together and they are less likely to share these relational maintenance strategies. This may be related to a larger issue such as an opportunity for everydayness which is different in relationships where individuals do not reside with one another. However, because living arrangements were not included in this study, we may only speculate that this offers a possible explanation.

Overall, the findings indicate that as long as siblings are using one of the communication forgiveness message types versus the do nothing tactic, it is related to a maintenance strategy. That is, as long as they are attempting to seek forgiveness it can be interpreted as a relational maintenance strategy for that relationship. The “do nothing” tactic choice did not relate to the relational maintenance strategies, suggesting that when an individual chooses to do nothing they are not attempting to reconcile the relationship. One may conclude that using relational maintenance strategies in conflict situations with adult siblings may contribute to a more healthy relationship where forgiveness-seeking tactics are used and are likely to improve the relationship. Consequently, individuals who actively seek forgiveness will use more relational maintenance strategies in their relationships, which exhibit a desire to be involved and committed to the relationship. Therefore, the “do nothing” tactic, in a conflict context where forgiveness seeking is necessary, is not viewed as a relational maintenance strategy and the short and long term
effects of the do nothing tactic in these conflict situations are worthy of further investigation.

*Research Question Four:*

The fourth research question examined if one’s attitude toward forgiveness is a mediator in the relationship of forgiveness message type and one’s attachment style. These findings indicate that attitude toward forgiveness mediates the relationship of forgiveness type and secure attachment style as well as avoidant attachment style; however it does not mediate the relationship of anxious/ambivalent attachment style.

A strong relationship was found between one’s attitude toward forgiveness and avoidant attachment style. Initially in research question one, this study examined the role of attachment style on choosing one of the four communication forgiveness-seeking tactics. In this research question we further examined that relationship in addition to considering attitudes toward forgiveness. The findings are mixed. Avoidant attachment style and attitude toward forgiveness has a stronger relationship than secure and anxious-ambivalent attachment styles, whereas in research question one the findings indicated that secure attachment style and the communication forgiveness message tactics had the strongest relationship. It means that individual’s attitude toward forgiveness is determined by those with an avoidant attachment style more strongly than individuals with a secure or anxious/ambivalent attachment styles. Therefore, one’s attitude toward forgiveness and avoidant attachment style is more strongly related than avoidant attachment style and the communication forgiveness message types. Interpreting these findings is somewhat mixed.
It appears that one’s attitude toward forgiveness is directly related to certain attachment styles (i.e. secure and avoidant) and its relationship with these attachment styles reduces the direct relationship between communication forgiveness message types to secure and avoidant attachment styles. Meaning, one’s attitude toward forgiveness is important in regards to attachment style and the communication forgiveness message type chosen. Perhaps we can interpret these findings as attachment style having an influence on attitude toward forgiveness, which can affect the communication message type chosen when seeking forgiveness with one’s adult sibling.

However, attitude toward forgiveness does not mediate in the relationship of forgiveness message type and anxious/ambivalent attachment style. This could be due to the fact that individuals with an anxious/ambivalent attachment style do not have strong attitudes toward forgiveness as individuals who exhibit secure and avoidant attachment styles. Hence, attachment style can determine the way individuals view forgiveness, and it can influence the communication used to seek forgiveness.

Thus, these results suggest that attachment style appears to manifest in attitude toward forgiveness and this affects the seeking behavior in conflict situations, at least in sibling relationships. Further examination is needed to understand why avoidant attachment style and one’s attitude toward forgiveness has such a strong relationship in comparison to secure and anxious/ambivalent attachment styles, and communication message type does not.

*Research Question Five:*

The fifth research question examined if adult sibling’s attitude toward forgiveness is a moderator in the relationship of communication forgiveness message type and
attachment style during conflict. The results revealed that there was no significant interaction between attitude toward forgiveness and forgiveness message types with all three attachment styles (secure, avoidant, anxious/ambivalent). These findings indicate that the relationship between attitude toward forgiveness and forgiveness message types do not affect the attachment style of the individual seeking forgiveness.

Interpreting these findings can be partially explained by previous literature. Brown and Phillips (2005) investigated in their study to determine whether forgiveness is a predisposition-like trait to determine whether there are stable individual differences in the predisposition to forgive others. They concluded that, “individual differences in forgiveness do appear to exist and may enhance our ability to predict the aftermath of interpersonal offenses” (Brown & Phillips, 2005, p. 627). Both attitude toward forgiveness and attachment style are considered to be predisposition-like traits of individuals. Therefore, considering that forgiveness may be a predisposition-like trait as well as attachment style is a predisposition-like trait, both are stable overtime. It very well may be that we have two stable traits independent of one another.

Another possible explanation may come from previous attachment research. Previous literature on attachment theory suggests that attachment, which is developed from the bond between a child and their primary caregiver during infancy (Bowlby, 1982) influences later social relations throughout one’s lifetime. Bowlby (1982) argued that the nature of an individual’s early relationship with their primary caregiver becomes a model for later relationships. This reinforces the idea that attachment style is a stable characteristic an individual possesses, and has the ability to shape one’s beliefs in many other instances, such as one’s attitude toward forgiveness. Attachment style is indicative
of attitude. In examining the relationship of attachment style and attitude toward forgiveness, this study suggests that attachment style is not influenced by one’s attitude toward forgiveness, but rather attachment develops the attitude toward forgiveness, or they may simultaneously occur as a result of the parent-child relationship.

Perhaps attitude toward forgiveness is indicative of other issues such as the influence of the type of relationship, the expectation of what one expects in the relationship, and how individuals deal with conflict. Further research is needed to develop a better understanding of individual’s attitude toward forgiveness.

Research Question Six:

Research question six investigated types of incidences siblings requested forgiveness. The analysis indicated that siblings sought out forgiveness most often in incidences where verbal aggressive messages had occurred (19.8%). The second most frequently mentioned incident that siblings requested forgiveness for was disregard, which includes rejection, ignoring, and abandonment (11.6%). The third and fourth most frequently reported incidences that caused the desire to seek forgiveness were unclear boundaries (11.0%) and disapproval (11.0%). Stealing and borrowing without permission and damaged property (8.1%) were the fifth most frequent incidences that caused adult siblings to seek forgiveness. Betrayal (7.6%) followed by lying (1.6%) were the least reported incidences adult siblings requested forgiveness. A following is a discussion of each category.

Verbal Aggressive Messages

The verbal aggressive incidences were further broken down into specific message types. Seven of the eight verbal aggressive message types reported by Infante et al.
(1992) were used in investigating the specific message types of verbal aggressive messages. The seven of the eight verbal aggressive messages used for this study are character attacks, teasing and ridicule, competence attacks, threats, swearing, and physical appearance attacks. Differences in the level of verbal aggressive message types were found. Of the 19.8% of verbal aggressive message, character attacks were the most frequent type (7%). For example, a participant reported verbal aggression as, “I was having a problem with a relationship with my girlfriend. When my brother tried to intervene, I attacked him verbally as if it was his fault by calling him names. I later on acknowledged that I was wrong, but didn’t directly apologize”.

Teasing and ridicule were the second most frequent type of verbal aggressive messages used between adult siblings (4.6%) and the third most frequent type of verbally aggressive messages used were competence attacks (1.2%). Teasing and ridicule include making a joking comment that is taken personally, using sarcasm. One respondent, for example, reported teasing and ridicule as, “I had embarrassed my sister in front of our co-workers because she was suffering from an allergic reaction from one of her make-ups. I thought it was funny, obviously she did not”. Competence attacks include verbal comments about the adult sibling’s intelligence, for example, one respondent reported a competence attack as “I called my sister a retard and stupid. She got really upset because I do it a lot, I felt bad in the end about it”. Teasing, ridicule, and competence attacks occur less often between adult siblings, however since this type of relationship begins at birth and siblings typically grow up with one another it occurs more frequently during childhood since they have an extensive amount of knowledge about one another’s insecurities and flaws. Infante, Bruning, and Martin (1994) found that people believe
teasing is justified when using verbally aggressive messages and individuals do not necessarily consider this to be verbally aggressive. However, there is evidence that teasing will result in lower relational satisfaction, especially when one is on the receiving end of the teasing (Vising & Baily, 1996).

Lastly, threats (0.6%), swearing (0.6%) and physical appearance attacks (0.6%) occurred least frequently within the verbal aggressive attacks. For example, one respondent reported a case of a threat as, “We were suppose to go somewhere (this happens a lot) and he was not ready (he never is) and I got angry and was yelling and threatening to leave” A reported example of swearing by a respondent was, “My brother was treating my mother in a very disrespectful manner and I went absolutely nuts on him by swearing at him”, and an example of a physical appearance attack by a respondent was, “I hurt my sisters feelings by making fun of her outfit and I later realized that it was mean and immature of me and I apologized to her”. Perhaps this less frequency of threats, swearing, and physical appearance attacks could be viewed as an ineffective strategy due to the severe emotional pain this can cause the individual as well as the possibility of hindering the long term relationship of the siblings.

The incidences reported here are similar to the previous research on verbal aggressiveness in families and may provide explanation for these results. For example, Infante, Myers, and Buerkel (1994) conducted a study on verbal aggression and family members and concluded that verbal aggression is more likely to occur within family situations because family members have a lower need of social approval within the family setting than in other environments. This study supports these findings because adult siblings reported more verbal aggression in their conflict situations rather than any
other reason such as betrayal or lying. In addition, Martin, et al., (1997) found that when verbal aggression is presented in sibling relationships there is less satisfaction and trust within the relationship. Thus these findings support the relationship between relational satisfaction and verbal aggression.

Additional verbal aggression studies found that the use of character attacks were the most frequently used verbally aggressive message, followed by competence attacks. The results from this study are consistent with the findings from previous studies (Infante et al., 1990 & Infante et al., 1992). Character attacks, competence attacks, and teasing and ridicule were the types of verbally aggressive messages used most in sibling relationships, similar to the marriage studies by Infante et al. (1990). This is consistent with the findings of Infante et al.’s (1990) study on verbally aggressive messages used in violent relationships in the frequent use of character attacks and competence attacks. Teven, Martin, and Neupauer (1998) describe the sibling relationship as different from any other relationship (i.e. friends, lovers) in which members have such an extensive understanding of each other’s personal history. Thus, using character attacks as well as competence attacks and teasing and ridicule are easy aggressive messages to use when information about one another is so readily available. These findings are not surprising since siblings often have intimate knowledge of one another, knowledge of their personal weaknesses, as well as knowledge of what will “push their buttons”. Therefore, despite the role in the family (spouse, sibling, parent), character attacks, competence attacks, teasing and ridicule are the verbally aggressive messages used most frequently.
Disregard

Disregard (i.e. rejection, ignoring, & abandoning) were the second most frequent incident individuals sought forgiveness from their adult sibling (11.6%). An example of disregard was reported by a respondent as, “My older sister and I arranged for me to come down and babysit for her two year old son so her and her husband could go out. I was suppose to come down on a Saturday and spend the night, but the night before I had ended up going out late. The next day I was hung over and decided not to go down to her house or return her phone calls that weekend. After the weekend passed I finally made contact with her and she was pretty upset with me”. A possible explanation for this high occurrence of disregard between adult siblings could be due to the level of commitment within the sibling relationships and the assumption that one’s sibling will always be there for them.

Unclear Boundaries

Unclear boundaries (11.0%) were the third most frequent type of incident individuals sought forgiveness. For example, a respondent reported an incident of unclear boundaries when their sibling thought he/she was right and was upset because the sibling did not agree and conflict arose, “We were having a conversation and she didn’t agree with what I said so she began to cut me off and eventually hung up. She called back and I asked for her forgiveness if I did anything wrong (even though she was wrong)”. Perhaps these types of incidences occur in sibling conflicts because siblings are so uniquely close to one another, therefore crossing boundaries may occur frequently within this type of relationship.
Disapproval

Disapproval was the fourth most frequent type of incident individuals sought forgiveness. An example of reported disapproval by a respondent was when a sibling did not approve of the person that was dating his brother and conflict arose between the siblings, “I told him that I didn’t like his girlfriend and then began to treat him and his girlfriend meanly. I told them I wouldn’t go to their wedding, that they were a horrible couple, and that I didn’t like who my brother was when he was with her”. A possible explanation for disapproval between adult siblings may be due to the closeness of the sibling relationship and that siblings will disapprove of one another’s actions or decisions, which could often result in conflict.

Stealing/Borrowing without Permission

Stealing and/or borrowing without permission (8.1%) was the fifth most frequent incidences that caused the desire to seek forgiveness from their sibling. An example from a respondent was, “I took my sisters car without asking and she was car-less”. In addition to stealing and borrowing, stealing, borrowing and damaging the property was also analyzed and had a frequency of 2.9%. An example by a respondent is, “I took a CD without asking and broke it”. Since siblings often have access to each other’s property, even if they no longer reside with one another, siblings often take stuff from one another with hopes of them not knowing or finding out. However, often times the item taken is damaged, and this can result in conflict.

Betrayal

Betrayal (7.6%) occurred to a much lesser extent than the previous incidences that caused the desire to seek forgiveness from their adult sibling. Such incidences of betrayal
may be telling another family member something that they should not have, sleeping with one of their significant others, etc. A specific example was reported by a respondent as, “My sister and her boyfriend of two years broke up because he was a jerk to her. After the breakup I remained close friends with her ex because we were friends before they even started dating. But she saw it as a sign of betrayal”. Betrayal occurs frequently in sibling relationships since so much of their personal information is shared with one another as well as having information and access to one another’s relationships. In addition, siblings often share social networks, therefore when conflict arises within the social network; siblings expect that their brother or sister will be faithful to them first.

**Lying**

Lying occurred least frequently. An example of a reported lie from a respondent was, “One time I took fifteen dollars from my mother’s secret stash, and blamed it on my brother. He got grounded, and I felt really bad so I bought him dinner every week”. The low frequency of lying between siblings can perhaps be understood because it is not common to lie to individuals where there is a power balance. That is, the need to lie is either not viewed as a viable strategy or the shared bond the siblings establish early in life make is less likely to view lying as a favorable behavior. Siblings tend to be very close and if lying occurred frequently, the truth would be revealed and could hinder the trust within the relationship significantly.

**Limitations**

The present study had several limitations. It should be mentioned that the “secure” attachment style had a relatively low reliability (.40). However, this did not affect the overall significance of the results, as suggested in previous research (Collins &
Read, 1990). Also, research question three should be interpreted with caution because Box’s M was found to be significant which indicates a violation of assumption of equivalent covariance matrices across cells. Nevertheless, significance was reached on Pillai’s Trace which is the omnibus test most resistant to violations of test assumptions.

Additionally, living arrangements of the siblings were not taken into consideration. Although this study did not focus on adult siblings who resided with one another, it would have been interesting to examine the living arrangements of the adult siblings and whether or not this contributed to the amount of conflict and forgiveness seeking within the relationship.

Further analysis is needed in regards to relational maintenance strategies and sibling relationships as these strategies may not adequately measure sibling relationships. Due to the uniqueness of the sibling relationship, “do nothing” during a conflict situation very well may be a relational maintenance strategy. Therefore, there is a possibility that the “do nothing” option is considered a relational maintenance strategy for siblings during conflict, due to the involuntary nature of the sibling relationship.

Kelley’s (1998) forgiveness messages were originally designed to measure granting forgiveness whereas for the purpose of this study it was applied to understanding the seeking aspect forgiveness. Previous research has provided an understanding on messages that grant forgiveness. As research progresses it is important to understand the seeking component of forgiveness, and this is research is an attempt to do so. Further research should be done on forgiveness seeking messages to expand our understanding.

Finally, a random sample was not established within the present study. Therefore, results were not generalizable to the population of adult sibling relationships at this mid-
western college. Nevertheless, the present study had hoped and expected to acquire a large majority of participants that have adult siblings, as forgiveness research has already been conducted in dating relationships, friendships, and within marriages (Kelley, 1998; Merolla, 2008).

**Directions for Future Study**

Research efforts should be made to improve the overall reliability of the “secure” attachment style dimension because a relatively low reliability was reported in this study. This indicates that the secure attachment style may need conceptual clarification. Bartholomew & Horowitz (1991) proposed a four-category attachment style that takes into consideration the representation of the self and other. This measure may be more reliable in determining forgiveness-seeking tactics in reference to one’s attachment style. Adding a fourth attachment style may improve the reliability of the secure attachment style. Future research should consider a more advanced and recent attachment measure when examining forgiveness messages in adult sibling relationships.

A study that examines both siblings in regards to the transgression that desired the need for forgiveness would add relevant findings to this study. Examining both sibling’s attachment styles as well as the forgiveness seeking communication used would be interesting and add relevant findings to the study of forgiveness. In addition, examining both siblings’ use of forgiveness as relational maintenance strategies as well as relational satisfaction would provide an overall understand of how forgiveness is used within this type of relationship. Also, the living arrangements of the adult siblings would be interesting to consider when examining forgiveness-seeking communication messages and the desire to seek forgiveness.
Further examination is needed to understand why avoidant attachment style and one’s attitude toward forgiveness has such a strong relationship in comparison to secure and anxious-ambivalent attachment styles. In addition, investigating individuals with avoidant attachment styles and the communication message types used to seek forgiveness may provide relevant findings in understanding how individuals with this attachment style deal with conflict in their adult sibling relationships.

Finally, researchers should further explore how gender influences communication forgiveness seeking messages within adult sibling relationships. Examining whether males or females use different forgiveness seeking tactics as well as whether they report the desire to seek forgiveness more often within same sex or opposite sex siblings would add relevant findings to the study of forgiveness. In addition, exploring whether males or females use forgiveness more often as a relational maintenance strategy as well as experiencing relational satisfaction in their adult sibling relationship would be fruitful to the study of forgiveness.

Conclusion

The present study demonstrated how forgiveness-seeking communication within adult sibling relationships may be influenced by attachment style and attitudes toward forgiveness. In addition, this study exemplified how forgiveness-seeking communication is used as a relational maintenance strategy and affects relational satisfaction within the adult sibling relationship. The results, although sometimes difficult to interpret, suggest that individuals with secure attachment styles tend to use more direct forgiveness-seeking strategies with their adult siblings, and this contributes to relational satisfaction in their
relationship. In addition, actively seeking forgiveness within adult sibling relationships is considered to be a relational maintenance strategy for the relationship.

The present study adds relevant findings to interpersonal communication by examining the role of forgiveness seeking within adult sibling relationships. Most of the prior research on communicating forgiveness is on granting forgiveness within romantic relationships or friendships. For example, Merolla (2008) used this typology to investigate forgiveness granting communication among friends and individuals in dating relationships. This study examined seeking forgiveness within a family context, specifically within adult siblings. This contribution supports Kelley’s (1998) typology and extends results within a family context.
REFERENCES


handbook of moral behavior and development: Vol. 1. Theory (pp. 123-152).

Journal of Adolescence, 12, 95-110.


Appendix

Communicating Forgiveness Questionnaire

This survey is about adult sibling relationships and communicating forgiveness. If you have no adult sibling, please pass this survey on to a friend or family member who does, then collect it and return it to your instructor.

This survey will ask you to focus on one sibling. It needs to be a sibling with whom you have had conflict as adults, following which you hoped for forgiveness. Please think of one sibling for whom this is true and refer to the same sibling throughout the rest of this survey.

1.) How many siblings do you have? ________________ SIBLINGS.

2.) Please list the age of your siblings and circle the sex of your siblings.

- Age _________ M F
- Age _________ M F
- Age _________ M F
- Age _________ M F

Which of these siblings is the one with whom you had conflict with and hoped for forgiveness? Please check the box to indicate this sibling.

Instructions: Please think of the most recent time when you and your sibling were both adults (18 years of age or older) and a conflict or a situation arose in which you desired forgiveness. Please refer to the same sibling throughout this survey, as this study pertains to adult sibling relationships.

3.) Please choose one of the four choices that best describe the way you attempted to seek forgiveness from your adult sibling after the event/incident. Please circle A, B, C, or D depending on which example best reflects the way you handled the situation.

A.) I explicitly acknowledged the wrongful act to my sibling. I let them know verbally by explicitly seeking forgiveness. I said nothing else (i.e. No stipulations attached, I did not promise it would not happen again).

B.) I sought forgiveness using indirect tactics by doing one or more of the following: I acknowledged the wrong doing by using humor/ I acknowledged the wrong doing by acting the way we did before the event took place/ I invited my sibling to do something together as a form of forgiveness-seeking.

C.) I sought forgiveness using compensation or by communicating conditions that I would never do it again, through one or more of the following: I sought forgiveness by doing something that would please them (i.e. favors for that sibling, getting that sibling something I know they will enjoy)/ I told them that it would never happen again/ I told them that I would do whatever they need in order for their forgiveness.
D.) I did nothing.
4.) Please describe the event/incident that caused the desire for forgiveness:

________________________________________________________________________
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5.) How long ago did this event occur?

_______________________________________

6.) Please indicate the magnitude of the wrongful act that resulted in your desire for forgiveness, on a scale from 1 to 7, where (1) indicates not severe at all and (7) indicates extremely severe. CIRCLE ONE NUMBER

1  2  3  4  5  6  7

7.) Please indicate how responsible you were for the wrongful act on a scale from 1 to 7, where (1) indicates my fault entirely, (4) indicates shared fault, and (7) all my sibling’s fault. CIRCLE ONE NUMBER

1  2  3  4  5  6  7

8.) How different is your relationship today from your relationship as children, where (1) indicates not different at all and (7) indicates very different. CIRCLE ONE NUMBER

1  2  3  4  5  6  7

Instructions: Please mark the following statements to reflect your attitude toward forgiveness. Indicate the degree to which the following statements reflect your feelings regarding forgiveness by marking whether you (1) strongly disagree or (7) indicates strongly agree. CIRCLE ONE NUMBER FOR EACH ITEM

9.) “I believe that forgiveness is a moral virtue.”
1  2  3  4  5  6  7

10.) “Justice is more important than mercy.”
1  2  3  4  5  6  7

11.) “It is admirable to be a forgiving person.”
1  2  3  4  5  6  7

12.) “I have no problem at all with people staying mad at those who hurt them.”
1  2  3  4  5  6  7

13.) “Forgiveness is a sign of weakness”
1  2  3  4  5  6  7

14.) “People should work harder than they do to let go of the wrongs they have suffered.”
1  2  3  4  5  6  7
Instructions: Please indicate how characteristic the statements below are of yourself, where (1) represents “not at all”, and (5) represents “very much like me”. **CIRCLE ONE NUMBER FOR EACH ITEM**

15.) I find it difficult to allow myself to depend on others
   1   2   3   4   5

16.) People are never there when you need them
   1   2   3   4   5

17.) I am comfortable depending on others
   1   2   3   4   5

18.) I know that others will be there when I need them
   1   2   3   4   5

19.) I find it difficult to trust others completely
   1   2   3   4   5

20.) I am not sure that I can always depend on others to be there when I need them
   1   2   3   4   5

21.) I do not often worry about being abandoned
   1   2   3   4   5

22.) I often worry that my sibling does not really love me
   1   2   3   4   5

23.) I find others are reluctant to get as close as I would like
   1   2   3   4   5

24.) I often worry that my sibling will not want to stay in close contact with me
   1   2   3   4   5

25.) I want to merge completely with another person
   1   2   3   4   5

26.) My desire to merge sometimes scares people away
   1   2   3   4   5

27.) I find it relatively easy to get close to others
   1   2   3   4   5

28.) I do not often worry about someone getting close to me
   1   2   3   4   5

29.) I am somewhat uncomfortable being close to others
   1   2   3   4   5

30.) I am nervous when anyone gets too close
   1   2   3   4   5

31.) I am comfortable having others depend on me
   1   2   3   4   5

32.) Often, love partners want me to be more intimate than I feel comfortable being
   1   2   3   4   5
Instructions: Please indicate your level of satisfaction with your adult sibling in regards to the below questions. Please rate each question from 1 to 5, where (1) indicates low satisfaction and (5) indicates high satisfaction. **CIRCLE ONE NUMBER FOR EACH ITEM**

33.) How well does your sibling meet your needs?
   1 2 3 4 5

34.) In general, how satisfied are you with your relationship?
   1 2 3 4 5

35.) How good is your relationship compared to most?
   1 2 3 4 5

36.) How often do you wish you didn’t have this person as a sibling?
   1 2 3 4 5

37.) To what extend has your relationship met your original expectations?
   1 2 3 4 5

38.) How much do you love your sibling?
   1 2 3 4 5

39.) How many problems are there in your relationship?
   1 2 3 4 5

Instructions: Please indicate how characteristic the statements below are of yourself toward your sibling throughout your relationship, where (1) represents “not at all”, and (7) represents “very much like me”. **CIRCLE ONE NUMBER FOR EACH ITEM**

40.) I stressed my commitment to my sibling.
   1 2 3 4 5 6 7

41.) I implied to my sibling that we have a future together.
   1 2 3 4 5 6 7

42.) I showed myself to be faithful to my sibling.
   1 2 3 4 5 6 7

43.) I told my sibling, “I love you”.
   1 2 3 4 5 6 7

44.) I created an affectionate environment for us.
   1 2 3 4 5 6 7

45.) I gave my sibling items of sentimental value such as gifts or cards.
   1 2 3 4 5 6 7

46.) I was especially verbally affectionate.
   1 2 3 4 5 6 7

47.) I showed affection nonverbally, by touching (i.e. hugging, kissing) my sibling.
   1 2 3 4 5 6 7
48.) I attempted to make our interactions enjoyable.
1 2 3 4 5 6 7
49.) I was cooperative in the way I handled disagreements between us.
1 2 3 4 5 6 7
50.) I tried to make my sibling feel good by doing things such as complimenting him/her.
1 2 3 4 5 6 7
51.) I was very nice, courteous, and polite when we talked.
1 2 3 4 5 6 7
52.) I acted cheerful and positive when with my sibling.
1 2 3 4 5 6 7
53.) I presented myself as cheerful and optimistic when with my sibling.
1 2 3 4 5 6 7
54.) I encouraged my sibling to share thoughts and feelings with me.
1 2 3 4 5 6 7
55.) I told my sibling how I feel about our relationship.
1 2 3 4 5 6 7
56.) I let my partner know how I feel about him/her.
1 2 3 4 5 6 7
57.) I shared a lot of private information with my sibling.
1 2 3 4 5 6 7
58.) I disclosed to my sibling what I needed or wanted from the relationship.
1 2 3 4 5 6 7
59.) We spent time with common friends.
1 2 3 4 5 6 7
60.) We focused on common friends and affiliations.
1 2 3 4 5 6 7
61.) I showed my sibling that I am willing to do things with his/her circle of friends.
1 2 3 4 5 6 7
62.) I included family or mutual friends in activities.
1 2 3 4 5 6 7
63.) I let my sibling know I am willing to help with tasks.
1 2 3 4 5 6 7
64.) I helped my sibling accomplish tasks (such as chores or homework).
1 2 3 4 5 6 7
65.) I tried to “be there” when my sibling needed someone to talk to.
1 2 3 4 5 6 7
66.) I took the time to listen to my sibling’s problems or concerns.
1 2 3 4 5 6 7
67.) I tried to be especially supportive and caring.
1 2 3 4 5 6 7
68.) I comforted my sibling when he/she was sad or distressed.
   1   2   3   4   5   6   7

69.) What is your age? _________

70.) Are you male or female? CIRCLE ONE
   - Male
   - Female

71.) How do you describe your ethnic/ racial identity?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

72.) What is your yearly household income? CIRCLE ONE

Under $25,000
$25,000-$39,999
$40,000-$49,000
$50,000-$74,000
$75,000-$99,999
More than $100,000

**THANK YOU FOR YOUR PARTICIPATION!**