Abstract

An Analysis of Sex Differences in Empathy and Forgiveness

by Stephen M. Kmiec

August, 2009

Director: Kathleen Row

DEPARTMENT OF PSYCHOLOGY

The relationships among sex, empathy, and forgiveness were examined. A sample of 108 undergraduates, aged 18 to 35 years, participated in interviews and completed a series of instruments to assess both state and trait levels of forgiveness, cognitive empathy, and emotional empathy. The results indicated that men had higher levels of state forgiveness than women, while no sex differences were found with respect to trait forgiveness. Women scored higher than men in trait emotional empathy, but not in any other empathy measure. Among the entire sample, trait forgiveness correlated positively with all empathy measures, while state forgiveness correlated only to state empathy measures. Empathy appears to play a greater role in forgiveness for men, among whom a regression showed that trait and state emotional empathy and trait cognitive empathy significantly contributed to trait forgiveness. Among women, only trait emotional empathy was found to contribute.

AN ANALYSIS OF SEX DIFFERENCES IN EMPATHY AND FORGIVENESS

A Thesis

Presented To

The Faculty of the Department of Psychology

East Carolina University

In Partial Fulfillment

of the Requirements for the Degree

MASTER OF ARTS IN CLINICAL PSYCHOLOGY

by

Stephen M. Kmiec

August, 2009

AN ANALYSIS OF SEX DIFFERENCES IN EMPATHY AND FORGIVENESS

by

Stephen M. Kmiec

APPROVED BY:

DIRECTOR OF DISSERTATION:_____

Kathleen A. Row, PhD

COMMITTEE MEMBER:_____

Susan L. McCammon, PhD

COMMITTEE MEMBER:_____

Derrick Wirtz, PhD

CHAIR OF THE DEPARTMENT OF PSYCHOLOGY:

_____

Kathleen A. Row, PhD

DEAN OF THE GRADUATE SCHOOL:

_____

Paul J. Gemperline, PhD

TABLE OF CONTENTS

LIST OF TABLES

CHAPTER 1: INTRODUCTION AND REVIEW OF THE LITERATURE

Over the years, volumes have been written on the psychology of interpersonal conflict. It is somewhat surprising, then, that until quite recently very little attention had been paid in scholarly research to the concept of forgiveness. Only a decade ago, Robert Enright and Joanna North (1993) estimated that if one were to seek out every English-language or English-translated article and book written on the topic of interpersonal forgiveness, from St. Augustine's writings of the fifth century all the way up to 1970, such a search would yield only about 110 titles. Considering the thousands of articles written about related topics like justice, violence, and interpersonal aggression during the same time span, it seems a curious oversight. While the literature base for forgiveness has increased significantly since that time, there is still a great deal of research to be done.

The study of forgiveness has not been an entirely straightforward matter. One of the main problems that arises is a common one in social research: how exactly does one define the concept? That is to say, what exactly is forgiveness? People seem to forgive in many different ways for many different reasons. Adding to the confusion is the difficulty of disentangling forgiveness from other related, but decidedly different, processes such as forgetting the offense, condoning the occurrence, or denying the event altogether (Enright & Coyle, 1998). Does forgiveness, as some have suggested, require conscious and deliberate effort by the injured party, or can it occur passively? Is there a consistent model that can be applied to the stages of forgiveness? Or do multiple stages necessarily have to occur at all? Can forgiveness be abrupt and spontaneous? These are

just some of the many points of disagreement among forgiveness researchers (McCullough, Pargament, & Thoresen, 2000).

While forgiveness may be applied to a variety of subjects—forgiveness of self or forgiveness of God, for instance—this study will focus on one particular subtype: interpersonal forgiveness. McCullough, Worthington, and Rachal (1997) define "interpersonal forgiveness" according to the following guidelines:

…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)

A number of scales have been devised to measure the construct of interpersonal forgiveness. These can generally be divided into two different subcategories, each of which represents a slightly different conceptualization. The first, and perhaps more commonly measured subtype, is state forgiveness. State forgiveness is offense-specific; it is typically measured by having subjects recall specific instances in which they were somehow slighted by another individual and then analyzing their response toward the offending party and the situation over time.

An alternative approach to measuring interpersonal forgiveness is by examining trait forgiveness. Sometimes referred to as forgiving personality or forgivingness, trait

forgiveness focuses on one's general propensity to forgive. Rather than cite a specific instance of forgiveness, measures of trait forgiveness attempt to assess one's tendency to forgive across a broad range of circumstances.

Refinements in the way in which forgiveness has been studied in recent years have allowed researchers to scientifically examine some widely-believed, but previously unresearched assumptions, about the value of interpersonal forgiveness. For example, in a survey of 425 adults aged 50-95, Lawler-Row and Piferi (2006) measured trait forgiveness, along with a number of measures of both physical and psychological well-being. The 33-item Forgiving Personality Inventory (FP; Kamat, Jones, & Row, 2006) was used to measure trait forgiveness, asking subjects to self-evaluate various indicators of forgiving personality along a five-point Likert scale. Based on these results, respondents were sorted into low- and high-trait forgiveness categories. The more forgiving group was found to have lower levels of depression and stress, as indicated by the Beck Depression Inventory (Beck, Ward, Mendelson, Mock, & Erbaugh, 1961) and the Recovery-Stress Questionnaire (Kallus, 1995), respectively. Additionally, on the Scales of Psychological Well-Being (Ryff, 1989), the high-forgiveness group showed higher scores on all six dimensions measured: environmental mastery, self-acceptance, purpose in life, autonomy, personal growth, and positive relationships with others. Forgiveness was also associated with healthy behaviors, social support, and spiritual well-being.

So, while forgiveness has long been valued and encouraged within many cultures, it was only fairly recently that science began to confirm that it may have real, observable

benefits. Social support, healthy behaviors, and spiritual well-being, all of which correlate with forgiveness, are also associated with physical health. The correlation between forgiveness and such variables as social support and positive relationships seems to lend support to the idea of forgiveness as pro-social. In forgiving a transgression, the victim is effectively suppressing a relationship-destructive response in favor of a relationship-constructive response, despite a destructive action by the offender. The decision to forgive, then, is a willingness to put aside the basic, self-satisfying urge for avoidance or revenge in favor of a response which promotes the well-being of the offender and the relationship between the two individuals. So, when wounded in an interpersonal conflict, the victim is faced with two conflicting desires: the desire to avoid or seek revenge, and the desire to maintain positive relationships with others. Forgiveness occurs when the constructive desire to preserve social ties wins over the destructive urge (McCullough, 2000). Forgiveness, then, may be a valuable resource in promoting both physical and social health.

<div align="center">Empathy and Forgiveness</div>

In the discussion of forgiveness thus far, the focus has been on fairly objective criteria and cognitive processes aimed at the preservation of social relationships. The definition offered by McCullough et al. (1997) speaks of changes in motivation away from retaliation and estrangement and toward increased goodwill. To more fully understand forgiveness as a process, it may be useful to examine why and how these changes in motivation occur.

Enright, Freedman, and Rique (1998) put forth one of the more detailed models of forgiveness as a process. Their model was intended as an "estimate of the general pathway many people follow when they forgive" (p. 52). The authors began by logically deriving a model of forgiveness, which they then presented to hundreds of people in order to gather feedback. In the resulting model, the authors identify twenty individual steps in the forgiveness process, divided into four phases—the uncovering phase, decision phase, work phase, and deepening phase. While not intended as a rigid structure—the authors acknowledge that individuals may skip steps or even entire phases—it does offer a widely applicable set of steps by which one may better understand the various aspects of how forgiveness generally occurs.

Of particular interest within this model is the work phase. After identifying the problem (uncovering phase) and making the decision to forgive (decision phase), the work phase offers perhaps the best explanation of how exactly forgiveness takes place within the individual. Four steps are presented within this unit:

12. Reframing, through role taking, who the wrongdoer is by viewing him or her in context

13. Empathy toward the offender

14. Awareness of compassion, as it emerges, toward the offender

15. Acceptance and absorption of the pain (p. 53).

Three of the four steps deal, in some form, with the understanding and vicarious experience of the thoughts and feelings of the offender, through understanding (though not necessarily condoning) the context and pressures surrounding his or her behavior, identifying with the offender on an emotional level, and perhaps even sharing in his or her suffering. These are specific steps which require the ability to relate to and understand others and to focus on their perceptions and experiences in an objective manner, or, more simply, empathy. The relationship between empathy and forgiveness, then, makes a great deal of intuitive sense.

Empathy is, of course, a rather large concept. There are multiple subtypes contained within the broad idea of empathy, and an even greater number of different scales which have been used to measure these subtypes. In this case, empathy will be divided into two related, but distinctly different concepts: cognitive and emotional empathy.

Cognitive empathy describes the basic human capacity for perspective taking, an ability which is likely to be a key cognitive factor in forgiveness. Hollin (1994) offers a fairly simple definition of cognitive empathy as "the ability to see the world, including one's own behavior, from another person's point of view" (p. 1232). This encompasses the ability to rationally and objectively examine a situation and to understand the factors which caused the other person to act in a certain manner.

The other type of empathy which is of interest here is emotional empathy. Eisenberg and Strayer (1987) described this conceptualization when they defined empathy as "an emotional response that stems from another's emotional state or condition

and that is congruent with the other's emotional state or situation" (p. 3). So, unlike the more hypothetical, analytical approach of cognitive empathy, emotional empathy is a vicarious experience of an emotional response.

If the proposed model for the forgiveness process were accurate, one would expect to see a correlation between forgiveness and both cognitive and emotional empathy. A few studies have examined empathy as a component of intergroup forgiveness, including one by Moeschberger, Dixons, Niens, and Cairns (2005) studying interpersonal factors affecting forgiveness between Protestants and Catholics in Northern Ireland. Affective empathy was measured using an eight-item scale in which 297 students rated the extent to which they experienced certain feelings about members of the outgroup community (feelings of Catholics toward Protestants and vice-versa) when members of that community are experiencing problems. Forgiveness was measured using a specialized scale specifically addressing forgiveness between Catholics and Protestants in Northern Ireland. From these data, two measures were generated. The first, "never forgiving," measured a lasting refusal to forgive and forget the transgressions of the other community. The second, "future forgiving," measured the perceived importance of forgiveness between the two factions for the future of Northern Ireland.

Empathy was correlated with both measures of forgiveness. A reasonably strong positive relationship was found between empathy and future forgiving ($r = .30, p < .01$). A stronger, negative correlation was found between empathy and never forgiving ($r = -.46, p < .01$).

A similar study of intergroup forgiveness was conducted by Tam, Hewstone, Kenworthy, Cairns, Marinetti, Geddes, and Parkinson (2008), again using the conflict in Northern Ireland as a basis. This time, a smaller sample of 97 Northern Irish university students was used. Forgiveness was measured using the same scale as the previous study, though a single measure was derived from the questions ("forgiveness") rather than the separate measures of future forgiving and never forgiving. Empathy, meanwhile, was measured using a simple survey consisting of two items: "I often feel sorry for people from the other community when they are having problems" and "When I see someone from the other community being treated unfairly, I sometimes don't feel much pity for them" (p. 310). Consistent with the Moeschberger et al. (2005) study, empathy and forgiveness were positively related ($r = .44$, $p < .01$).

While these studies provide valuable insight into the empathy-forgiveness link, they are both targeted to very specific populations on an intergroup level. To understand this relationship more fully, it is necessary to examine forgiveness and empathy in a variety of contexts at the individual level.

Konstam, Chernoff, and Deveney (2001) conducted a study of 138 graduate students in the northeastern U.S. to examine the relationship between forgiveness and several "adaptive moral emotional processes" including proneness to shame, guilt, anger, and, most importantly to the present study, empathic responsiveness. Forgiveness was measured using the Enright Forgiveness Inventory (EFI; Subkoviak et al., 1995), a 60-item scale measuring affective, behavioral, and cognitive domains of forgiveness. Participants responded to the EFI based on their own personal accounts of an event that

"hurt them deeply," which they were asked to describe in writing. Among the other scales administered was the Interpersonal Relativity Index (IRI; Davis, 1980), assessing four dimensions of empathy. Two of these subscales were found to correlate positively with total forgiveness. Empathic Concern, which is tied to the concept of emotional empathy, correlated modestly but significantly with forgiveness ($r = .17$, $p < .05$). Stronger but still moderate, was the correlation between forgiveness and Perspective Taking ($r = .23$, $p < .01$), which serves as a good measure of cognitive empathy.

Ristovski and Wertheim (2005), in a study of compensation following criminal victimization, yield some additional information about empathy and forgiveness. In this study, 75 Australian adults were asked to read a scenario in which they were to imagine themselves as the victims of a nonviolent theft. After reading and imagining the scenarios, participants completed two subscales of the IRI, empathic concern and perspective taking, which served as measures of trait empathy. Also included were 16 items taken from the EFI and from the revenge scale (a reverse-forgiveness measure) of the Transgression-Related Interpersonal Motivations (McCullough et al., 1998), measuring affective and cognitive forgiveness.

Once again, higher-empathy participants were more forgiving than low-empathy participants. Looking more closely at these data, several interesting features emerge across the various compensation conditions. Trait empathy appears to function as a mediating factor between the type of compensation received and the decision to forgive. When no compensation was given, both high- and low-forgiveness individuals showed a similarly low propensity toward forgiveness. Also quite similar were the levels of

forgiveness between high- and low-empathy individuals following voluntary compensation, a condition in which levels of forgiveness were high for both groups. However, the high empathy group showed significant increases in forgiveness in the external- and forced- compensation groups compared to the no-compensation condition, while the low empathy group did not. The high empathy group showed similarly high levels of forgiveness across all three compensation conditions, while the low empathy group only experienced such gains following voluntary compensation.

While Ristovski and Wertheim (2005) demonstrated a link between empathy and hypothetical forgiveness in imagined scenarios, other studies have found similar links between empathy and forgiveness in the context of real events. In fact, McCullough (2000) stated that, to his knowledge, empathy was "the only psychological variable that has been shown to help people to forgive specific real-life transgressions when manipulated experimentally" (p. 46). McCullough et al. (1997) illustrated this relationship in a study of individuals who expressed a desire to learn to forgive some specific individual in their life, after having been unable to do so previously. The specific offenses were varied, as were the offenders—34% wished to forgive a boyfriend or girlfriend, 21% a close friend, 17% a parent, and 28% someone else. On average, the self-reported suffering of the victims was fairly severe, with a mean score of 7.2 on a scale of 1 to 9 (1 being very little pain, 9 being the most pain the individual has ever felt).

The students were randomly assigned to one of three conditions, with an approximately equal proportion of males and females in each group. One group participated in a seminar emphasizing the importance of empathy as a prerequisite to

forgiveness. A second group participated in a seminar designed to encourage forgiveness but with no emphasis on empathy. Both of these seminars consisted of eight one-hour sessions conducted over the course of a weekend. A third group was placed in a wait-list condition and received no treatment until after the completion of the experiment. All subjects were given questionnaires before the seminar, immediately after the seminar, and six weeks after the seminar. Along with general demographic items, the questionnaires contained measures for affective and cognitive empathy as well as forgiveness. Affective empathy was measured using a four-item version of Batson's empathy adjectives (Coke, Batson, & Davis, 1978), in which respondents rated, on a scale of 0 to 5, the extent to which they felt a series of empathy-related adjectives toward their offender. For cognitive empathy, subjects were given a modified version of the Self-Dyadic Perspective-Taking Scale (Long, 1990). Finally, forgiveness was assessed using a measure consisting of five items representing constructive and destructive dispositions toward the offender. Additionally, a single item asked the students to rate the extent to which they had forgiven the offender on a scale of 1 (not at all forgiven) to 5 (completely forgiven).

The results indicated that the empathy training seminar produced greater increases in forgiveness than the alternate seminar or the control group. Empathy training also produced greater gains in affective empathy relative to the other conditions, though a similar pattern was not found with cognitive empathy. Increases in cognitive empathy were nearly identical in the empathy-focused and alternative seminar, indicating that factors common to both programs such as psychoeducation, discussion, and support may

promote cognitive empathy as well. A further analysis of partial variance indicated that the greater effectiveness of the empathy-based program in promoting forgiveness could be attributed primarily to the accompanying increase in emotional empathy.

Sex, Empathy, and Forgiveness

In general, the studies presented thus far offer little or no analysis of sex differences in empathy, forgiveness, or the correlation thereof within their subject groups. This omission might lead one to believe that sex does not play a significant role in the empathy-forgiveness process. A closer examination of the few studies which do specifically address this issue, however, indicates that this is not the case.

Though the volume of literature examining the relationship between sex and empathy is fairly small, the findings are generally consistent. In virtually every instance, women overwhelmingly score higher on empathy than men (e.g., Schieman and Van Gundy, 2000; Macaskill, Maultby, and Day, 2002; Toussaint and Webb, 2005). An extensive analysis by Eisenberg and Lennon (1983), however, suggests that the sex-empathy difference may not be as straightforward as it first appears. According to their review, self-report scales did indeed reveal a large difference favoring women. Women also rated higher than men when empathy was measured through reflexive crying or self-reports in lab situations. The sex difference disappeared entirely, however, when empathy was measured through physiological signs or "unobtrusive observations of nonverbal reactions to another's emotional state" (p. 100). Thus, the sex difference appears to be limited to self-report measures.

The relationship between sex and forgiveness is, at a glance, somewhat unclear. As with sex and empathy, relatively few studies have sought to directly address this relationship, and those that have offer conflicting conclusions. A number of studies, including Toussaint and Webb (2005) and Macaskill et al. (2002), have found no significant difference in overall levels of forgiveness between men and women. Nonetheless, some literature suggests that even if the sexes forgive equally, they may not forgive identically. Qualitative differences may exist between men and women in the forgiveness process even where quantitative differences do not (Konstam et al. 2001).

In a set of survey data collected from members of the American Mental Health Counselors Association by Konstam, Marx, Schurer, Emerson Lombardo, and Harrington (2002), 55% of counselors reported that women were more likely to raise forgiveness issues than men, while only 4% reported that men were more likely than women (42% reported equal likelihood between men and women). Respondents further indicated that women seemed to value forgiveness more highly than men and often viewed it as an essential component of relationships, and that they may be more open to exploring issues related to forgiveness. This may relate to differing social expectations between the sexes on the subject of forgiveness. Respondents indicated that the ability to forgive was often considered admirable in women, while it may be viewed as a sign of weakness in men. The barriers to forgiveness may differ as well, with men tending to stay focused on feelings of anger and desire for revenge, while women were more focused on their own feelings of hurt and loss.

This information, while lending some insight into sex differences in the forgiveness process, must be interpreted cautiously. While women may seem to hold forgiveness in greater esteem than men, this does not necessarily mean that men have more difficulty forgiving. Azmitia, Kamprath, and Jakob (1998) examined boys and girls faced with a violation in their friendships. The authors found that for girls, the modal time before renewing friendships with the offender was two weeks. For boys, the modal time was one day. This may indicate a greater willingness to forgive among the boys, or at least a greater tendency to quickly move on and avoid prolonged conflict.

Furthermore, any correlations that do exist between sex and forgiveness may depend at least in part on how forgiveness is conceptualized and measured. A study by Lawler-Row and Piferi (2006), mentioned earlier in this text, presented an examination of several correlates of forgiving personality, a trait forgiveness measure. Examining the relationship between sex and trait forgiveness, women scored significantly higher on the FP than men. In addition, Lawler-Row, Scott, Raines, Edlis-Matityahou, and Moore (2007) examined state forgiveness among 270 students. The relationship between sex and state forgiveness found in this study was opposite that found with trait forgiveness in the previous study: men scored significantly higher than women on state forgiveness. Thus, while revealing significant sex differences in forgiveness, the differing results make it impossible to clearly determine if one sex is generally more forgiving than the other.

Though the exact relationships remain unclear, it appears that some sex differences, both qualitative and quantitative, exist in both empathy and forgiveness. It

has also been widely suggested that empathy plays a significant role in the forgiveness process. Given that women tend to score equal to or higher than men in empathy, one might expect women to similarly outscore men on forgiveness, yet the literature shows multiple instances in which men are shown to be equally or even more forgiving than women. This may suggest the presence of sex or gender differences not only in empathy and forgiveness, but also in the relationship between these two variables. To date, only a few studies have examined this question.

Macaskill et al. (2002) set out primarily to examine the forgiveness-empathy correlation, citing a relative lack of empirical data on the subject and the need to measure a variety of forgiveness constructs. A sample of 324 British undergraduates completed surveys designed to measure forgiveness and empathy. Forgiveness was determined using the Mauger et al. (1992) measure, which yields separate scales for forgiveness of self and forgiveness of others. For empathy, the researchers used a measure by Mehrabian & Epstein (1972), a measure of emotional empathy based on individuals' ability to recognize and share the emotions of others.

While this particular study was not designed with a specific focus on sex differences, the results nonetheless offer some useful sex-specific data. Unsurprisingly, women scored significantly higher than men on the empathy scale. No significant sex differences were found in forgiveness of self or others. Empathy, meanwhile, correlated with forgiveness of others in both men and women. Looking more closely at the relationship between empathy and forgiveness of others, a possible sex difference begins to emerge. While the relationship was significant for both men and women, the

correlation appears to be stronger in women ($r = .33$, $p < .01$) than in men ($r = .23$, $p <$ .05), suggesting the possibility of sex- or gender-based differences in the empathy-forgiveness relationship.

Fincham, Paleari, and Regalia (2002) offer another look at the sex aspect of the empathy-forgiveness correlation in their study of Italian husbands and wives. Participants in this study were administered two questionnaires, one for relationship quality and one for relationship events. The relationship events questionnaire described a series of negative spousal behaviors that participants were asked to read and vividly imagine. Following the scenarios, respondents answered questions related to attribution, emotion, and forgiveness. Measures for negative emotion and emotional empathy were derived from the emotion questions. Forgiveness was determined by a four-item measure for each scenario indicating the extent to which they would disapprove, think favorably, condemn, and forgive their spouse, with the items for disapproval and condemnation being reverse scored (McCullough et al., 1997).

Again, though sex was not a specific focus of the study, separate data and correlations were provided for the husbands and wives. While the authors did not examine whether sex differences occurred in levels of empathy or propensity toward forgiveness, they did find significant positive correlations between emotional empathy and forgiveness separately in both the male and female sample groups. As in the previous study, a sex difference appears to be present in the strength of the relationship between empathy and forgiveness. In this case, however, it was the men who show a stronger correlation ($r = .75$, $p < .001$) than women ($r = .53$, $p < .001$).

Toussaint and Webb (2005) set out specifically to address the question of sex as a mediating factor in the relationship between empathy and forgiveness. Here, researchers used a convenience sample of 45 men and 82 women, aged 25-45, recruited from public parks and beaches in California. Forgiveness was measured among participants using the Enright Forgiveness Scale (Enright, 2005), while the Balanced Emotional Empathy Scale (Mehrabian, 1996) was used to measure emotional empathy.

As expected, empathy was found to be significantly higher among the female portion of the sample than the male portion. Additionally, no significant sex differences were found among any of the three forgiveness measures. The most important findings from this study lie in the sex differences in the empathy-forgiveness relationship. Among men, significant correlations were found between empathy and forgiving behavior ($r =$ .30, $p < .05$), empathy and forgiving cognition ($r = .32, p < .05$), and, to a marginal extent, empathy and forgiving affect ($r = .28, p < .10$). Interestingly, no significant correlations were found between empathy and any forgiveness measure among the women sampled.

<div align="center">Rationale for the Present Study</div>

Looking at the literature on sex differences in forgiveness, a few notable findings can be gleaned, some more consistently than others. From a theoretical standpoint, there is no obvious reason for any inherent differences in forgiveness between the sexes. Indeed, most studies find no sex differences in levels of forgiveness (usually using a trait forgiveness measure); however, two of the studies examined did report sex differences (Lawler-Row and Piferi, 2006; Lawler-Row et al., 2007). Using well-supported

measures of forgiveness, they demonstrate sex differences in overall levels of trait and state forgiveness, respectively. Specifically, Lawler-Row and Piferi (2006) found older women to be higher in trait forgiveness than older men, while Lawler-Row et al. (2007) found higher levels of state forgiveness in young men than young women. Women scoring significantly higher on trait forgiveness is a somewhat unusual finding, and with no clear theoretical ground and a number of other studies showing no sex difference, we do not expect to duplicate this result. Though there is no inherent theoretical reason for men scoring higher on state forgiveness, other studies such as Azmitia et al. (1998) also suggest that men may forgive more readily, especially when forgiveness is examined using specific functional or observational measures. Though only a few of the studies employed state measures of forgiveness, those that did give us reason to believe that men will once again rate higher on state forgiveness in the present study. None of the previous studies have measured state and trait forgiveness within the same sample. In doing so, this research will provide the most direct comparison data available between these two forgiveness subtypes.

Several studies, including Macaskill et al. (2002) and Toussaint and Webb (2005), indicate that women score higher in emotional empathy than men. Eisenberg and Lennon (1983) found this difference as well, but cautioned that the findings may have as much to do with the way in which empathy is measured as they do any actual sex differences. Women may score higher on self-report measures of empathy, not because they are actually more empathic, but rather because they are more inclined to perceive or report themselves as such, perhaps due to gender role expectations. Nonetheless, because we

are using the same types of measures as the previous studies, we expect to once again

find women rating higher in emotional empathy. However, it should be noted that all of

the studies cited here measured trait emotional empathy and not state emotional empathy.

While we would generally intuitively expect the two emotional empathy measures to

have similar sex differences, sex differences in state emotional empathy have not been

explored at this point and are thus not predictable.

The relationship between cognitive empathy (state or trait) and sex, meanwhile, is

even less clear. In fact, none of the studies found examined this question.   From a

conceptual standpoint, if one assumes that differences in emotional empathy might stem

in part from gender role expectations, then one might predict a smaller, perhaps non-

significant difference between sexes in cognitive empathy. However, there is at this

point no empirical evidence on which to base these predictions.

This leads to the next major question addressed in this study: what relationship

exists between empathy and forgiveness? The theoretical understanding of forgiveness

suggests that empathy is a valuable and perhaps even necessary part of the forgiveness

process. The forgiveness model proposed by Enright et al. (1998) prominently features

steps involving the victim's understanding the perspective and sharing the feelings of the

perpetrator. There is a fair amount of empirical investigation of the empathy-forgiveness

link in the literature. Typically, this is examined utilizing measures of trait forgiveness

and trait emotional empathy, which have been found to correlate positively in multiple

studies (Ristovski and Wertheim, 2005; Fincham et al., 2002; Toussaint and Webb,

2005). Also supporting this view are the positive correlations between trait forgiveness

and state emotional empathy (Moeschberger et al., 2005; Tam et al., 2008). Based on these findings, we expect to find consistently positive correlations between trait forgiveness and both state and trait emotional empathy in the present study. The few studies which examine state forgiveness suggest a similar pattern, with state forgiveness positively correlated with both trait emotional empathy (Konstam et al., 2001) and, perhaps, state emotional empathy (as suggested by McCullough et al., 1997). Here again, we expect to find similar correlations in the present study.

Unfortunately, it is much more difficult to predict the relationship between forgiveness and cognitive empathy. The literature examined yielded only two articles addressing this relationship. The most directly relevant study (Konstam et al., 2001) demonstrated a positive correlation between state forgiveness and trait cognitive empathy. Another article (Ristovski and Wertheim, 2005) linked trait forgiveness to trait empathy using an empathy measure incorporating both cognitive and emotional aspects. While a positive correlation was found, it is impossible to ascertain with certainty the role of cognitive empathy relative to that of emotional empathy. None of the articles examined addressed state cognitive empathy. Models such as that of Enright et al. (1998) imply a cognitive component to the empathy-forgiveness relationship, but there is a general lack of empirical examination of this in the current literature. It would therefore be unsurprising from a conceptual standpoint if state and trait cognitive empathy correlated positively with forgiveness, but there is no definitive basis on which to make a prediction.

This leaves the final question of how the empathy-forgiveness relationship varies with sex. Examining the previous results, we know that women consistently score higher than men on emotional empathy measures. We also know that emotional empathy tends to correlate positively with forgiveness. If higher empathy is associated with higher levels of forgiveness, and women have higher levels of empathy than men, one would expect that women would also be more forgiving than men. However, the evidence suggests that this is not the case and that forgiveness appears to be more or less equal between sexes and may even favor men when state measures of forgiveness are utilized. Therefore, either the effect of empathy on forgiveness differs between men and women, or some other factor is affecting the levels of forgiveness in women. The literature has shown varying roles for empathy, including relationships with forgiveness in both men (Fincham et al., 2002; Toussaint and Webb, 2005) and women (Macaskill et al., 2002). Of those studies clearly finding differential correlations, most favor a stronger predictive role for empathy in forgiveness among men than women. However, all three studies examined use trait measures of forgiveness. Given the possible sex differences between state and trait forgiveness found elsewhere, the forgiveness-empathy relationship may differ for state forgiveness. Furthermore, the role of cognitive empathy remains to be examined.

The current literature has not yet provided a clear understanding of the role of sex in the forgiveness process. While a number of studies suggest that significant sex differences may exist, the examination of such differences between forgiveness and empathy is often little more than an afterthought, with few studies focusing directly on

these issues. This study represents an effort to provide a more thorough examination of the effect of sex on empathy and forgiveness, as well as how it affects the relationship between the two, replicating and expanding upon the existing literature by including multiple measures of state and trait forgiveness as well as cognitive and emotional empathy.

This study focuses on six measures: state and trait forgiveness, state and trait cognitive empathy, and state and trait emotional empathy. In examining these variables, we hope to better understand how each varies by sex, what relationships exist between empathy and forgiveness, and how these relationships differ between sexes.

CHAPTER 2: METHOD

Participants for this study consisted of 108 undergraduate students (44 males, 64 females) enrolled in introductory psychology courses, ranging in age from 18 to 35 years (mean age 20.4 years). Volunteers were offered a minimal amount of class credit in exchange for their participation.

Subjects participated in individual, recorded interview sessions in which they were asked to describe two incidents from personal experience: one in which they had been betrayed or hurt by a parent, and another in which they were similarly offended by a friend or romantic partner. Following each story, participants were asked to complete measures of state forgiveness and empathy. Additionally, respondents were given a questionnaire packet before or after the interview (depending on scheduling and arrival times) containing measures of trait empathy and forgiveness.

<u>Forgiveness</u>

Two measures of forgiveness were administered. The first was the Forgiving Personality Inventory (Kamat et al., 2006), included as a measure of trait forgiveness. This instrument consists of 33 items scored on a five point Likert scale. The FP has an estimated internal validity of .93 and a test-retest reliability of .86 over two months. The second, used as a measure of state forgiveness, was the Acts of Forgiveness scale (AF; Drinnon and Jones, 1999). The AF has an estimated internal validity of .96 and a test-retest reliability of .90 over a three-month period. Using another five-point Likert scale, this instrument consists of 45 items related to forgiveness in the context of a specific incident chosen by the respondent, the AF was completed for each of the two scenarios

(parent and other) following the respective interviews. The mean of the two AF scores was used to create a single measure of state forgiveness.

<div align="center">Empathy</div>

Empathy was examined on two dimensions: state versus trait and emotional versus cognitive. Therefore, four empathy measures were collected: trait emotional empathy, trait cognitive empathy, state emotional empathy, and state cognitive empathy.

Trait emotional empathy was measured using the empathy subscale of the Impulsiveness, Venturesomeness, and Empathy in Adults scale (Eysenck, Pearson, Easting, & Allsopp, 1985). This instrument uses 19 items to measure empathy, each a statement with which the respondent indicates their agreement or disagreement on a five-point Likert scale. For trait cognitive empathy, the Multiple Perspectives Inventory (MPI; Gorenflo and Crano, 1998) was administered. Once again, this 20-item instrument utilizes a five-point Likert scale ranging from strong disagreement to strong agreement in regard to a series of statements. The MPI has been shown to be fairly reliable, with an alpha of .90.

For each of the two state empathy measures, participants were asked to respond to questions based on the two personal stories. To measure state emotional empathy, Batson's eight-item empathy scale was utilized (Coke et al., 1978). For each item, the respondent is asked to rate the extent to which each describes their present feelings toward their offender. Estimates of internal consistency for this instrument range from .79 to .95. Since data were collected based on two separate incidents for each participant,

the scores for the two incidents were averaged into a single state emotional empathy measure.

Scores for state cognitive empathy were based on observation of a videotaped interview with each participant. Two observers viewed footage of each respondent describing their experiences being betrayed or hurt by a parent and a friend or romantic partner. The observers assigned a rating assessing the degree to which the participant was able to understand and articulate the perspective of the offender in the scenario, ranging from 1 (Cannot take perspective, no understanding) to 5 (Integrated, complex description of other's view). Interrater reliability coefficients ranged from .78 to .98. As with the state emotional measure, ratings for the two scenarios were averaged into a single score representing state cognitive empathy.

Research Design

Individual T-tests were used to examine sex differences in state and trait forgiveness, state and trait cognitive empathy, and state and trait emotional empathy. Correlations between empathy and forgiveness were then examined, comparing the two forgiveness and the four empathy variables. Finally, to compare the patterns of variables between men and women in the prediction of forgiveness, two regression analyses for men and women were computed using the same variables.

CHAPTER 3: RESULTS

A comparison of means between men and women was run for each of the two forgiveness and four empathy variables using individual t-tests. The means and p values can be found in Table 1. As predicted, no significant sex differences were found with respect to trait forgiveness, while state forgiveness was found to be significantly higher among men ($p < .05$). Trait emotional empathy was found to be higher among women ($p < .001$), as expected. State emotional empathy, on the other hand, had no significant sex differences. No sex differences were found in state or trait cognitive empathy, though state cognitive empathy did show a marginally significant difference favoring women ($p = .059$).

In order to investigate the relationships among the forgiveness and empathy variables, a correlation matrix was calculated, shown in Table 2. Trait forgiveness was found to correlate with all four empathy variables: trait emotional empathy ($r = .476, p < .001$), state emotional empathy ($r = .394, p < .001$), trait cognitive empathy ($r = .369, p < .01$), and state cognitive empathy ($r = .314, p < .01$). State forgiveness was also found to correlate positively with state emotional empathy ($r = .774, p < .001$) and state cognitive empathy ($r = .316, p < .01$). Unexpectedly, state forgiveness did not correlate significantly with trait emotional empathy or trait cognitive empathy. Separate correlations for both sexes can be found in Tables 3 and 4. The correlations between trait forgiveness and most empathy subtypes appeared to be much higher numerically for men than women, but further analysis did not show these differences to be significant.

Finally, a series of linear regressions was employed using forgiveness as a dependent variable and empathy as a predictor to determine how the empathy-forgiveness relationship differed by sex. Trait and state forgiveness were examined for each sex for the relative contributions of all four empathy types, the results of which can be found in Table 5.

The model for trait forgiveness in men was found to be significant ($R = .70$, $p < .001$) with an r-square value of .43. Trait emotional empathy ($p < .05$), trait cognitive empathy ($p < .05$), and state emotional empathy ($p < .05$) were all found to contribute significantly to trait forgiveness, while only state cognitive empathy did not. The trait forgiveness model for women was also significant ($r = .49$, $p < .01$), though the r-square value of .24 was almost half that found in trait forgiveness for men. Examining the empathy variables, only trait emotional empathy was found to contribute significantly ($p < .01$).

Examining state forgiveness in the same way, the model for men is once again significant ($r = .74$, $p < .001$) with an r-square of .54. In this case, however, only state emotional empathy was significant ($p < .001$). Examining the state forgiveness model for women, we find the same pattern. The model is significant ($r = .82$, $p < .001$) with an r-square value of .67, and the only significant empathy variable is state emotional empathy ($p < .01$).

Table 1

Individual T Tests for Sex Differences in Empathy and Forgiveness

	Sex	N	Mean	Range	SD	SEM	t
Trait Forgiveness	M	44	124.32	72-164	19.01	2.87	-.83
	F	64	127.16	92-157	16.18	2.02	
State Forgiveness	M	44	165.75	92.5-214.5	27.03	4.08	1.96*
	F	64	155.50	56-202	26.58	3.32	
T. Emotional Empathy	M	44	64.39	46-81	8.27	1.24	-5.10**
	F	64	72.05	60-92	7.22	.902	
S. Emotional Empathy	M	44	26.21	12-38	5.87	.89	.85
	F	64	25.19	8-39.5	6.36	.79	
T. Cognitive Empathy	M	44	70.16	45-90	10.48	1.58	.41
	F	64	69.39	48-96	8.94	1.12	
S. Cognitive Empathy	M	44	1.89	1-3.5	.59	.09	-1.91
	F	64	2.13	1-4	.62	.08	

*$p < .05$, **$p < .001$

Table 2

Empathy and Forgiveness Correlations

	1	2	3	4	5	6
1. Trait Forgiveness	-	.316***	.369***	.476***	.314***	.394***
2. Trait Cognitive Empathy		-	.141	.154	.205*	.151
3. Trait Emotional Empathy			-	-.050	.167	.091
4. State Forgiveness				-	.316***	.774***
5. State Cognitive Empathy					-	.250**
6. State Emotional Empathy						-

*$p < .05$, **$p < .01$, ***$p < .001$

Table 3

Empathy and Forgiveness Correlations for Men

	1	2	3	4	5	6
1. Trait Forgiveness	-	.473***	.523***	.487***	.337*	.440**
2. Trait Cognitive Empathy		-	.394**	-.028	.068	.143
3. Trait Emotional Empathy			-	.186	.209	.215
4. State Forgiveness				-	.391**	.696***
5. State Cognitive Empathy					-	.310*
6. State Emotional Empathy						-

*$p < .05$, **$p < .01$, ***$p < .001$

Table 4

Empathy and Forgiveness Correlations for Women

	1	2	3	4	5	6
1. Trait Forgiveness	-	.281*	.129	.515***	.281*	.381**
2. Trait Cognitive Empathy		-	-.022	.089	.122	.143
3. Trait Emotional Empathy			-	.119	.222	.100
4. State Forgiveness				-	.336**	.826***
5. State Cognitive Empathy					-	.239
6. State Emotional Empathy						-

*$p < .05$, **$p < .01$, ***$p < .001$

Table 5

Regression Analysis of Empathy-Forgiveness Relationships by Sex

	Trait Forgiveness		State Forgiveness	
	Male	Female	Male	Female
Trait Emotional Empathy beta	.30*	.31**	-.16	.05
State Emotional Empathy beta	.28*	.19	.65***	.75***
Trait Cognitive Empathy beta	.31*	.07	.07	.01
State Cognitive Empathy beta	.17	.18	.19	.15
R	.70	.49	.74	.82
R Square	.43	.24	.54	.67
Sig.	.000	.003	.000	.000

*$p < .05$, **$p < .01$, ***$p < .001$

CHAPTER 4: DISCUSSION

The purpose of this study was to better understand the relationship between sex, empathy, and forgiveness. Specifically, it is an attempt to determine whether sex differences exist with regards to various types of empathy and forgiveness, whether various measures of empathy correlate with state or trait forgiveness, and what sex differences exist in the relationships between empathy and forgiveness. The findings offer insights into all three of these questions and may help to explain why, while empathy and forgiveness remain closely associated concepts, traditionally higher empathy levels in women do not necessarily translate to more forgiveness.

The fact that no significant sex differences were found with respect to trait forgiveness is consistent with most of the existing research, and the fact that men were found to score higher than women on state forgiveness supports the earlier findings of Lawler-Row et al. (2007). These findings could be interpreted in several ways. It may be that while men and women are similar in their overall levels of forgiveness, men are more forgiving in certain specific instances. When asked to recall specific instances where another person wronged them, as in the state forgiveness measures, female respondents may have thought of instances in which they have had particular difficulty forgiving the offender, even if these instances are not representative of their normal pattern of forgiveness. The present study does not control for factors such as severity of offense or closeness to the offender, either of which could affect individual instances of forgiveness, but there is no reason to expect any of these factors to be biased by sex.

It may also be that men actually are more forgiving than women. Trait forgiveness measures are attained through a self-report of general tendencies. As Konstam et al. (2002) reported, women tend to value forgiveness more than men. Forgiveness is typically seen among women as a virtue and an important feature in relationships with others, whereas men typically place less emphasis on forgiveness and may even view it outwardly as a sign of weakness. If this is the case, it is entirely possible that women would tend to over-report and men would tend to under-report general forgiveness levels in accordance with differing values and gender role expectations. The FP itself may include certain items that more closely reflect values than actual behaviors. State forgiveness, then, may be less subject to this bias. Men may report that they are less forgiving than they really are, but their higher levels of forgiveness emerge when they are questioned with regard to a specific, concrete example. Women may report themselves as more forgiving but reveal themselves to be somewhat less so when recalling specific instances. Either or both of these could explain the sex differences found here.

A similar argument can be made explaining the sex differences found in emotional empathy. It was not at all surprising that women were higher in trait emotional empathy, as this mirrors the results of every study examined thus far. It is perhaps more interesting to note that when state emotional empathy was measured, no such difference was found. Emotional empathy carries different cultural implications for men and women, and may carry something of a negative stigma in men while being considered admirable in women. Assuming that the measure used for state emotional empathy is an

indication of actual sympathetic emotional response with the offender, as opposed to general self-reported tendencies, lack of sex difference in state empathy may indicate that men are not significantly different from women in their actual capacity for emotional empathy but rather their awareness of or willingness to admit to such feelings. The lack of sex differences in cognitive empathy (both state and trait) is consistent with this idea as cognitive empathy would not carry the same gender-related stigma.

If the explanations offered above are correct, the sex differences found in both the empathy and forgiveness measures would actually be attributed more to gender rather than sex. That is to say, these differences would have less to do with actually being male or female than with one's identification with masculine or feminine gender roles. It would be useful, then, to further evaluate these questions by conducting similar studies using a scale for gender role identification rather than simply sorting respondents by sex.

One of the basic assumptions in the literature thus far was that empathy, in general, would relate to forgiveness. While the present study supports this notion to some extent, the relationship is not entirely straightforward. Trait forgiveness does, as expected, correlate positively with all four empathy measures used. State forgiveness, on the other hand, correlated only with state empathy measures. So, respondents who report that they are generally empathic also report that they are generally forgiving. Respondents who showed higher levels of empathy in relation to specific instances also showed higher levels of forgiveness in relation to the same instances. Independently, both of these findings appear fairly logical. What is more difficult to understand is why an individual's general levels of trait empathy do not correlate with their likelihood to

forgive the offender in their specific scenarios. While it could be, as suggested in the discussion of sex differences in empathy and forgiveness above, that trait empathy measures are subject to less accurate self-reporting, previous research have shown such measures to be fairly valid.

An examination of the linear regressions used to assess sex differences in the empathy-forgiveness relationship may provide some useful insights. For both men and women, the only factor which was found to significantly contribute to the state forgiveness model was state empathy, with beta values of .65 and .75, respectively. As described previously, state emotional empathy was measured using Batson's eight-item empathy scale, a widely used measure for this construct. To give some idea of the nature of the items used in this measure, a few examples (rated by the respondent on a scale of 1 to 5 for degree of agreement) include "I feel warm towards my offender"; "I feel softhearted for my offender"; and "I feel tender toward my offender." While the stated purpose of the scale is to evaluate empathy towards an offender, items like these could instead be taken as measures of *positive regard* or *sympathy* toward the offender, a very different concept and one that would likely correlate closely with forgiveness for different reasons. This is not meant to suggest that this scale has no worth as a means of measuring emotional empathy, but rather that several items may be influenced by positive regard, a factor very likely tied to forgiveness, making it less distinctive in this particular instance. And, while some items on the scale do relate more obviously to empathy—"I feel empathic towards my offender" and "I feel sympathetic towards my offender" for instance—on an instrument containing only eight items, even a few items

influenced by another factor could significantly affect respondents' ratings. Assuming for a moment that this is the case, the regression would indicate that empathy in general does not significantly affect state forgiveness in men or women, but that positive regard toward the offender was very closely related to forgiveness.

The state emotional empathy measure emerges again in the linear regressions as the only empathy factor shown to significantly contribute to trait forgiveness in women. This is notably different from the findings among the men in the sample, for whom not only state emotional empathy but also trait emotional and trait cognitive empathy made significant contributions to trait forgiveness. At a minimum, this shows that a wider range of empathy subtypes affect forgiveness in men, including trait variables which have no such effect on forgiveness for women. Further, given the doubts raised about the state emotional empathy measure used, it may in fact be that empathy as a whole contributes significantly to forgiveness in men but not in women, a finding in line with those of Fincham et al. (2002) and Toussaint and Webb (2005).

More research could be done to further clarify the relationship between sex, empathy, and forgiveness. Future studies could approach this question using measures of gender roles. Different measures of state emotional empathy could be employed as well to avoid potential confounding with other factors and to determine with greater certainty whether any type of empathy affects forgiveness among women. Ideally, it would also be useful to find more objective means of measuring trait emotional empathy to combat the bias that more traditional self report scales may carry. Nonetheless, the research presented here offers perhaps the clearest examination of the question of sex differences

in empathy and forgiveness available thus far and may offer some useful insights and applications.

The importance of forgiveness has been well established. Previous research has shown that forgiveness is a pro-social process (McCullough, 2000), that it is associated with both physical and psychological well-being (Lawler-Row and Piferi, 2006), and that it is often raised as an issue in therapy (Konstam et al., 2002). Empathy-based approaches to encouraging forgiveness in therapy have proven successful in the past (McCullough et al., 1997), and the present study does indeed demonstrate the relationship between empathy and forgiveness both broadly and in specific instances.

Interestingly, this study suggests that certain stereotypes regarding empathy and forgiveness in men should not be taken for granted. While it has been widely believed that men are less empathic than women, measures of state emotional empathy suggest otherwise. Perhaps it should not be assumed that men are lower in emotional empathy. Rather, they may simply perceive themselves as less so or be conditioned to admit to less empathy due to prescribed gender roles.

Much attention has been given to empathy-based interventions as a means to promote forgiveness. In general, these interventions seek to train state cognitive empathy to increase state forgiveness. While the present study finds that these two variables to correlate strongly with one another, the regression analysis presented indicates that state cognitive empathy does not play a significant role in forgiveness for either sex.

The most significant finding for clinical purposes may be that empathy actually appears to be more important in forgiveness with men than with women. As such,

therapists would do well to emphasize an empathy-based approach to forgiveness-related issues when working with male clients in particular. Conversely, it may well be that empathy-based approaches are less effective for women than is typically assumed. So, though women are likely to discuss empathy more readily in a therapy setting, it may be wise to take an approach to forgiveness with female clients that is not based solely around empathy with the offender.

References

Azmitia, M., Kamprath, N. A., & Jakob, L. (1998). Intimacy and conflict: The dynamics

of boys' and girls' friendships during middle childhood and early adolescence. In

L. H. Meyer, H. Park, M. Grenot-Scheyer, I. S. Schwartz, & B. Harry (Eds.),

Making friends. Baltimore: Paul H. Brooks Publishing Company.

Beck, A. T., Ward, C. H., Mendelson, M., Mock, J. E., & Erbaugh, J. K. (1961). An

inventory for measuring depression. *Archives of General Psychiatry*, *4*, 561–571.

Coke, J. S., Batson, C. D., & McDavis, K. (1978). Empathic mediation of helping: A

two-stage model. *Journal of Personality and Social Psychology, 36,* 752-766.

Davis, M. H. (1980). A multidimensional approach to individual differences in empathy.

Journal of Personality and Social Psychology, *44*, 113-126.

Drinnon, J. R., & Jones, W. H. (1999). Measuring an act of forgiveness. Paper presented

at Southeastern Psychological Association, Mobile, AL.

Eisenberg, N., & Lennon, R. (1983). Sex differences in empathy and related capacities.

Psychological Bulletin, 94, 100-131.

Eisenberg, N., & Strayer, J. (1987). Critical issues in the study of empathy. In N.

Eisenberg & J. Strayer (Eds.), *Empathy and its development* (pp. 3-13).

Cambridge, England: Cambridge University Press.

Enright, R. D. (2005). *Enright Forgiveness Inventory and manual.* Redwood City, CA:

Mind Garden.

Enright, R. D., & Coyle, C. T. (1998). Researching the process model of forgiveness within psychological interventions. In E. L. Worthington (Ed.), *Dimensions of forgiveness*. Philadelphia: Westminster Press.

Enright, R. D., Freedman, S., & Rique, J. (1998). The psychology of interpersonal forgiveness. In R. D. Enright & J. North (Eds.), *Exploring Forgiveness* (pp. 46-62). Madison: University of Wisconsin Press.

Enright, R. D., & North, J. (1993). Introducing forgiveness. In R. D. Enright & J. North (Eds.), *Exploring forgiveness* (pp. 3-8). Madison: University of Wisconsin Press.

Eysenck, S. B. G., Pearson, P. R., Easting, G., & Allsopp, J. F. (1985). Age norms for impulsiveness, venturesomeness, and empathy in adults. *Personality and Individual Differences*, *6*, 613-619.

Fincham, F. D., Paleari, F. G., & Regalia, C. (2002). Forgiveness in marriage: The role of relationship quality, attributions, and empathy. *Personal Relationships, 9*, 27-37.

Gorenflo, D. W., & Crano, W. D. (1998). The multiple perspectives inventory: A measure of perspective-taking. *Swiss Journal of Psychology, 57*, 163-177.

Hollin, C. (1994). Forensic (criminological) psychology. In A. Colman (Ed.), *Companion encyclopedia of psychology* (pp. 1231-1253). London: Routledge.

Kallus, K. W. (1995). *Der Erholungs-Belastungs-Fragebogen (EBF) (The Recovery-Stress-Questionnaire)*. Frankfurt: Swets & Zeitlinger.

Kamat, V. I., Jones, W. H., & Row, K. L. (2006). Assessing forgiveness as a dimension of personality. *Individual Differences Research*, *4*, 322-330.

Konstam, V., Chernoff, M., & Deveney, S. (2001). Toward forgiveness: The role of shame, guilt, anger, and empathy. *Counseling and Values*, *46*, 26-39.

Konstam, V., Marx, F., Schurer, J., Emerson Lombardo, N. B., & Harrington, A. K. (2002). Forgiveness in practice: What mental health counselors are telling us. In S. Lamb & J. G. Murphy (Eds.), *Before forgiving: Cautionary views of forgiveness in psychotherapy.* London: Oxford University Press.

Lawler-Row, K. A., & Piferi, R. L. (2006). The forgiving personality: Describing a life well-lived? *Personality and Individual Differences*, *41*, 1009-1020.

Lawler-Row, K. A., Scott, C. A., Raines, R. L., Edlis-Matityahou, M., & Moore, E. W. (2007). That varieties of forgiveness experience: Working toward a comprehensive definition of forgiveness. *Journal of Religion and Health*, *46*, 233-248.

Long, E. C. J. (1990). Measuring dyadic perspective-taking: Two scales for assessing perspective-taking in marriage and similar dyads. *Educational and Psychological Measurement, 50,* 91-103.

Macaskill, A., Maltby, J., & Day, L. (2002). Forgiveness of self and others and emotional empathy. *The Journal of Social Psychology, 142,* 663–665.

Mauger, P. A., Perry, J. E., Freeman, T., Grove, D. C., McBride, A. G., & McKinney, K.E. (1992). The measurement of forgiveness: Preliminary research. *Journal of Psychology and Christianity, 11,* 170–180.

Mehrabian, A. (1996). *Manual for the Balanced Emotional Empathy Scale (BEES).* Monterey, CA: Author.

McCullough, M. E. (2000). Forgiveness as human strength: Theory, measurement, and links to well-being. *Journal of Social and Clinical Psychology*, *19*, 43-55.

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

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

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

Mehrabian, A., & Epstein, N. (1972). A measure of emotional empathy. *Journal of Personality, 40,* 525–543.

Moeschberger, S. L., Dixons, D. N., Niens, U., & Cairns, E. (2005). Forgiveness in Northern Ireland: A model for peace in the midst of the "Troubles." *Peace and Conflict: Journal of Peace Psychology*, *11*, 199-214.

Ristovski, A., & Wertheim, E. H. (2005). Investigation of compensation sources, trait empathy, satisfaction with outcome, and forgiveness in the criminal context. *Australian Psychologist*, *40*, 63-69.

Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*, *57*, 1069–1081.

Schieman, S., & Van Gundy, K. (2000). The personal and social links between age and self-reported empathy. *Social Psychology Quarterly, 63,* 152–174.

Subkoviak, M. J., Enright, R. D., Wu, C., Gassin, E. A., Freedman, S., Olson, L. M., & Sarinopoulis, I. (1995). Measuring interpersonal forgiveness in late adolescence and middle adulthood. *Journal of Adolescence*, *18*, 641-655.

Tam, T., Hewstone, M., Kenworthy, J. B., Cairns, E., Marinetti, C., Geddes, L., & Parkinson, B. (2008). Postconflict reconciliation: Intergroup forgiveness and implicit biases in Northern Ireland. *Journal of Social Issues*, *64*, 303-320.

Toussaint, L., and Webb, J. R. (2005). Gender differences in the relationship between empathy and forgiveness. *The Journal of Social Psychology*, *145*, 673-685.

APPENDIX: IRB APPROVAL

University and Medical Center Institutional Review Board
East Carolina University • Brody School of Medicine
600 Moye Boulevard • Old Health Sciences Library, Room 1L-09 • Greenville, NC 27834
Office **252-744-2914** • Fax **252-744-2284** • www.ecu.edu/irb
Chair and Director of Biomedical IRB: L. Wiley Nifong, MD
Chair and Director of Behavioral and Social Science IRB: Susan L. McCammon, PhD

TO: Stephen Kmiec, Dept. of Psychology, ECU, 104 Rawl Bldg.

FROM   UMCIRB

DATE: April 7, 2009

RE: Human Research Activities Determined to Meet Exempt Criteria

TITLE: "An Analysis of Relationships Among Gender, Empathy, and Forgiveness"

UMCIRB #09-0334

This research study has undergone IRB review on 4/1/09. It is the determination of the IRB Chairperson (or designee) that these activities meet the criteria set forth in the federal regulations for exemption from 45 CFR 46 Subpart A. Thes human research activities meet the criteria for an exempt status because it is research involving the collection or study o existing data, documents, records, pathological specimens, or diagnostic specimens, if these sources are publicly available or if the information is recorded by the investigator in such a manner that subjects cannot be identified, directl or through identifiers linked to the subjects. NOTE: 1) This information must be existing on the date this IRB application is submitted. 2) The data collection tool may not have an identifier or code that links data to the source of the information. The Chairperson (or designee) deemed this **unfunded** study **no more than minimal risk.** This research study does not require any additional interaction with the UMCIRB unless there are proposed changes to this study. Any changes must be submitted to the UMCIRB for review prior to implementation to allow determination that proposed changes do not impact the activities eligibility for exempt status. Should it found that a proposed change does require more substantive review, you will be notified in writing within five business days.

The following items were reviewed in determination exempt certification:
• Internal Processing Form – Exempt Application (dated 3/25/09)

It was furthermore determined that the reviewer does not have a potential for conflict of interest on this study.

The UMCIRB applies 45 CFR 46, Subparts A-D, to all research reviewed by the UMCIRB regardless of the funding source. 21 CFR 50 and 21 CFR 56 are applied to all research studies that fall under the purview of Food and Drug Administration regulations. The UMCIRB follows applicable International Conference on Harmonisation Good Clinical Practice guidelines.

IRB00000705 East Carolina U IRB #1 (Biomedical) IORG0000418
IRB00003781 East Carolina U IRB #2 (Behavioral/SS) IORG0000418
IRB00004973 East Carolina U IRB #4 (Behavioral/SS Summer) IORG0000418
Version 3-5-07

UMCIRB #09-033
Page 1 of