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THE RELATIONSHIP BETWEEN PERSONALITY AND FORGIVENESS OF SEXUAL INFIDELITY IN MARRIAGE

,

by

Karen Suggs Roper, B.A.

A Dissertation Presented in Partial Fulfillment of the Requirements for the Degree Doctor of Philosophy

COLLEGE OF EDUCATION LOUISIANA TECH UNIVERSITY

March 2012

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ABSTRACT

Discovery of sexual infidelity is often accompanied by a strong desire for infidelity relevant information (Peluso, 2007). This study explored how information and conceptualization of situational factors affects forgiveness in a spouse who discovers the extramarital sexual activity of his or her spouse. The current study focused on knowledge of details and how such knowledge affected rumination and motivations of revenge, avoidance, and benevolence. Popular literature currently promotes a process of healing that begins with a revelation of the details associated with the extramarital behaviors of the offending spouse. A unique objective of this study was consideration of the specific features of discovery of sexual infidelity on motivations of forgiveness.

It was hypothesized that increasing amounts of infidelity relevant information would be reflected by increasing levels of rumination and diminishing levels of forgiveness. The results of this study fail to support the contention that acquisition of infidelity relevant information has a statistically significant relationship to healing or forgiveness. Results indicate a statistically significant negative relationship between forgiveness and rumination. Motivations for revenge and avoidance were statistically, negatively associated with the single item forgiveness question on the questionnaire. Benevolence was statistically significant results were found for details and related effects on rumination or forgiveness. As expected, a statistically significant relationship between time since discovery and rumination was found. However, the current study fails to support a relationship between time and forgiveness.

Revenge motivations appeared to be important in this particular study. Forgiveness had a statistically significant negative correlation with revenge, rumination, and neuroticism. A statistically significant negative relationship was found between revenge and agreeableness. Rumination had a statistically significant negative relationship with benevolence and a statistically significant positive relationship with avoidance. Benevolence had a statistically significant negative relationship with agreeableness, but it was not significantly related with neuroticism. There was a lack of support obtained in this study for the contention that details lead to forgiveness. More carefully controlled clinical studies are needed to clarify whether there is any therapeutic value to disclosure of details about sexual infidelity.

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vi

TABLE OF CONTENTS

ABSTRACT iii
ACKNOWLEDGMENT vi
LIST OF TABLES xii
CHAPTER ONE INTRODUCTION
Statement of the Problem4
Justification of the Study6
Purpose of the Study9
Sexual Infidelity and Forgiveness10
Forgiveness Definitions17
Measurement of Forgiveness19
Benefits of Forgiveness
Predictors of Forgiveness
Apology22
Personality23
Contextual predictors of forgiveness25
Cognitions and forgiveness
Responsibility and intent29
Rumination and Forgiveness

Infidelity Relevant Details	32
Summary of Predictors	32
Infidelity Relevant Information and Forgiveness	34
Three Cognitive Approaches to Relationship Transgressions	35
Discovery of Infidelity Relevant Details	36
Summary	38
Hypotheses	40
Introduction to hypothesis 1	40
Hypothesis 1	41
Introduction to hypothesis 2	41
Hypothesis 2	42
Introduction to hypothesis 3	42
Hypothesis 3	43
Introduction to hypothesis 4	43
Hypothesis 4	45
Introduction to hypothesis 5	45
Hypothesis 5	46
Introduction to hypothesis 6	46
Hypothesis 6	46
Introduction to hypothesis 7	46
Hypothesis 7	47
Introduction to hypothesis 8	48
Hypothesis 8	48

Introduction to hypothesis 9	49
Hypothesis 9	50
CHAPTER TWO METHODS	51
Participants	51
Procedure	53
Instrumentation	53
Big Five Inventory	53
Transgression-Related Interpersonal Motivations Inventory-18	54
Rumination about an Interpersonal Offense Scale	55
International Personality Item Pool (IPIP) Forgiveness	55
Demographics	56
Discovery of Infidelity Relevant Details (DID) Questionnaire	56
CHAPTER THREE RESULTS	57
Assumptions and Data Preparation	57
Statistical Analysis	57
Descriptives	58
Hypotheses 1-6	59
Hypothesis 1	61
Hypothesis 2	61
Hypothesis 3	61
Hypothesis 4	62
Hypothesis 5	62
Hypothesis 6	62

ì

Hypotheses 7-9	63
Hypothesis 7	64
Hypothesis 8	64
Hypothesis 9	64
CHAPTER FOUR DISCUSSION	66
Findings and Implications	66
Hypothesis 1	66
Hypothesis 2	69
Hypothesis 3	71
Hypothesis 4	71
Hypothesis 5	71
Discovery of Details and Forgiveness	72
Hypothesis 6	73
Hypothesis 7	74
Hypothesis 8	75
Hypothesis 9	77
Summary	77
Limitations	79
Future Research	80
APPENDIX A JUSTIFICATION OF POTENTIAL REVELATIONS	83
APPENDIX B WEBSITES LISTING AN INVITATION TO PARTICIPATE	85
APPENDIX C HUMAN SUBJECTS INSTITUTIONAL REVIEW BOARD PROPOSAL	87
APPENDIX D INSTITUTIONAL REVIEW BOARD (IRB) APPROVAL	92

APPENDIX E AUTHOR PERMISSION TO USE THE TRANSGRESSION-	
RELATED INTERPERSONAL MOTIVATIONS INVENTORY	94
APPENDIX F AUTHOR PERMISSION TO USE THE RUMINATION ABOUT	
	00
INTERPERSONAL OFFENSE SCALE	90
APPENDIX G DISCOVERY OF INFIDELITY RELEVANT DETAILS	
QUESTIONNAIRE	98
REFERENCES	102

LIST OF TABLES

Table 1	Contextual Details of Potential Infidelity Relevant Information	36
Table 2	Time since Discovery of Sexual Infidelity	52
Table 3	Descriptive Statistics of Variables	59
Table 4	Correlations for Personality, Forgiveness, and Rumination	60
Table 5	Correlations with Total Number of Details	63
Table 6	Descriptive Statistics for Infidelity Relevant Details	64

CHAPTER ONE

INTRODUCTION

This study considered cognitive processes of the offended spouse and situational factors of discovery of sexual infidelity in a marriage. Existing research on environmental and contextual factors in forgiveness supports the idea that cognitions associated with discovery and rumination of infidelity have mediating effects on forgiveness (Wohl & Pritchard, 2008). Research on forgiveness has not expanded to include the effects of specific transgressions and situational factors occurring within a specific type of interpersonal relationship (McCullough, Bono, & Root, 2007). The highly emotive environment common to discovery of infidelity is likely to exert tremendous power on cognitive processes like memory consolidation and rumination. Ruminative processes may be related to the amount of infidelity relevant information provided to the offended spouse during discovery.

This study was based on the hypothesis that contextual information like motivational details, logistical details, and sexual details specific to acts of sexual infidelity would evoke a differential response in cognitions and forgiveness. It is important to understand how detailed contextual information regarding a hurtful transgression might impact the offended spouse's ability to recover from the effects of the transgression over time. Personality factors may drive individual responses to newly

1

acquired information at the time of the transgression or even years into the healing process (Kleine, 2007). It was anticipated that an accounting of contextual information often associated with discussion of sexual infidelity would promote further understanding of rumination and the forgiveness process.

This study explored the impact of contextual features of the transgression and discovery on rumination. Rumination is thought to act as a deterrent to forgiveness and may warrant its use as an effective starting point for research on memory consolidation and forgiveness. Rumination is believed to be associated with reductions in forgiveness. This proposition has been supported through the results of repeated measures within subject studies on rumination. In a series of experiments, McCullough et al. (2007) found that increased rumination precedes reductions in forgiveness. Controlling ruminative processes may increase chances of forgiveness for the offended spouse.

Rumination is believed to be a factor in the consolidation of experiences that occur during a 3-month period following the discovery of a relational transgression (McCullough, Luna, Berry, Tabak, & Bono, 2010). A perceived, sincere apology that occurs within a 3-month period following discovery may impact the process of rumination. Although receipt of a sincere apology has been correlated with forgiveness (Ohbuchi, Kameda, & Agarie, 1989), timing of the apology remains in question (Frantz & Benningson, 2005). It is possible that an apology that occurs within a critical time period will become consolidated with information related to discovery. The consolidation of apology with the more hurtful information of discovery may work to soften the resulting rumination and motivations for revenge and avoidance. The consolidated positive reactions of apology may then moderate resulting rumination and forgiveness. Knowledge obtained during the three month period following discovery may be correlated to memory consolidation of the disturbing features of discovery and would then serve as a catalyst to mediate or moderate forgiveness. In other words, it may be timing of the apology rather than the apology itself that relates to the likelihood of forgiveness of the transgression.

A disturbing trend in popular self-help literature is the apparent promotion of an in-depth exchange of infidelity-relevant information between the offending spouse and the offender. This in-depth exchange of information is largely determined by the individual demands of the offended spouse (Glass, 2003; Spring, 1996). To date, revelation of details lacks empirical support as a therapeutic technique (Olson, Russell, Higgens-Kessler, & Miller, 2002). If rumination is instrumental in the process of forgiveness, then it would be important to know the impact that memory consolidation and a large amount of transgression-relevant information may have on the cognitive processes that drive rumination and the forgiveness process (Katovsich, 2008).

Forgiveness offers many offended spouses an enhanced quality of life often associated with a positive sense of psychological well-being (Orcutt, 2006; Toussaint & Webb, 2005) and enhanced physical health (Berry & Worthington, 2001; Harris & Thoresen, 2005; Lawler et al., 2003; Witvliet, Ludwig, & Vander Laan, 2001). The research on forgiveness has distinguished some specific correlates of forgiveness and provided insight into some of the psychological processes that might be involved in forgiveness (McCullough, Worthington, & Rachal, 1997; McCullough et al., 1998).

Forgiveness is a complicated process. Despite its status as a topic of general interest, research has failed to generate a corresponding level of empirical work

addressing the cognitive changes associated with forgiveness (Barber, Maltby, & Macaskill, 2005; Fehr, Gelfand, & Nag, 2010). The main body of research on forgiveness evaluates the thoughts, feelings, and emotions of the offended person. Paleari, Regalia, and Fincham (2005) called for future research aimed at disentangling the effects of traitlike disposition from forgiveness effects of specific features of the offense. Metts (1994) addressed this problem in her conceptualization of three cognitive approach styles to potential relational transgressions. The current study explored the potential effects of specific types of details about relational transgressions on cognitive changes seen in forgiveness and rumination.

Statement of the Problem

An analysis of 175 studies encompassing 26,006 participants provided integration of the correlates of forgiveness. That integration resulted in a three part typology of forgiveness (Fehr et al., 2010). This typology recognizes the importance of victims' cognitions, affect, and the interpersonal constraints to forgiveness following the offense. Results highlighted the multifaceted nature of forgiveness with special emphasis on intent, empathy, apology, and anger. Consistent with existing theory, situational constructs are shown to account for greater variance in forgiveness than victim dispositions. Olson et al. indicate that as of 2002 total revelation of details lacked empirical support as a therapeutic technique. A review of the literature since that time has not revealed any other empirical support.

McCullough et al. (2007) have established a foundation for investigation of rumination as a deterrent to forgiveness. Rumination as cognition can provide an effective starting point for future research on memory consolidation and forgiveness. Little is known about cognitive processes related to post-discovery interactions and forgiveness (Barber et al., 2005; Fehr et al., 2010; McCullough et al., 2010). Post-discovery interactions may impact long-term forgiveness through an intense drive and acquisition of emotive knowledge following discovery and the resulting rumination about this newly acquired knowledge.

Popular literature on infidelity currently promotes a process of healing that begins with an accounting of the extramarital behaviors of the offending spouse. This accounting is generally driven by the questions of the offended spouse. The specific types of information are guided by the demands of the offended spouse. This approach would require that the offending spouse provides the offended spouse an honest accounting of transgression-relevant information regarding the extramarital involvement of infidelity. Literature currently suggests that the information exchange be driven by the individual demands of the offended spouse (Glass, 2003; Spring, 1996).

To date, total revelation of details lacks empirical support as a therapeutic technique (Olson et al., 2002). Exploration of details and resulting rumination may provide understanding of cognitive processes associated with forgiveness. It is important to explore the impact that an expansive revelation of information related to a severe transgression, sexual infidelity, may have on the cognitive processes that drive rumination and forgiveness (Katovsich, 2008).

As suggested in previous research, the current study explored forgiveness within a specific relational context (Fincham, 2000; McCullough, 2000). The effects of forgiveness across relational contexts are believed to differ considerably. Forgiving a friend for a minor transgression is likely a much different process than forgiving an

abusive partner (Katz, Street, & Arias, 1997). In addition, this study has focused on the context of specific information acquisition and its effects on cognitions like rumination and forgiveness following the discovery of sexual infidelity in a marriage (McCullough et al., 2010).

Justification of the Study

While some researchers explore and analyze factors that may be predictive of betrayal, few have focused on analyzing the process of change experienced in the immediate aftermath of discovery. The initial account revelation has a long-term impact on recovery from the discovery of infidelity (Kleine, 2007). Kleine's results reflect an important need to understand which post-discovery behaviors and experiences are related to rumination and possibly an inability to forgive.

The effects of infidelity in a marriage are felt by every member of the family, and the negative effects of such a transgression can last years beyond the initial discovery (Kleine, 2007). Platt, Nalbone, Casanova, & Wetchler (2008) explored the impact of parental infidelity on adult children of couples in conflict. These 150 adults reported significant childhood experiences of parental infidelity and marital conflict. Children who describe parents as being high in conflict had a more negative view of themselves and the world. Adult children who had childhood knowledge of a father's infidelity were more likely to engage in infidelity as opposed to children without knowledge of paternal infidelity. These effects reveal the significant impact that family discord related to infidelity can have on the self-image of the children in conflicted families and healthy interactions in significant relationships as adults. In a qualitative study completed by Klacsmann (2008), the majority of participants reported the use of mental health services in response to the discovery of a spouse's infidelity. Individual therapy was pursued by 85% of the sample, and 81% of the sample reported pursuing couples' therapy in response to this relational crisis. Only 1% of couples failed to pursue professional therapy in coping with a spouse's infidelity. Cano and O'Leary (2000) found that 54% of participants affected by infidelity pursued individual therapy while 22% sought therapy for the couple itself. These results suggest that discovery of extramarital sexual behavior of a spouse can be a difficult life circumstance that may require professional intervention for its resolution.

People experiencing this transitory though devastating event would likely benefit from empirical support for providing therapy in its aftermath (Bruce & Sanderson, 2005; Dupree, White, Olsen, & Lefleur, 2007). Because this act of betrayal has the power to destroy people, families, and vocational/professional pursuits, empirically supported knowledge is an ethical consideration. Clinical professionals serving this population would benefit from access to empirically grounded knowledge and insight that would increase the likelihood of individual healing and, where warranted, marital reconciliation (Dupree et al., 2007).

Currently, a limited amount of information is available to inform the development of an empirically validated treatment specific to the unique demands of infidelity. Popular literature has focused on the offending spouse and various types of infidelity scenarios (Glass, 2003; Spring, 1996); relatively little has been learned of the special circumstances and unique experiences of the offended spouse. The goal of this research is the eventual identification of factors related to discovery that make forgiveness more likely for the offended spouse.

This study addressed these issues in two important ways. This project replicated important information about the offended spouse's personality and responses to processes of forgiveness. It included replication of results for rumination and processes of forgiveness following the discovery of sexual infidelity. Second, this study explored cognitive factors believed to have had an effect on an offended spouse's ability to forgive. Transgression relevant details were collected in an attempt to quantify cognitions specific to sexual infidelity. Additionally, these transgression specific details were grouped and organized by contextual commonalities found among predictors of forgiveness throughout the forgiveness literature (see Appendix A). Contextual factors of transgression discovery and the impact of infidelity relevant information served as indicators for transgression specific cognitions.

It has been proposed that an accounting of information relevant to spousal extramarital activity is important to offended spouse healing following the discovery of infidelity (Glass, 2003). Stories published online and discussed among self-help groups related to infidelity warrant further investigation into the process of total revelation of infidelity relevant details and post-discovery behaviors. Because popular literature is actively promoting a course of action that appears to have no empirical support, it was an important aspect of this project. While this proposed accounting of truthful behavior may well serve the marriage or offended spouse, it may best be pursued within the stability of a clinician's office. Without the benefit of a neutral, well-informed professional to guide the couple and manage the fallout of the potentially disturbing results, the process could result in additional harm. It could be judged irresponsible to suggest a potentially harmful course of action without the benefit of empirical information for ethical consideration of the proposed action.

Purpose of the Study

The current study considered the experiences of forgiveness and rumination following the discovery of infidelity in marriage. Because the health and psychological benefits of forgiveness are well documented, forgiveness provided a benchmark for determination of the offended spouse's path from discovery to personal healing. The current project considered the initial period of discovery of the transgression of sexual infidelity. The amount of information known about a spouse's extramarital sexual activity was considered with regards to its effect on processes of forgiveness (e.g., avoidance, revenge, and benevolence). In addition, the current study explored cognitive factors that may have had a powerful effect not only on an offended spouse's ability to forgive, but on also rumination.

Forgiveness does not necessarily lead to a reconciliation of a hurtful or abusive relationship. In many situations, it is advisable that a relationship not be repaired if it has the potential for damage or a history of abuse. A goal of the current study was to provide researchers and clinicians a common thread of experience that might promote forgiveness and weaken the damaging tendencies of rumination. Common elements of information discovery and contextual factors were identified and organized in order to provide an avenue for exploration of the cognitions of forgiveness.

A large amount of infidelity relevant information provided to an offended spouse experiencing emotional dysregulation due to discovery of the extramarital sexual activity may provide a consolidation of experience impossible to overcome. If information learned early in discovery is expansive, the offended spouse may be in danger of experiencing unrelenting, internal images of infidelity behaviors (real or imagined). Empirical evidence of the effects of a large acquisition of transgression details early in discovery may guide therapists for clinical intervention of the offended spouse. Information that first provides clarification for the type of detail acquired may support the offended spouse's development of personal identity that includes the relational transgression. The developing identity would include the acceptance of the reality of a severe relationship transgression and the potentially damaging aftermath. The new identity might allow the offended spouse the ability to cope more effectively during the acute emotional dysregulation that usually occurs during discovery (Olmstead, Blick, & Mills, 2009).

Sexual Infidelity and Forgiveness

Often, the knowledge of sexual infidelity is followed by the dissolution of the marriage (Afifi, Falato, & Weiner, 2001). Discovering that one's spouse has been sexually unfaithful is associated with a 6-fold increase in the likelihood of a major depressive episode (Cano & O'Leary, 2000; Christian-Herman, O'Leary, & Avery-Leaf, 2001; Gorman & Blow, 2008). Along with the escalation in depression and divorce comes the danger of acute and/or protracted anger and sadness (Amato & Rogers, 1997; Daly & Wilson, 1998; Vaughn, 2003). Forgiveness therapy has been associated with reductions in depression in women (Reed & Enright, 2006).

McCullough, Pargament, and Thoresen (2000) discuss the motivations of prosocial change toward a perceived transgressor during the process of forgiveness. A victim who forgives his or her offender becomes increasingly motivated toward pro-social thoughts and actions toward the perceived transgressor. Pro-social behaviors can take the form of task cooperation, reconciling the damaged relationship, or sometimes just resisting the urge to avoid the transgressor. Post-divorce parenting may benefit from prosocial motivations toward the transgressor following divorce. The current project focused on forgiveness of spouses who engaged in sexual infidelity.

Infidelity has been defined and conceptualized in different ways. Patterns of infidelity might suggest an offending partner who frequently engages in extramarital sexual activity with many different partners, or it may be a single, long-running relationship set up as an alternate partner other than the spouse. Evolutionary psychology generally views infidelity as either a sexual infidelity, an emotional infidelity, or a combined infidelity (Shackelford, Buss, & Bennett, 2002). In order to explore elements of forgiveness specific to infidelity, the concept must be specifically operationalized.

For the purpose of the current study, self-identified offended spouses (betrayed spouses) endorsed survey items that reflected the belief and perception that their spouses had engaged in extramarital sexual activity. Due to the topic of study, it was assumed that the offended spouse would not know the actual facts of the extramarital activity. What was important for this project was the perception of a spouse's sexual infidelity by the offended spouse and the cognitions and reactions that follow. Therefore, it was unnecessary to be more specific in the definition of sexual infidelity or the concern that the data may be capturing the effects of some undisclosed behavior. What was explored was the perception or belief of the offended spouse and how the offended spouse beliefs may have impacted the process of forgiving.

Afifi et al. (2001) found a significant effect for method of discovery and forgiveness of infidelity. Approximately 44% of relationships ended with the unsolicited revelation of infidelity revealed by the offending spouse. When a spouse's extramarital activity was revealed through unsolicited communication with a stranger, relationship dissolution was high. The smallest impact appears to have been the group whose spouses confirmed a solicited request for information. In other words, the lowest level of relationship dissolution was for the spouse who asked for confirmation of extramarital activity and the offending spouse revealed his or her extramarital sexual activity. The results suggest that discovery method and the exchange of information that follows may have an important impact on the process of forgiveness, and it may be a worthwhile consideration in continuing research on forgiveness.

Discovery of infidelity often creates an environment wherein meeting obligations or attending to basic family demands becomes difficult and sometimes impossible (Amato & Rogers, 1997). While some offended spouses continue productivity at work and in the home, other offended spouses appear to be heavily affected by the discovery. Research has not addressed the ways in which discovery of sexual infidelity may carry such disruptive power in daily functioning (Olmstead et al., 2009). The pressure of impending desertion or relationship dissolution may place an offended spouse of sexual infidelity in danger of escalating domestic violence (Daly & Wilson, 1998; Peters, Shackelford & Buss, 2002).

Extramarital affairs are believed to be among the most damaging relationship events a family can face (Whisman, Dixon, & Johnson, 1997). Betzig (1989) cited infidelity as the single most common cause of marital dissolution in 160 societies reviewed. In the United States alone, only 17% of divorces do not cite infidelity as an element of the divorce. Since 1997, a steady, small stream of research addressing infidelity seems focused on predicting infidelity and its effects on the marriage once infidelity has occurred (Amato & Rogers, 1997). It has been suggested that successful recovery from the revelation of infidelity is dependent upon a full accounting of infidelity-related details as requested by the offended spouse (Glass, 2003; Spring, 1996). While this approach may have widespread intuitive appeal, it lacks empirical credibility both in consideration of its outcomes and in the potential for future harm.

The literature identifies three basic forms of infidelity. Infidelity involving physical behaviors associated with sex is referred to simply as sexual infidelity. Emotional infidelity suggests the betrayal of the psychological relationship inherent to marriage. Finally, a combination of the two suggests that the extramarital sexual activity occurs within a relationship that appears to operate as a parallel marriage or form of polyamory. As Hall and Fincham (2006) noted, sexual infidelity is likely to result in angry, vengeful humiliation of the offended spouse. Domestic violence may grow from the fear, frustration, and anger in the offended spouse following discovery of sexual infidelity. Emotional infidelity is more likely to evoke feelings of insecurity, depression, abandonment, and undesirability (Hall & Fincham, 2006). Generally, the combination of both sexual and emotional infidelity creates such a negative environment and personally demeaning experience that the relationship is unable to survive (Hall & Fincham, 2006). Adding to the problems of infidelity is the resulting familial effects of divorce.

Generally, avoidance of the negative effects of divorce would be beneficial for all family members (Duncombe, Harrison, Allan, & Marsden, 2004; McNulty, 2008).

Effects on the children of families disrupted by infidelity and divorce have been found to last as long as 10 years (Wallerstein, 1988). Children living in high conflict homes were found to be more negative about self and others than children who described their homes as low conflict (Platt et al., 2008). Anger and grief associated with the discovery of sexual infidelity may become intractable. A special concern for people impacted by the sexual infidelity of a spouse is the failure of some individuals to heal psychologically with anger increasing across time. Wallerstein (1988) warns against intractable grief that lingers throughout the years, but with the paradoxical response of acting as if the trauma had only recently occurred.

Forgiveness factors such a personality, apology, rumination, and saving face (Metts, 1994) are well studied in forgiveness literature. Situational/contextual factors regarding consequences (Duncombe et al., 2004; Scott, Booth, King, & Johnson, 2007) and method of discovery (Gunderson & Ferrari, 2008) have increased knowledge on forgiveness. Unfortunately, research design problems and operational definitions have made it difficult to accumulate information on personal healing following the sexual infidelity of a spouse (Blow & Hartnett, 2005; Harris, 2003).

Little work has addressed the offended spouse of infidelity and the effects most important to recovery. Shackelford et al. (2002) presented an evolutionary perspective in asserting that sexual involvement of a spouse is most threatening to men because it raises issues of paternity. Emotional involvement of a spouse is posited as a greater threat to women because it puts them in increased danger of losing support or companionship while small children may remain in her care. The current study is among the first to consider the impact of transgression relevant information on the process of forgiveness. Women are often dependent upon a mate for valuable resources of survival. Shackelford et al. (2002) used a hypothetical method of participant response that objectified the different nuances between emotional infidelity and sexual infidelity. Respondents used a forced choice option to indicate which of the hypothetical situations would be most upsetting, most difficult to forgive, and most likely to lead to the break-up of the relationship. Results indicated that men experience difficulty in forgiving when a spouse is involved sexually with another; women are equally disturbed by emotional infidelity or sexual infidelity. An understanding of the effects of discovery on health and the resulting forgiveness or unforgiveness is an area in need of further research (Klacsmann, 2008; Dupree et al., 2007; Kleine, 2007).

In an effort to promote healing and recovery from this situation, contemporary self-help literature promotes a process of total revelation of infidelity-relevant information by the transgressor. Glass (2003) concluded that recovery from the discovery of infidelity is dependent upon the quantity of information known by the offended spouse about the transgression of infidelity. She proposed that the exchange of information was important to the re-establishment of the primacy of the marriage. Peluso (2007) acknowledged a phenomenon of intense pursuit of infidelity relevant information following discovery of the hurtful transgression. Peluso (2007) explained that "... a great many details is brought up, often repeatedly" (p. 299). It is unclear what this large quantity of potentially hurtful information, combined with the reportedly repetitive nature of the disclosures, will ultimately have on the mental health of the offended spouse or the ability to forgive over time. It would seem this type of process might set up a potentially damaging scenario that would re-victimize the offended spouse. Rather than providing

recovery and promoting future health, the pursuit of infidelity relevant information may ultimately result in a prolonged, intractable exposure to the damaging effects on selfesteem and personal identity sometimes experienced upon the discovery of sexual infidelity.

Intuitively, unanswered questions would seem to lead to speculation that may feed rumination. In an effort to fill in the blanks themselves, the offended spouse may recall the same, inaccurate facts multiple times; possibly working to discover some memory that would provide the answers for which they are searching. It is posited in popular literature that a process of complete and truthful revelation of information may promote recovery. Through an honest, transparent recounting of the accurate facts relevant to the infidelity, regardless of the result, an offended spouse is thought to have closure or resolution on what may be a particularly disruptive period in his or her life (Glass, 2003).

The position that total revelation of details is an important factor in overcoming the effects of discovery of the extramarital sexual involvement of a spouse lacks empirical support. Popular literature appears to promote the contention that full disclosure of all details is associated with forgiveness and personal healing following infidelity. The course of action appears to be based upon the best practices judgment of the authors (Dupree et al., 2007). It may be an ethical consideration to pursue research on this suggested practice of total revelation of information (Olmstead et al., 2009). Olmstead et al. caution clinicians about ignoring ethical responsibilities when helping clients work through difficult situations.

Forgiveness Definitions

Early definitions for forgiveness appeared to disregard the common, practical understanding of forgiveness. Early research (Tedeschi, Hiester, & Gahagan, 1969) operationalized forgiveness as a set of cooperative and competitive responses between the offending person and the offended person in an interpersonal transgression. Subkoviak, Enright, Wu, and Gassin (1995) focused on forgiveness as a process of overcoming negative affect and judgment toward the offender, without denying the victim's right to such affect and judgment. Forgiveness provides the opportunity to view the offender with compassion, benevolence, and love.

Later, McCullough et al. (1997) conceptualized forgiveness as an intrapersonal process where "a set of motivational changes whereby one becomes decreasingly motivated to retaliate against an offending relationship partner, decreasingly motivated to maintain estrangement from the offender; and increasingly motivated by conciliation and goodwill for the offender . . ." (p. 321). The researchers conceptualized forgiveness as an interactive suite of motivations toward revenge, avoidance, and goodwill toward the transgressor. They contend that forgiveness occurs when the offended party is guided more by a desire for goodwill and less by a need to react on personal feelings of indignation and anger. There is a consensus among theorists that when people forgive psychological representations of a transgressor (e.g., thoughts, feelings, motivations, or behavioral inclinations) become more positive and/or less negative (Wade & Worthington, 2005).

Karremans, Van Lange, Ouwerkerk, & Kluwer (2003) assert that as people experience pro-social change toward a transgressor, psychological representations of the offending person are restored to a pre-transgression state. However, McCullough and others (2010) maintain that a person's pro-social orientation toward an offender may improve, but it will never return to pre-transgression levels of benevolence.

McCullough et al. (2000) posit that forgiveness is marked by an intra-individual pro-social change in one's motivations or emotions toward a transgressor. As an offended partner begins to experience decreased motivations for retaliation against the offender, motivation for estrangement from the offender decreases (Wade & Worthington, 2005). The offended spouse may actually become more motivated to conciliation and experience goodwill for the offender. Some of those who have been offended become more forgiving toward an offender despite the offender's hurtful actions.

In 2006, McCullough, Root, and Cohen concluded that pro-social motivation is a foundational and incontrovertible feature of forgiveness. It is important to note that forgiveness and relationship reconciliation are not interdependent. Reconciliation implies the restoration of a damaged relationship. Forgiveness is possible without the restoration of the relationship. Conversely, it would be possible to have reconciliation without the benefit of forgiveness. The focus is on the internal process and changes that occur within the offended spouse for the benefit of the offended spouse.

Forgiveness is a process of overcoming negative thoughts and feelings against a transgressor as positive feelings become more active (McCullough & Hoyt, 2002). While benevolent behaviors toward the transgressor may not increase, its downward trajectory will slow. As forgiveness grows, the downward progression of waning feelings of benevolence will stall. As motivations for benevolence appear to normalize, motivations for revenge are weakened or possibly extinguished (McCullough et al., 2010). Earlier

definitions conceptualized forgiveness as the internal focus of the offended person on pro-social motivations for a transgressor. Wade and Worthington (2005) conceptualize and support this definition from a different perspective by positing that sometimes unforgiveness and forgiveness are each distinctly different things. Lack of forgiveness encompasses the need for revenge and avoidance motivations as assessed by the 18-item Transgression Related Interpersonal Motivations (TRIM-18).

Measurement of Forgiveness

As research in forgiveness has grown, its measurement has moved ever closer to the distinction between motivations of forgiveness (e.g., benevolence) and motivations of unforgiveness (e.g., revenge) (Fincham, 2000). McCullough et al. (2006) added the 6item benevolence subscale to the TRIM-18. It is an account of the pro-social changes that typically accompany forgiveness. The TRIM-18 is a measure of motivations for benevolence, avoidance, and revenge. Contemporary literature in forgiveness recognizes this triad of distinction across a spectrum of motivations ranging from specific offense forgiveness to specific offense unforgiveness. Positive feelings of forgiveness were uniquely predicted by dispositional forgivingness and by the participants' deliberate attempt to forgive the offense.

Wade and Worthington (2005) found the benevolence factor to be a good measure of forgiveness. Benevolence is associated with actions and thoughts associated with an offended person's desire to reconstruct the relationship (McCullough, Bellah, Kilpatrick, & Johnson, 2001). Benevolent motivations may take the form of actions designed to build a more positive relationship with the transgressor or actions of goodwill toward the transgressor (McCullough, Fincham, & Tsang, 2003). Vengefulness and avoidance characterize the state of unforgiveness, and they can be reconciled and changed through purposeful action (Wade & Worthington, 2005). McCullough et al. (2010) defined vengeance as, "an attempt to redress an interpersonal offense by voluntarily committing an aggressive action against the perceived offender" (p. 602). They propose that vengeance is a disposition that directs people toward actions of revenge. Often, acts of vengeance are experienced as satisfying to the offended person (Crombag, Rassin, & Horselenberg, 2003). Avoidance motivations are described as a transgressor's desire "... to maintain relational distance from their transgressor" (p. 603).

The tripartite model of the forgiveness mechanism as discussed by McCullough et al. (1997) describes forgiveness as a complicated process of pro-social, motivational changes. These pro-social motivational changes provide a scenario in which one becomes less motivated to seek revenge on the transgressor, less motivated to avoid and maintain emotional or physical distance from the transgressor, but also increasingly more motivated to experience goodwill and benevolence toward the transgressor (McCullough, et al., 2007).

In 2010, McCullough et al. furthered this definition through the development and analysis of a mathematical conceptualization of the forgiveness process. They used the decay property of memory to envision forgiveness as a process that begins almost immediately upon discovery of the transgression. The initial robust response of forgiveness weakens with the passage of time. The forgiveness process begins as the knowledge of the transgression is made available to the offended spouse. In the days following the discovery, forgiveness changes will have begun.

McCullough et al.'s (2010) conceptualization of the form and function of memory and its impact on how an offended person may experience forgiveness support the proposition that as revenge and avoidance motivations seem to decrease, benevolent motivations toward the transgressor are leveling from the downward trajectory and may even begin to increase. For example, rather than ruminating on potential acts of revenge, the offended spouse may be content to simply disregard the transgressor. Should benevolence continue, however, it is important to recognize that benevolent motivations might never return to pre-transgression levels of goodwill. The offended spouse will never experience as positive an orientation toward the offender as he or she did before the discovery was made. The forgiveness function was shown effective in predicting forgiveness across time specific to each process of forgiveness. It appears that time is an important consideration in the overall process of forgiveness. Across time, revenge and avoidance motivations decrease while benevolence increases. McCullough et al.'s (2010) research suggests that the first three months following the discovery of an interpersonal transgression are important in the total path of forgiveness and healing.

Benefits of Forgiveness

As human beings, we depend on each other for survival. Malcom and Greenberg (2000) discuss the impact of forgiveness processes on personal change. The overview of existing literature seems to suggest that changes in self-validation, self-assertion, and clear understanding of one's own motivations more clearly are precursors to empathy and forgiveness of the transgressor. Indeed, discussion on the contributions of a Gestalt point of view of interpersonal hurt and forgiveness seems to suggest that through the process of forgiveness, even unrelated hurts may be resolved. Forgiveness enables relationships to

survive and social structures to remain strong and intact (Maio, Thomas, Fincham, & Carnelley, 2008; Metts & Cupach, 2007). Health benefits of forgiveness have generally been determined through the study of cardiovascular effects of hostility (Miller, Smith, Turner, Guijarro, & Hallet, 1996). Forgiveness enables relationships to survive and social structures to remain strong and intact (Maio et al., 2008; Metts & Cupach, 2007). Health benefits of forgiveness have generally been determined through the study of cardiovascular effects of hostility (Miller et al., 1996). Kaplan (1992) posited that forgiveness has cardiovascular health benefits by reducing sustained anger and hostility. Interestingly, developing a forgiveness outlook (cognitive processing) was the key to the reduction of hostility.

Predictors of Forgiveness

Fehr et al. (2010) provided an integration of the research addressing correlates of forgiveness. The results of analysis highlighted the important effects of intentionality of the transgression, empathetic responses to the transgressor, and angry cognitions about the offense on the likelihood of forgiveness.

Apology. An apology is a repair tactic used by the offender following the commission or discovery of a relational transgression (Fehr et al., 2010). Apologies may be offered as a reflection of guilt, or they may be offered as a tool to achieve a socially desirable goal. Goffman (as cited in Frantz & Benningson, 2005) asserts that apologies are intended to distance the offender from the pain of the transgression. Struthers, Eaton, Santelli, Uchiyama, and Shirvani (2008) found that an apology fails to promote forgiveness when the offender intended to cause harm with the transgression. If the offender judges the potential circumstances as being likely hurtful but they make the

decision to follow through with the hurtful behavior, the offended spouse judges the offender as causing harm with intention. It appears that apologies must be considered within the context of the specific transgression.

It is hypothesized that apologies may promote empathy for a transgressor in an offended person. Empathy is an important correlate of forgiveness (Gunderson & Ferrari, 2008; Macaskill, Maltby, & Day, 2002) and, therefore, apology is almost a prerequisite to forgiveness in most interpersonal transgressions. An apology may serve to modify the offended person's opinion or judgments on the transgressor or possibly on the transgression. Through the transgressor's acts of kindness, the offended person could begin to view the offender with waning levels of revenge or avoidance, but increasing levels of benevolence. The offender is then viewed as a person more deserving of forgiveness and acceptance (Eaton & Struthers, 2006, Struthers et al., 2008).

Personality. The personality characteristics of the betrayed spouse may well determine the path of personal healing through forgiveness (Olson et al., 2002). Malcolm and Greenberg (2000) presented a review of existing theory, research, and treatment models for forgiveness. They proposed that the process of forgiveness contributes to an individual's understanding of self and others, and that self-discovery is helpful in forgiving all hurtful transgressions – existing and new. Avoidance, vengefulness, and benevolence have all been associated with factors of personality as defined by the Five Factor Model of Personality (Fehr et al., 2010; McCullough et al., 2003).

The Five Factor Model of Personality (FFM) originally grew from Cattell's reduced list of 35 descriptors of human self-defining behavior, motivations, and experiences. Years of work have reduced the basic personality arguably to five distinct,

23

independent traits. Although the FFM is composed of neuroticism, extraversion, openness, conscientiousness, and agreeableness, not all are linked to processes of forgiveness. Forgiveness has been empirically linked with agreeableness, neuroticism, and sometimes extraversion. Neuroticism is characterized by a negative, unpleasant orientation to self and others. The facets of neuroticism as measured by the Big Five include anger, anxiety, depression, and vulnerability. These facets may be expressed in any number of ways, but the defining feature is that people high in neuroticism respond to stress or vulnerability with maladaptive reaction (John & Srivastara, 1999).

People high in neuroticism experience decreased self-worth, and restricted judgment. People who are high in neuroticism experience negative emotional states while responding poorly to stressors in the environment. They are generally pessimistic and tend to make decisions based on maladaptive motivations to revenge and avoidance. They respond poorly to challenges, and they may become more dysfunctional as pressure from anxiety becomes unmanageable. Motivation for revenge is an important feature of neuroticism. Vengefulness has been linked to levels of neuroticism (McCullough et al., 2001). In addition, increased levels of avoidance were significantly negatively correlated to neuroticism. Research has shown that increasing rates of neuroticism are positively correlated with rumination (Brose, Rye, Lutz-Zois, & Ross, 2005; McCullough et al., 2003).

Agreeableness is also related to forgiveness (Maltby et al. 2008) and is a good predictor of forgiveness and benevolence (Haslam, Whelan, & Bastian, 2009). People high in agreeableness have an orientation toward cooperation and social harmony. Agreeable people are generally considerate, generous, and helpful. They hold an optimistic view of the future. People high in agreeableness often respond to challenges with a sense of optimism and confidence (Jensen-Campbell & Graziano, 2001). Low levels of agreeableness have been associated with hostility and criminal behavior in adolescents (Gleason, Jensen-Campbell, & Richardson, 2004).

As Costa and McCrae (1992) worked with the adjective checklist for the NEO-PI, extraversion continued to emerge as a significant trait. The facets of extraversion include gregariousness, assertiveness, and a tendency toward expanded activity. People high in extraversion are generally warm and talkative. They usually enjoy highly social settings and appear to gain their energy from other people. They exhibit high energy and are quite enthusiastic about the activities in which they are involved. Conversely, those low in extraversion demonstrate a quiet, calm approach to life's tasks. This tendency to work alone is not shyness, but a trait in which one simply does not require much stimulation from others (John & Srivastara, 1999). In addition to the consideration of apology or personality as unique predictors of forgiveness, contextual factors of the transgression have been occasionally associated with forgiveness.

Contextual predictors of forgiveness. Wade and Worthington (2005) explored potential predictors of unforgiveness and forgiveness for a specific offense in 91 undergraduates. Contextual predictors indicated that quality of pre-transgression relationship, severity of the offense, and historical time of the offense were not related to unforgiving or forgiveness. Perception of the offender's contrition and the presence of an apology were associated with the levels of unforgiveness and forgiveness. Empathy for the offender predicted forgiveness. Participants who characterized their current state as forgiving of a specific offense reported limited desires to seek revenge or avoidance of

offenders. In other words, reduction in avoidance and revenge can exist *without* an increase in benevolence/forgiveness. However, forgiving appears to be naturally related to decreases in avoidance and revenge motivations.

Cognitions and forgiveness. Forgiveness researchers conceptualized cognitions and forgiveness through a process of sensemaking (Fehr et al., 2010). Through a sensemaking perspective, the offended person analyzes and weighs several important factors, resulting in an ultimate decision about potential value for any future interactions with the offending person (McCullough, Root, Tabak, & Witvliet, 2009). Situational factors regarding victims' perceptions of offenders' intent to harm or the level of responsibility the offender has for the offense are important correlates in cognition of forgiveness. Equally important correlates are the presence and quality of an apology, the perceived severity of the harm as viewed by the offender before the transgression occurred, and the offended person's rumination over the offense. Situational correlates answer the question "What happened?" This determination of events is discussed in Metts' (1994) conceptualization of the cognitive aspects of interpersonal transgressions.

Another marker of cognition that affects forgiveness is mood (Clore, Schwarz, & Conway, 1994). Moods provide internal signals about ongoing intrapersonal changes and an environment that is affected moment-to-moment (Schwarz & Clore, 1988). Mood may work to inform an offended spouse about the level of severity of a transgression, and moods may help to determine if the offending spouse can be viewed through empathetic eyes following the transgression. Worthington (2005) found that victims experiencing positive emotions toward an offender have an increased motivation to forgive. Conversely, negative mood related to the offending spouse might influence less

forgiveness for a severe transgression like sexual infidelity. Moods become attributed to external sources as described by the mood-as-input theory (Watson, Clark, & Tellegen, 1988).

As predicted by the mood-as-input theory, subjects' persistence on a rumination task was greatest in the group experiencing negative mood while deploying an "as many as can" stop rule (Clore et al., 1994). Other results suggest a mechanism by which mood may contribute to perseverative depressive rumination (Hawksley & Davey, 2010).

The mood-as-input model describes how judgments and task approach skills are influenced by our mood (Forgas, 1995; Schwarz & Clore, 1988). According to mood-asinput theory, feelings that occur at any given moment may affect our actions, judgments, and decision-making processes (Beer, Knight, & D'Esposito, 2006.) Worthington (2005) found that victims experiencing positive emotions toward an offender had an increased motivation to forgive. Conversely, negative mood related to the offending spouse might increase revenge and avoidance motivations while ignoring benevolent motivations as predicted by the mood-as-input model (Cote, 2005; Watson et al., 1988).

Persistence or accomplishment of a task may be attributed to external sources and mood when making individual judgments or group decisions (Cote, 2005; Hawksley & Davey, 2010). In a mood-as-input model, decision rules like a stop-task order (e.g., enough, enjoy) may determine the amount of persistence for the task in a person dependent upon a negative or positive mood. As described by the mood-as-input theory, effects from decision rules may be attributed to mood states rather than recognizing the interaction effects of mood and decision rules upon task persistence (Watson et al., 1988). Cote (2005) posited that a mood-as-input model would predict the influence of mood provided contextual decision rules for expending effort were assigned to the task. In the study, a total of 379 subjects read instructions for a performance appraisal task after watching an emotive movie. Systematic information processing was based on how participants distinguished between strong or weak performance by the president of the university. Subjects in the negative mood state processed information differently than subjects having a positive mood. Subjects in the negative mood state judged performance in a systematic manner rather than heuristically, as was the case with a positive mood state. The systematic, judging processing common to negative mood states may partially explain why many offended spouses find initial gains in forgiveness greatest in the first three months following discovery (McCullough et al., 2010).

Very small gains come as one moves temporally farther away with time from the moment of discovery (McCullough et al., 2010). If the offended spouse is operating on an "enough" stop task and has a negative mood, once he or she has attained a level of acceptance or forgiveness that is judged adequate or "enough," the offended spouse will stop evaluating the transgression or transgressor and simply accept that level of resolution. Conversely, transgression relevant information that may have been the focus of rumination may prevent a return to benevolent motivations toward the offender.

If the offended spouse is operating on a stop task of enough then, theoretically, he or she would continue generating possible reasons and ruminating on causes of the sadness relating to infidelity of the spouse. Although the offended spouse would have ceased acting on revenge and avoidance motivations, ruminations would keep the negative cognitions and emotions readily available through priming and interference of the decay function of memory.

Responsibility and intent. Attribution theory (Weiner, 1995) provides a broad, general lens through which to view and understand the situational correlates that might affect overall forgiveness. Attribution theory in forgiveness literature generally addresses responsibility and intent of the offending person. The offended person would gather information about the transgression and through an examination of evidence would attribute the degree of responsibility the offending person should take in the situation of the offender is really a decent person who would not willingly or knowingly cause harm. This judgment allows the offended spouse freedom to forgive the offending spouse of the pain that was incurred as a result of the transgression while continuing to hold the offender responsible for the actual commission of the transgression. Aquino, Tripp, and Bies (2006) describe the attribution of responsibility as *blame*. Blame provides an analysis for locus of control (Weiner, 1995).

Struthers and colleagues (2008) address intent as the goals of the offender. They found that the intent attributed to the transgressor may work against the apology offered in response. In other words, it informs the offended party of the basic motivation of the offender during the time of the transgression. Some extramarital sexual activity has been reported as a tactic for exiting an unwanted marriage. In the evaluation of intent or blame, infidelity used as an avenue of marital dissolution is qualitatively different than an act of situational irresponsibility. Responsibility and intent have been negatively correlated to forgiveness (Struthers et al., 2008).

Rumination and Forgiveness

Rumination is a passive and repetitive focus on the negative and damaging features of an interpersonal transaction or event (Skinner, Edge, Altman, & Sherwood, 2003). Rumination is believed to operate through a trigger to memory. It works as a priming mechanism that keeps the damaging elements of the interpersonal transgression alive and operative as if the transgression only just happened (McCullough et al., 2007). Through rumination, the memory decay commonly associated with many negative events, theoretically, does not erode with time. The ruminative ideas remain present in the offended person's mind (McCullough et al., 2007). Rumination is an automatic process that keeps the offended person suffering endlessly with little sense of control over the unwanted cognitive intrusions of the transgression (Wade, Vogel, Liao, & Goldman, 2008). Research has shown a harmful association between rumination and mental health with high rumination being damaging to an individual's health and relationships with others (Wade et al., 2008). Research has shown a negative correlation between rumination and forgiveness (Fehr et al., 2010).

Ruminating about an offense appears to be related to the amount of time taken to process forgiveness (McCullough et al., 2001). Also, rumination has been correlated to an increasing chance of treatment failure (Kachadourian, Fincham, & Davila, 2005). McCullough et al. (2001) found a significant, positive correlation between rumination and vengefulness. Furthermore, rumination plays a critical role in one's ability to forgive (McCullough et al., 2007). It is, however, unknown if rumination is correlated with the quality or quantity of knowledge obtained about a transgression. McCullough et al. (2010) suggested that rumination may be a good starting point for the conceptualization of how memory consolidation impacts the process of forgiveness. McCullough et al. (2007) contend that rumination is a deterrent to forgiveness.

Little is known about cognitive processes in forgiveness (Barber et al., 2005; Fehr et al., 2010; McCullough et al., 2010). Gunderson and Ferrari (2008) found that frequency of the transgression and existence of an apology are more predictive of forgiveness than the method of discovery. It is possible that projects reflecting a relationship between forgiveness and method of discovery have actually tapped into differences related to infidelity-relevant information that were obtained under different methods of discovery. It is logical to expect that a discovery occurring through the intentional revelations of an apologetic spouse would reveal more infidelity-relevant information than discovery that is marked by an unsolicited revelation through an uninvolved third party.

A review of forgiveness literature provided inconclusive information regarding the effects of apology on rumination or other cognitive processes related to forgiveness and the historical experience of sexual infidelity. As noted, apology is a well-documented predictor of forgiveness. Frantz & Benningson (2005) found that timing of an apology may be important in the resolution of a transgression. Undergraduates were asked to respond to a hypothetical scenario of an interpersonal transgression. In a second study, undergraduates recalled a time when they experienced a hurtful transgression. Postdiscovery interactions may impact long-term forgiveness through an intense drive and acquisition of emotive knowledge following discovery and the resulting rumination about this newly acquired knowledge. This highly emotive information must then be assimilated into the offended spouse's existing long-term memory.

Infidelity Relevant Details

Unlike many in the popular literature, Spring (1996) cautions against the complete revelation of details in specific situations, since the betrayed spouse may be in an emotionally precarious position due to past circumstances. She maintains that a complete revelation of details may prove more damaging to the offended spouse struggling with previously unresolved betrayal. Spring asserts that hopes for reconciliation would be less important than the specific needs of the offended in this situation. She advises that a mental health professional is the best person to determine the quality and quantity of transgression related information. Her contention is that clinical evaluation and management may prove a healthier path to recovery than satisfying an offended spouse's need to know. In addition, personal history and current mental health status should be considered before embarking upon an unsubstantiated technique that may have unanticipated results. Research addressing the effects of infidelity has made clear that this area of study will benefit from development of an empirical base that supports therapeutic technique of the clinician (Dupree et al., 2007; Klacsmann, 2007; Kleine, 2007; Olmstead et al., 2009).

Summary of Predictors

Because of the focus on a total revelation of transgression-related information as directed by the offended spouse, transgression details seem to have good potential as a construct for consideration in forgiveness research. Ethics would dictate that a therapist have a reasonable expectation of success for any intervention that might be suggested to clients (Dupree et al., 2007). Trauma victims appear to benefit from early processing of life-threatening events (Foa, Hembree, & Rothbaum, 2007). The special contextual and psychological factors involved in the discovery of sexual infidelity may result in revictimization rather than resolution when confronted with an inventory of detailed relational offenses. It is important to note that trauma victims benefit from a processing of information they already possess. Although each scenario involves the transfer of a large exchange of potentially harmful information, the processes are not the same. The contrast exists wherein a victim of trauma is recounting damaging information that he or she already possesses. With regards to infidelity, this process would result in the offended spouse receiving a great deal of new information that may or may not be helpful in resolution of the extramarital sexual activity. The result would be a scenario in which the victim is exposed to additional trauma of new information rather than the purging of hurtful information of which they are already aware.

A search of relevant literature failed to uncover support for the expectation that a massive revelation of psychologically damaging information would promote healing and resolution in an offended spouse. Revelations of infidelity often carry an immediate response of shock and obsession (Peluso, 2007). The reported need to know is described as compulsive with the offended spouse often obsessive in the pursuit of knowledge. Offended spouses describe a sense of being driven as if the knowledge of details specific to the transgression would somehow erase the reality of sexual infidelity. These powerful motivations may occur within the first three months of the initial revelation of infidelity.

Forgiveness research and literature pertinent to marriage and relationships have reported situational and contextual factors associated with forgiveness (i.e., apology, method of discovery, relationship value). A transgression similar to sexual infidelity will likely exert effects in many areas of functioning. It may impact self-confidence or it may create a preoccupation with one's physical health. There is no way to predict exactly how a person will respond when confronted with a significant betrayal in his or her primary relationship. Popular authors contend that the impact of infidelity evokes major changes in self-concept (Glass, 2003). It is a logical conclusion to make intuitively that betrayal is complicated and affects each person in a dynamic and unique way; therefore, healing and forgiveness in overcoming the damage of betrayal is likely to be equally complicated, dynamic, and unique to the offended person.

Individual differences and situational factors are important considerations in understanding the experiences of an offended spouse. The relative experiences of betrayal and the resulting disruption of identity and attachment highlight the complexities of harm and disruption through betrayal. Forgiveness and healing would likely include additional changes in an already disrupted identity. While infidelity literature has proposed a process of information exchange in the hope of achieving relief from the effects of discovery, it may be a bit simplistic. It is unlikely that revelation of an expanded amount of psychological and emotional information during a time of intense emotional dysregulation would result in a generalized response of forgiveness.

Infidelity Relevant Information and Forgiveness

Fehr et al. (2010) posit that pro-social motivations are transformed through cognitions specific to the transgression and the transgressor (the offending spouse). They describe a process of forgiveness whereby cognitions, affect, and socio-moral constraints develop over time for the offended person. Theoretically, this process begins with a focus on victims' attitudes and thoughts surrounding the offense. The offended person goes through a period during which the offended spouse's attitudes and thoughts will affect his or her perception of the offending spouse's intent (Struthers, Dupuis, & Eaton, 2005; Struthers et al., 2008), responsibility (Aquino et al., 2006), and severity of the transgression (Fincham, Jackson, & Beach, 2005). To date, evidence of cognitions that may inform the process of forgiveness has focused on rumination, intent of the transgression, and apology (Fehr et al., 2010). What is lacking is a model of discovery that would enumerate particular types of information and the differential effect that each may have on rumination about a specific offense. It is also unknown how these different types of information might moderate the effects of a perceived sincere apology.

Three Cognitive Approaches to Relationship Transgressions

In order to study memory consolidation and transgression conceptualization, evidence of a common thread of cognition must be identified. Metts (1994) conceptualized potential relational transgressions into three qualitatively different groups: rules violations, hurtful events, and infidelity. Rather than using emotional responses to the transgression, Metts analyzed the offended spouse's cognitive conceptualization of the interpersonal transgressions. She arrived at three qualitatively different groupings to these potential conceptualizations. These three cognitive approaches to potential relational transgressions are observed in scholarly literature as 1) behaviors that are a violation of relational rules and norms, 2) the interpretive consequences of certain behaviors (i.e., how painful or disrespectful was the transgression toward the offended), and 3) what specific behaviors constitute a relational transgression (i.e., sexual/emotional infidelities, potential loss of resources, threat to paternity). These three theoretically derived approaches to potential relational transgressions were used to group potential infidelity revelation details. Consideration of Metts' conceptualization of a transgression through its cognitive approach style was considered in determining the potential revelations of sexual infidelity. Identification and subsequent objective evaluation of classes or quality of potential post-discovery transgression details might include the associations identified in Table 1.

Table 1

Contextual Details of Potential Infidelity Relevant Information

	Description	Metts' concepts	Perspective
Logistical	How it happened	Rules violations	Behavioral
Motivational	Why it happened	Interpretive consequences	Cognitive
Sexual	Physical Actions	Sexual behaviors	Evolutionary

Discovery of Infidelity Relevant Details

McCullough et al. (2010) propose that the intrapersonal experience of forgiveness is the natural result of memory consolidation processes with the impact of rumination. Consolidation then continues through ruminative processes that keep these memories active long after discovery. This distributed learning results in the rehearsal of information and is not easily forgotten (Litman & Davachi, 2008). Barber et al. (2005) found that anger memories are the most important aspect in forgiving oneself and, more relevant to the current study, in managing thoughts of revenge. They posit that controlling thoughts of revenge is critical to the process of forgiveness.

McCullough et al. (2010) found an important temporal effect in the processes of forgiveness within subjects in a repeated-measures design of participants. They posited that something critical occurs during the first three months following discovery that may well guide the offended spouse's orientation toward forgiveness. Following an initial, relatively large increase in forgiveness, as time progresses, the rate of forgiveness diminishes. The process, as described by McCullough et al. (2010), suggests that as negative emotions are extinguished, some other cognitive process works to retain the experiences of the transgression.

Ruminative processes informed by both real and imagined information concerning the extramarital sexual involvement may impact forgiveness through its effect on memory. McCullough et al. (2010) apply the concept of memory consolidation to the process of forgiveness. Knowledge obtained during the 3-month period following discovery may be correlated to the process of rumination serving as a catalyst to mediate or moderate the process of forgiveness. Memory consolidation processes may take information normally a part of the explicit memory system and through repetition and practice (rumination) incorporate the information into the implicit memory system. Implicit memory may drive rumination (Maltby et al., 2008; Pronk, Karremans, Overbeek, Vermulst, & Wigboldus, 2010). According to memory theory, explicit memory is more controlled and slower. It requires a cue in order to respond. When the memory is not being used, it is forgotten in the background. Implicit memory requires little active work. Conditioned responses of the implicit system are instantly accessible and outside of conscious control. Implicit memories may be triggered through any conditioned stimuli in the environment. These stimuli could have generalized onto benign environmental stimuli or more specific items directly related to the transgression. This leaves the offended person constantly on guard for the triggers in the environment, unsure about when the unwanted memories may become active. Healing from a transgression where the negative aspects are a part of the easily controlled explicit memory system would be more easily managed than managing the unpredictability and insidiousness of hurtful memories operating in the implicit system (Bowers & Schacter, 1990). Rumination is believed to be a factor in the consolidation of experiences that occur during a 3-month period following the discovery of a relationship transgression.

Summary

Currently, measurement of forgiveness is accomplished in two ways. Single point-in-time measurement provides an immediate between-subjects view of people's experiences with forgiveness. The forgiveness of a specific transgression also can be measured as a time-bound construct to describe the natural longitudinal trajectory of people's responses to a transgression over time (McCullough et al., 2003, 2010).

Generally, measurement of forgiveness is achieved through assessment of specific offenses or transgressions that evoke negative feelings. Measurement of the disposition to forgive remains popular (McCullough et al., 1998; Rye et al., 2000). In 2006, McCullough et al. revised the TRIM to include a benevolence subscale to account for pro-social motivation in addition to the measurement of revenge and avoidance motivations. Since the publishing of Glass's (2003) *Not Just Friends*, the research devoted to healing and recovery has continued to emerge. Although the current study included a limited topic of exploration from this self-help book made popular in more commercial literature, the content of the book is not reported as empirically derived. This study is among the first to consider this specific, suggested course of action related to infidelity and impose the scientific process in understanding its effects. By comparison, little information on the cognitive processing of a hurtful transgression immediately following discovery is available in the forgiveness literature (Olson et al., 2002; Kleine, 2007; Olmstead et al., 2009).

While researchers have shown interest in understanding infidelity, it was Glass's break with the idea common to the time period that infidelity is a symptom of a troubled marriage. Her position brought the idea of full disclosure to the infidelity problem. Separating the problem of infidelity from the belief that infidelity is a reflection of the quality of the marriage changed the view that discussion of the transgression was considered counterproductive (Olmstead et al., 2009). Glass posited, along with Treas and Gieson (2000), that infidelity exists within the mind of the involved spouse and occurs in happy, well-adjusted marriages as well as in troubled marriages. A thorough accounting and consideration of the details of the extramarital transgression may lead to a more complete level of understanding and acceptance by the offended spouse regardless of post-discovery marital status. Glass proposed that processing of the facts of infidelity is essential to recovery.

Forgiveness may herald personal healing. Forgiveness is not connected to the resolution or dissolution of the marital relationship. Regardless of the resulting marital

status, forgiveness may provide the offended spouse health benefits through reductions in anxiety that may be impacted by motivations for revenge and avoidance. Forgiveness provides the offended spouse an opportunity for potential restoration of personal identity and self-worth. Exploration of the effects of transgression relevant details and the contextual factors surrounding discovery may form a foundation on which to provide ethical and effective treatment options.

Hypotheses

Introduction to hypothesis 1. Research reflects a significant, negative correlation between neuroticism and forgiveness (Brose et al., 2005; Maltby et al., 2008; McCullough et al., 2001; McCullough & Hoyt, 2002; McCullough et al., 2010). Neuroticism shares a statistically significant relationship with forgiveness in studies that address forgiveness and the Five Factor Model (Ashton, Paunonen, Helmes, & Jackson, 1998; Brose et al., 2005). It is believed to be predictive of forgiveness through the assessment of levels of benevolence, revenge, and avoidance (McCullough & Hoyt, 2002). In 2005, Jones reported a negative correlation between neuroticism and benevolence, and Katovsich (2008) reported that empathy, important in benevolence, is significantly and positively correlated with forgiveness. Rumination is also a correlate of neuroticism.

Hill, Allemand, and Burrow (2010) reported that the association between forgivingness and identity development is mediated by levels of neuroticism and agreeableness. McCrae and Costa (1987) described neuroticism as the tendency to react to life events with great stress. Larsen and Ketelaar (1991) were more descriptive in describing the neurotic person as displaying greatly increased negative affect when confronted with negative environmental stimuli. The study reported a significant, negative correlation between forgivingness and neuroticism. Derryberry and Reed (1994) reported a significant negative correlation between neuroticism and avoidance. Significant, positive correlations were reported in some of the earliest work using the TRIM-12 to conceptualize forgiveness. A significant, negative correlation was reported between avoidance and forgiveness (McCullough et al., 1997). Recently, a study that reported measured avoidance motivations 2.5 years following a hurtful transgression also reported significant positive correlations between avoidance and forgiveness (Maltby et al., 2008). McCullough et al. (2001) reported a significant, positive correlation between vengefulness and neuroticism. McCullough and Hoyt (2002) developed the TRIM instrument and found statistically significant negative correlations between forgiveness and avoidance, revenge, and benevolence in the offended.

In addition, neuroticism has been correlated to rumination. As negative affect increases, the neurotic person becomes more likely to ruminate over perceived negative life events. Muris, Roelofs, Rassin, Franken, and Mayer (2005) proposed that this persistence of negative affect and lack of forgiveness of a hurtful offense are linked, and they are a key component of neuroticism. It was expected that neuroticism would be positively correlated with rumination.

Hypothesis 1. Neuroticism will be negatively correlated with benevolence and avoidance, and positively correlated with revenge and rumination.

Introduction to hypothesis 2. Agreeableness is the personality factor that marks the typical pro-social orientation of interpersonal behaviors of the individual. People who are low in agreeableness are more likely to experience conflict with peers and experience

empathy deficits (Asendorpf & Wilpers, 1998; Ashton et al., 1998). Glinski and Page (2010) found negative correlations between avoidant personality type and elements of agreeableness.

McCullough et al. (2001) provided a thorough discussion and empirical view of vengefulness and its effects on forgiveness, rumination, well-being, and the Big Five. They supported the conceptualization of agreeableness as a trait that helps people manage their interpersonal frustrations/anger effectively. Jensen-Campbell and Graziano (2001) showed that vengeful resolution tactics were more likely to be seen as appropriate responses to interpersonal transgressions by persons low in agreeableness.

Historically, benevolence has been significantly, positively correlated to agreeableness (Macaskill et al., 2002). Haslam et al. (2009) found a significant association between agreeableness and benevolence, traditional values, and conformity. Saroglou and Munoz-Garcia (2008) reported a significant positive correlation between agreeableness and benevolence as well as agreeableness and religiosity.

Revenge motivations and avoidance motivations were negatively correlated with agreeableness (Brose et al., 2005; Katovsich, 2008; McCullough et al., 2001; McCullough & Hoyt, 2002). Caprara, Barbaranelli, and Zimbardo (1996) reported a negative correlation between rumination and agreeableness.

Hypothesis 2. Agreeableness will be positively correlated with benevolence and negatively correlated to revenge, avoidance, and rumination.

Introduction to hypothesis 3. A review of empirical work recognized the inconsistency in findings of significance between studies related to extraversion and forgiveness (Brose et al., 2005; Jones, 2005; Neff, Rude, & Kirkpatrick, 2007). Macaskill

et al. (2002) reported a significant negative correlation between extraversion and forgiveness; however, Brose et al. (2005) later found contradicting results of a significant positive correlation between forgiveness and extraversion. Jones (2005) supports Brose et al. (2005) by reporting positive correlations between forgiveness and extraversion. Inconsistent findings for the relationship between extraversion and processes of forgiveness fail to support extraversion as a correlate of forgiveness. Recent studies with significant correlations continue to support the efficacy of its use as an avenue of study for personality and forgiveness (Berry, Worthington, O'Conner, Parrott, & Wade, 2005). Berry and colleagues argue that a statistically significant negative correlation between extraversion and forgiveness exists. This correlation is reflected by significant findings in five of the 25 instruments Berry et al. reported.

Hypothesis 3. Extraversion will be positively correlated with benevolence and revenge. Extraversion will be negatively correlated with avoidance and rumination.

Introduction to hypothesis 4. Time as a factor in forgiveness is an interesting, contemporary construct in the forgiveness literature. McCullough et al. (2003) postulate because forgiveness is a process of change, and change takes time, then time is an intricate aspect of forgiveness. McCullough et al. (2010) found evidence for viewing forgiveness as a process of change. This process shows early, relatively large gains in forgiveness with diminishing rates of change the further one moves in time from the moment of the transgression. McCullough et al. (2010) may have found mathematical support for the old adage, "All things heal with time." This work also suggests that all things heal, but at different rates for different people.

McCullough et al. (2010) propose that differing rates of forgiveness among individuals may be the result of memory consolidation early in the discovery period. Ruminative processes may keep memories of a hurtful transgression active long after the period of discovery has ended. Following an initial, relatively large rate of forgiveness in the first three months following discovery of a transgression, the process of forgiveness appears to change. As time progresses, the rate of forgiveness grows ever smaller. This predictable pattern is described by McCullough et al. (2010) as a process where negative emotions are extinguished as some other process is working to retain the experiences of the transgression.

Memory theory would allow for such seemingly opposing actions. While general consolidation of experiences would have resulted in memories recalled upon cue or in a slow and thoughtful manner may become instantly accessible. A more classically conditioned consolidation of transgression details results in memory that becomes a part of the less controlled implicit memory (Bowers & Schacter, 1990; Maltby et al., 2008; Pronk et al., 2010). Ruminating about an offense appears to be related to the amount of time necessary to process forgiveness (McCullough et al., 2001). In other words, if an offended spouse has only recently experienced discovery, the restricted amount of time that has been spent in healing (following discovery) would reflect a high level of rumination; however, if an offended spouse has known about the infidelity for five years, for example, a fairly low level of rumination would be expected. Knowledge and time are addressed throughout forgiveness work. This project focuses on knowledge and time with regard to forgiveness.

Hypothesis 4. Rumination will be negatively correlated with forgiveness and time since discovery.

Introduction to hypothesis 5. Little is known about the psychological processes that might lead to memory consolidation in the context of forgiveness. It is unknown if rumination is correlated with the quality or quantity of knowledge obtained about a transgression. McCullough et al. (2010) suggest that rumination may be a good starting point for the conceptualization of how memory consolidation impacts the process of forgiveness. Memory consolidation involves the neural assimilation of newly acquired knowledge to the existing, established structure in long term memory (Bowers & Schacter, 1990).

Barber et al. (2005) found that anger memories are the most important aspects in forgiving oneself and in managing thoughts of revenge. They posit that controlling thoughts of revenge is critical to the process of forgiveness. McCullough, et al. (2001) found a significant, positive correlation between rumination and vengefulness. In 2007, McCullough et al. found a significant relationship between forgiveness and rumination. As rumination increases, forgiveness is less likely.

Gunderson and Ferrari (2008) found that forgiveness is most likely to occur for a single transgression rather than numerous transgressions. Forgiveness is also more likely when it is accompanied by a perceived sincere apology (McCullough et al., 1998; Ohbuchi et al., 1989). This sincere apology and apparent remorse is thought to promote empathy, an important aspect of benevolence. Forgiveness is associated with increased levels of such empathy (Ashton et al., 1998; Macaskill et al., 2002). Benevolence, an important factor in forgiveness, is thought to have a negative correlation to rumination.

This correlation suggests that rumination plays a critical role in one's ability to forgive (Berry et al., 2005; McCullough et al., 2007).

Hypothesis 5. Rumination will be negatively correlated with benevolence and positively correlated with revenge and avoidance.

Introduction to hypothesis 6. Popular, contemporary literature appears to be heavily influenced by the idea that complete revelation of infidelity relevant information provides the offended spouse an opportunity to recover from the effects of the discovery of sexual infidelity in the marriage (Glass, 2003; Spring, 1996). An extensive review of the professional literature failed to identify empirical support for this assertion. This study explored forgiveness as it related to knowledge of details following the discovery of sexual infidelity. The offended spouse appears to possess an urgency to uncover every possible aspect of the transgression (Peluso, 2007). To this point, it appears that the current study is the only one to have explored the impact of discovery of transgressionrelevant information on rumination or one's ability to forgive sexual infidelity. Because many therapists and much contemporary literature promotes full disclosure of infidelity relevant information, an understanding for how a large amount of transgression relevant information may be important in continuing research on forgiveness and rumination.

Hypothesis 6. The offended spouse's knowledge of total number of details relevant to the extramarital sexual infidelity will be negatively correlated with benevolence and forgiveness but positively correlated with avoidance, revenge, and rumination.

Introduction to hypothesis 7. It appears that forgiveness research and infidelity research have not considered the unique impact that knowledge and memory

consolidation may play in the process of forgiveness (McCullough et al., 2010). Because rumination appears to be important to the process of forgiveness, it is important to know the impact that extensive revelation of transgression information has on the cognitive processes that drive rumination. Intuitively, the repetitive nature of rumination may facilitate and result in longer term retention of the negative impact of the event.

Metts' (1994) first approach to cognitive conceptualization of a relational transgression provides an avenue of investigation for memory consolidation and forgiveness. Knowledge of rules violations is described as knowing how the transgression occurred or when it may have happened. This knowledge is generally concrete and includes such items as names, time, and/or place. Forgiveness literature has reported significant correlations between forgiveness of infidelity and the number of times the offending spouse may have been involved in extramarital sexual activity. Many offended spouses want to know if the sexual infidelity was accompanied by additional transgressions of lying or financial betrayal. Logistical information would likely include the revelation of behaviors that were performed in preparation for the sexual infidelity and any behaviors that may have been implemented to cover the transgression or to facilitate continuing circumstances of infidelity. This knowledge might suggest the level of intentionality of the transgression (Gunderson & Ferrari, 2008; Zeichmeister & Romero, 2002) and the perceived locus of control driving the transgressor (McCullough et al., 2003). These factors may promote empathy which has been associated with increased levels of benevolence, a specific aspect of forgiveness (Katovsich, 2008).

Hypothesis 7. Offended spouses who indicate they have completely or mostly forgiven their partners will endorse a higher degree of knowledge about logistical details

of the extramarital transgression than offended spouses who report they have not forgiven or have only marginally forgiven their partners.

Introduction to hypothesis 8. Metts' (1994) named interpretive consequences as the second approach to understanding the impact of potential relational transgressions. A description of the interpretive consequences includes the offended spouse's consideration for the degree of disrespect or harm incurred by the offended spouse. The offended spouse appears to respond to judgments the offending spouse may have made prior to the actual act of extramarital sexual activity. This judgment appears to be mediated by the pre-transgression quality of the relationship (Karremans et al., 2003). Additionally, interpretive consequences might include the transgressor's expected results or objectives of the transgression. In other words, what events or implications did the transgressor consider as a possible result of his or her infidelity? The pre-transgression judgments would inform the offended spouse in attributing blame or responsibility to the nonoffending spouse's behaviors. Attributions or explanations that spouses give for each other's behavior are also related to his or her response to that behavior (Hoyt, Fincham, McCullough, Maio, & Davila, 2005). Theoretically, the better the relationship before the transgression, the higher the empathy for the offender may be following discovery (Katovsich, 2008). McCullough et al. (2003) studied the impact of transgressions motivations and found that empathy is important for benevolence toward a nonmonogamous spouse.

Hypothesis 8. Offended spouses who indicate they have completely forgiven or mostly forgiven their partners will endorse a higher level of knowledge of motivational

details of the extramarital transgression when compared with offended spouses who report they have not forgiven or have only marginally forgiven their partners.

Introduction to hypothesis 9. Often, the first question from the offended spouse upon discovery of the transgression of infidelity is, "Did you have sex?" Something critical and unique appears to be associated with this specific aspect of interpersonal relationships. This critical association is most often discussed and addressed by evolutionary theory. Gender differences measured through reactions to sexual infidelity versus emotional infidelity in a committed relationship highlight the discussion of gender and sexual infidelity (Buss, Larsen, Westen, & Semmelroth, 1992).

Research on jealousy as a specific, innate model (JSIM) has shown that men are more likely to be disturbed by sexual infidelity while women experience emotional infidelity as more disturbing (Buss et al., 1999). Conversely, Harris (2003) failed to find support for this model. Some scientists have attributed these measured effects to inappropriate instrumentation or experimental limitations of hypothetical scenarios versus historical survey (Berman & Frazier, 2005). Metts' (1994) third approach, specific sexual behaviors, assumes that relationships exist on a continuum that proceeds from platonic to shared sexual behavior. Sexual infidelity may be composed of many different types of sexual behaviors, with each carrying a different degree of perceived betrayal. Because sexual infidelity has been correlated with a greater likelihood of anger (Shackleford et al., 2002), sexual infidelity is determined to be the outcome variable in order to clearly assess the impact of sexual infidelity on memory consolidation and the process of forgiveness.

The correlation between sexual infidelity and anger supports the contention that knowledge of sexual details of the transgression will result in a higher degree of rumination, revenge, and avoidance regardless of gender. There have been no documented studies on sexual infidelity and benevolence; however, existing research on the inhibiting force of rumination, vengefulness, and avoidance of the transgressor provides a foundation for a cursory statement that acknowledges sexual acts occurring in infidelity will inhibit the development of benevolence for the offending spouse.

Hypothesis 9. Offended spouses who indicate they have completely forgiven or mostly forgiven their partners will endorse a lower level of knowledge of sexual details of the extramarital transgression when compared with offended spouses who report they have not forgiven or have only marginally forgiven their partners.

CHAPTER TWO

METHODS

Participants

A sample of 168 volunteers participated in this study online. Of the original 168 volunteers, 36 participants were removed from the analyses due to incomplete surveys or invalid response sets. Additionally, eight participants' responses did not indicate the discovery of a physical sexual infidelity and were eliminated from the analyses. The final data set for this study included 124 participants.

Of the 124 participants from across the world, 37 were male (30%), 86 were females (69%), and one person did not report his or her gender. All participants were at least 18 years of age. The age of participants ranged from 25 to 72 with a mean age of 44 years (SD = 9.30). This was a fairly homogenous sample with 98 (79%) participants identifying themselves as Caucasian. Others identified themselves as: African American (9), Hispanic (5), Oriental (5), American Indian (3), Middle Eastern (1), and other (3).

Each participant reported at least one episode where he or she learned that his or her spouse had engaged in extramarital sexual infidelity. Approximately 43% (53) of the sample had been married less than 10 years at the time of the survey. High rumination was reported by 51% (67) of the sample. Almost half (45.2%) of the sample remained married to the offending spouse who had been involved in the reported extramarital sexual activity. The amount of time that had passed since participants first learned of a spouses' infidelities are reported in Table 2.

Table 2

Time since Discovery of Sexual Infidelity

Time	Number	Percent	Cumulative Percent
< 3 months	11	8.9	8.9
3-6 months	5	4.0	12.9
6 -12 months	17	13.7	26.6
1-3 years	26	21.0	47.6
3-5 years	26	21.0	68.6
5-10 years	23	18.5	87.1
> 10 years	15	12.1	99.2
Not specified	1	0.8	100.0
Total	124	100.0	

Volunteers responded to an invitation to participate. Only adults with the experience of discovery of sexual infidelity in a marriage were eligible to participate in the study. After responding to the posted invitation to participate in a study about infidelity, volunteers acknowledged consent and acceptance of the survey as a confidential process with anonymous responses. They were informed that each volunteer

would have the opportunity to enter a gift certificate drawing upon completion of the survey. No other remuneration was offered.

Procedure

Participants were recruited from websites that focused on infidelity (see Appendix B). They responded to a posted invitation to participate in a study on infidelity. After reporting age and the discovery of sexual infidelity, adult participants were directed to the full survey packet located on a secure server at www.surveymonkey.com. Participants completed a 17-item demographics questionnaire and five instruments that are described below. Institutional review and approval forms for this study can be found in Appendices C and D.

Instrumentation

Big Five Inventory

Personality traits were measured with John, Donahue, and Kentle's Big Five Inventory (BFI; 1991). The 44-item instrument was constructed to provide quick, efficient assessment of five personality dimensions—neuroticism, extraversion, openness, agreeableness, and conscientiousness. Self-report ratings are on a scale from 1 (*strongly disagree*) to 5 (*agree strongly*) for each of the items. Items elicit participant responses based on the likelihood that the item describes the participant's personality. Examples of Big Five Inventory items that measure neuroticism include, "____is relaxed, handles stress well" and "___gets nervous easily." Items assessing levels of agreeableness include, "____perseveres until the task is finished," and "____is considerate and kind to almost everyone." Extraversion items include, "____generates a lot of enthusiasm," and "Is outgoing and sociable" (John et al., 1991). Internal consistencies for the BFI subscales have been reported as exceeding .75 for all five subscales, and test-retest reliabilities generally exceed .80 (Benet-Martinez & John, 1998; John et al., 1991). This measure is appropriate for cross-cultural research in personality (Benet-Martinez & John, 1998).

Transgression-Related Interpersonal Motivations Inventory-18

Forgiveness was assessed with the 18-item Transgression-Related Interpersonal Motivations Inventory (TRIM-18; McCullough et al., 2003, p. 549; McCullough et al., 2006). With the TRIM-18, forgiveness is operationalized as a decrease in two interpersonal motivations (avoidance and revenge) and an increase in a third motivation (benevolence) toward a transgressor (McCullough et al., 1997). The TRIM-18 is an effective self-report measure for the assessment of forgiveness (Exline, Baumeister, Bushman, Campbell, & Finkel, 2004; McCullough & Hoyt, 2002; McCullough et al., 1998). It is comprised of three subscales. The 7-item avoidance subscale and 5-item revenge subscale are combined with a 6-item benevolence scale to make up the TRIM-18.

The avoidance and revenge subscales have a reported high internal consistency (.85), moderate test-retest stability (8-week test-retest r = .50), and there is good evidence of construct validity (McCullough et al., 1998, 2001). Examples of the avoidance subscale include, "I am trying to keep as much distance between us as possible" and "I withdraw from him/her" (McCullough et al., 1998, p. 1603). The revenge subscale includes the following: "I will make him/her pay for what they did" or "I am going to get even." The 6-item benevolence subscale measures benevolent motivations toward the transgressor and has good (.91 - .93) internal consistency estimates and test-retest correlations ranging from .52 - .87 (McCullough et al., 2003). Items on the benevolence

subscale include, "Even though his/her actions hurt me, I have goodwill for him/her" and "I forgive him or her for what he or she did to me" (McCullough et al., 2003, p. 549). Items on the avoidance scale together with the items on the revenge scale make up a TRIM-12 forgiveness scale. Items for all subscales were rated on a 5-point Likert-type scale from 1(*strongly disagree*) to 5 (*strongly agree*). Author permission to use the TRIM is found in Appendix E.

Rumination about an Interpersonal Offense Scale

Rumination was measured with the rumination about an Interpersonal Offense Scale (RIO; Wade et al., 2008). It measures the level of state rumination about a specific interpersonal transgression. Rumination is defined as the repetitive cognitive rehearsal about a specific past interpersonal offense. The RIO consists of six items relating to a specific interpersonal transgression. Items are rated from 1 (*strongly disagree*) to 5 (*strongly agree*). Higher scores indicate more rumination about a specific offense. The RIO is composed of items similar to the following, "I can't stop thinking about how I was wronged by this person" (Wade et al., 2008). Internal reliabilities have been measured above .90 over three samples, and factor loadings were above .78 (Wade et al., 2008). Author permission to use the RIO is located in Appendix F.

International Personality Item Pool (IPIP) Forgiveness

The IPIP Forgiveness scale (Goldberg et al., 2006) is a 10-item scale that measures facets of agreeableness. The following examples are included in the IPIPforgiveness scale: "I am inclined to forgive others" and "I try to forgive and forget". Goldberg et al. (2006) reported Cronbach's alpha of .78. These 10 items were used as a validity check to identify unusual response patterns in the data.

Demographics

The demographics questionnaire included 17 questions. Demographic information included such facts as gender, marital status, country of residence, history of sexual infidelity by spouse, level of forgiveness of the offending spouse, and questions to determine the types of details learned during the discovery of sexual infidelity within a married relationship.

Discovery of Infidelity Relevant Details (DID) Questionnaire

Participants were asked to endorse items from a questionnaire of potential revelations that may occur during the discovery of sexual infidelity. Potential revelations were divided into three qualitatively different groups of cognitive conceptualizations as proposed by Metts (1994). This questionnaire included items to determine whether participants had access to logistical information, motivational information, and sexual details of the extramarital involvement (see Appendix G). Questionnaire items were designed to elicit information found in empirical literature that is reported as having a significant relationship with forgiveness of discovery of sexual infidelity. The following items are typical of the questionnaire: "I know the general length of time of the sexual relationship," "my spouse has explained that a desire for companionship was a reason for extramarital sexual activity," and "my spouse reported that there was a monetary exchange for sexual activity."

CHAPTER THREE

RESULTS

Assumptions and Data Preparation

Missing values were handled through a process described by M. McCullough (personal communication, July 18, 2011) and N. Wade (personal communication, July 18, 2011). Values were imputed for each scale with less than one-third of the items missing. Mahalanobis Distance was used to identify multivariate outliers and establish multivariate normality for the data. No outliers were identified.

The sexual details and motivational details variables were moderately positively skewed. Appropriate transformations to correct skew were made (Mertler & Vannatta, 2009). Log transformation on the sexual details variable and a square root transformation on the motivational variable resulted in near normal distributions. The assumptions of homogeneity of variances and homoscedastity were assessed using Levene's and Box's tests. These assumptions were not violated (Mertler & Vannatta, 2009).

Statistical Analysis

Correlation coefficients were computed among the five personality factors of the BFI, the three factors of the TRIM-18, the RIO, and the single-item question of forgiveness to test Hypotheses 1-6. Hypotheses 7-9 were analyzed using a multivariate analysis of variance (MANOVA).

57

Descriptives

The average age of participants in this study was 43.7 (SD = 9.3) years. Heterosexual involvement characterized the extramarital sexual activity of 87% (109) of the sample. Of the remaining participants, 6% (7) reported homosexual extramarital activity. The other 7% (8) participants reported partners whose extramarital sexual activity included both heterosexual and homosexual activity. Approximately 28% (35) percent of this sample had offending spouses who were involved in a single affair of less than one year. Descriptive statistics for the variables are presented in Table 3.

Forgiveness was assessed with a single question using a 4-point Likert-type response (1 = *I have completely forgiven*, 4 = *I will never forgive*). The forgiveness item was reversed scored so that high scores indicate higher levels of forgiveness. Twelve percent (15) of the sample reported that they had completely forgiven the offending spouse; 37% had mostly forgiven, 28% had marginally forgiven, and 22% reported that they would never forgive the offending spouse. It is important to note that the single item forgiveness response was well correlated to the TRIM-12. The TRIM-12 is a measure of forgiveness as assessed through motivations of revenge and avoidance. Results from the TRIM-12 indicate a statistically significant correlation between the self-reported levels of forgiveness and the TRIM-12 (r = .508, p = .000, N = 124). Time since discovery was assessed with a single item which asked how much time had passed since learning of the spouse's sexual infidelity. Time since discovery was statistically significant and negatively correlated with rumination (r = -.281, p = .002, N = 124).

Table 3

Descriptive Statistics of Variables

Variables	# of items	Mean	SD	Min	Max
Logistical	8	4.02	2.22	1	8
Motivational	7	2.73	1.51	0	7
Sexual	10	2.74	1.94	0	10
Avoidance	7	21.97	7.31	7	35
Revenge	5	11.79	5.56	5	25
Benevolence	6	17.89	5.68	6	30
Rumination	6	18.99	7.55	6	30
Extraversion	8	27.87	6.09	11	40
Agreeableness	9	35.24	4.93	21	44
Conscientiousness	9	34.46	6.06	21	45
Neuroticism	8	22.42	5.84	8	37
Openness	10	37.93	6.7	22	50

Hypotheses 1-6

Hypotheses 1-5 were tested using Pearson correlation coefficients and Hypothesis 6 was tested using a Spearman correlation coefficient. Correlation coefficients were computed for the five personality factors of the BFI, the three factors of the TRIM-18, and the RIO (see Table 4).

Table 4

		1	2	3	4	5	6	7	8
1	Avoidance		.558**	764***	.081	.007	.036	.183*	443***
2	Revenge			565***	.237**	222*	017	.396***	457***
3	Benevolence				129	.089	034	190*	.531***
4	Neuroticism					327***	032	.168	129
5	Agreeable						.174	103	068
6	Extraversion							106	108
7	Rumination								252**
8	Forgiveness								

Correlations for Personality, Forgiveness, and Rumination

****p* < .001. ***p* < .01. * *p* < .05

Hypothesis 1. Hypothesis 1 stated that neuroticism would be negatively correlated with benevolence, and positively correlated with revenge, avoidance, and rumination. Hypothesis 1 was partially supported in this study. Results did not support a statistically significant correlation between neuroticism and benevolence (r = -.129, p = .153, N = 124). As expected, results did reflect a statistically significant relationship between neuroticism and revenge (r = .237, p = .008, N = 124). No statistically significant relationship was found between neuroticism and avoidance (r = .081, p = .372, N = 124). There was no statistically significant correlation between neuroticism and rumination (r = .168, p = .062, N = 124).

Hypothesis 2. Hypothesis 2 stated that agreeableness would be positively correlated with benevolence, but negatively correlated with revenge, avoidance, and rumination. Hypothesis 2 was partially supported. There was a statistically significant negative correlation between agreeableness and revenge (r = -.222, p = .013, N = 124). No statistically significant relationship was found between agreeableness and avoidance, (r = .007, p = .937, N = 124). The results of this study indicate that agreeableness is not significantly correlated with benevolence (r = .089, p = .326, N = 124) or rumination (r = .103, p = .255, N = 124).

Hypothesis 3. Hypothesis 3 stated that extraversion would be positively correlated with benevolence or revenge, but it would be negatively correlated with avoidance and rumination. No statistically significant correlation was found between extraversion and benevolence (r = -.034, p = .704, N = 124). In addition, there was no statistically significant correlation between revenge (p = -.017, p = .848, N = 124),

avoidance (r = .036, p = .693, N = 124), and rumination (r = -.106, p = .243, N = 124). Hypothesis 3 was not supported.

Hypothesis 4. Hypothesis 4 stated that rumination would be negatively correlated to time since discovery as well as forgiveness. Results from this study support hypothesis 4. This study demonstrated a statistically significant negative correlation between rumination and time since discovery (r = -.281, p = .002, N = 124). Additionally, rumination was statistically significant and negatively correlated with forgiveness (r = -.252, p = .005; N = 124).

Hypothesis 5. Hypothesis 5 stated that rumination would be negatively correlated with benevolence and positively correlated with revenge and avoidance. Rumination demonstrated a statistically significant negative correlation with benevolence (r = -.190, p = .034, N = 124). As predicted, rumination was statistically significant and positively related to revenge (r = .396, p = .000, N = 124) and avoidance (r = .183, p = .042, N = 124).

Hypothesis 6. Hypothesis 6 stated that the overall number of details regarding the extramarital transgression would be negatively correlated with benevolence and forgiveness but positively correlated with avoidance, revenge, and rumination. Hypothesis 6 was not supported. The offended spouse's knowledge of total number of details relevant to the extramarital sexual infidelity was not significantly correlated with forgiveness, benevolence, avoidance, revenge, or rumination (see Table 5 for Spearman correlations).

Table 5

Correlations with Total Number of Details

Variable	<i>R</i>
Forgiveness	036
Rumination	.061
Avoidance	027
Revenge	090
Benevolence	.073
Time	024

Hypotheses 7-9

Hypotheses 7-9 focused on whether there were differences among logistical, motivational, or sexual details regarding a spouse's extramarital sexual activity and levels of forgiveness. In order to determine group differences on transgression variables for people who reported they had completely forgiven their spouses or mostly forgiven their spouses as compared to others who reported they had experienced a small amount of forgiveness or no forgiveness for a spouse's transgression, MANOVA was used. Forgiveness groups were based on a single item self-report question that reflected a statistically significant correlation to the processes of forgiveness as represented by the TRIM-12 (r = .508, p = .000, N = 124). Descriptive statistics by group are shown in Table 6. No statistically significant differences were found among the groups, *Wilks'* A =.984, F(3, 116) = .613, p = .608, partial $\eta^2 = .016$.

Table 6

Details	Forgiveness Group		No Forgiveness Group		
	М	SD	М	SD	
Logistical	3.916	2.196	4.167	2.308	
Motivation	2.883 (1.63)	1.688 (.495)	2.600 (1.56)	1.330 (.416)	
Sexual	2.717 (.342)	1.878 (.283)	2.783 (.344)	2.026 (.294)	

Descriptive Statistics for Infidelity Relevant Details

Note. Values in parentheses indicate transformed variables.

Hypothesis 7. Hypothesis 7 stated that offended spouses who indicated they had completely or mostly forgiven their partners would endorse a higher degree of knowledge about logistical details of the extramarital transgression than offended spouses who report they had not forgiven or had only marginally forgiven their partners. Hypothesis 7 was not supported.

Hypothesis 8. Hypothesis 8 stated that offended spouses who indicated they had completely forgiven or mostly forgiven their partners would endorse a higher level of knowledge of motivational details of the extramarital transgression when compared with offended spouses who report they had not forgiven or had only marginally forgiven their partners. Hypothesis 8 was not supported.

Hypothesis 9. Hypothesis 9 stated that offended spouses who indicated they had completely forgiven or mostly forgiven their partners would endorse a lower level of knowledge of sexual details of the extramarital transgression when compared to offended

spouses who reported they had not forgiven or had only marginally forgiven their partners. Hypothesis 9 was not supported.

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CHAPTER FOUR

DISCUSSION

Findings and Implications

In the present study, adults with a history of the discovery of at least one episode of sexual infidelity were surveyed. Previous research employed both actual (historical) and hypothetical accounts of infidelity. Thus, only a portion of each sample had experienced the actual effects of the transgression. This study offers an exploration of forgiveness where all participants had experienced the discovery of sexual infidelity of their spouse. Surprisingly, the sample was predominately Caucasian. Invitations to participate were posted on infidelity related websites (see Appendix B), so it is unclear why there was a homogeneous sample (see Appendix B for posting websites). Findings from this study may not generalize to a more racially heterogeneous population; however, the results provide a good opportunity for understanding the forgiveness process of the offended spouse within the context of discovery of an actual marital infidelity rather than responding to a hypothetical situation.

Hypothesis 1

Hypothesis 1 stated that neuroticism would be negatively correlated with benevolence and positively correlated with revenge, avoidance, and rumination. Hypothesis 1 was partially supported in this study. Contrary to the results of

66

Jones (2005) and Katovsich (2008), results of the present study did not indicate a statistically significant negative correlation between neuroticism and benevolence. Contrary to the results of Derryberry and Reed (1994), but consistent with the findings of McCullough and colleagues (2001), neuroticism was not significantly correlated with avoidance in the current study. Surprisingly, this study failed to support the finding of Muris et al. (2005). There was no observed statistically significant relationship between neuroticism and rumination.

The statistically significant positive correlation between neuroticism and revenge is consistent with studies by McCullough et al. (2001) and McCullough and Hoyt (2002), Vengefulness appears to be a dispositional response style of a person high in neuroticism and low in agreeableness (McCullough et al., 2001). McCullough and colleagues (2001) posit that measured relationships among vengefulness and negative affect, acts of revenge, and tendency toward rumination did not extend to motivations for avoidance. Results of the current study support McCullough's et al. (2001) contention that people high in neuroticism are more likely to respond to motivations for revenge rather than to motivations of avoidance. Currently, there is no position establishing a reason for this conclusion. The current study found statistically significant correlations between revenge motivations, neuroticism, and agreeableness. Revenge is not exactly the opposite of forgiveness. It is one component of forgiveness as presented in the tripartite model of forgiveness (McCullough & Hoyt, 2002). Mullet, Neto, and Riviere (2005) defined revenge as the infliction of harm on an offender in return for a perceived wrong (p. 160). As avoidance motivations become more pronounced, forgiveness may consist of simply

avoiding the transgressor as motivations for revenge weaken. As benevolent motivations expand, then actions may begin to reflect a more prosocial stance toward the offender.

The activation of either revenge or avoidance motivations may come from intended goals or cues from the environment. For example, a person high in neuroticism may choose to act on motivations for revenge rather than motivations of avoidance because his or her response style creates a tendency toward maladaptive, less agreeable behaviors, as posited by McCrae & Costa (1987). A person low in neuroticism may respond initially to motivations for revenge, but he or she would likely feel dissonance in revenge actions and cognitions. At that point, he or she may begin to respond to the more agreeable motivations for avoidance and eventually benevolence. People high in neuroticism have a tendency to respond to life events in a generally negative fashion, and this may work to inform their responses for the process of forgiveness.

Many people would characterize the motivation for avoidance of a perceived transgressor or motivation to control thoughts of the transgression as more socially appropriate or adaptive responses than acting on revenge for the transgressor (McCullough et al., 2001). As forgiveness processes operate across time and a spouse develops a more ambivalent or empathetic view of the offending spouse, motivated by this more benevolent attitude, a judgment may be made. A choice might be to simply embrace motivations for avoidance and allow the memory of the hurtful event to fade. This may account for situations where forgiveness is granted, but no reconciliation of the transgression is pursued (i.e., divorce). As a result of a more empathetic view, the value of retaining the relationship with the transgressor may increase, resulting in more prosocial interactions with the transgressor. There is a wide range of influences on benevolent motivations. The value ascribed to continuing a relationship can evoke benevolence (McCullough et al., 2009). Benevolence for the offending spouse may increase due to normalization of the offense or developing judgments of empathy with the offending spouse. Judgments of social desirability may characterize benevolent motivations toward a transgressor as a sign of a person who is high in agreeableness.

Revenge motivations are more likely active with a person high in neuroticism, but avoidance may be the preferred response of a more stable, secure personality (i.e., someone low in neuroticism or high in agreeableness). A person high in neuroticism who has experienced negative feelings of having been dishonored or disrespected may respond to motivations for revenge; however, one who is low in neuroticism may be better able to temper his or her response and simply avoid. While neuroticism influences vengefulness in the present study, neuroticism was not related to avoidance or benevolence.

Hypothesis 2

Hypothesis 2 stated that agreeableness would be positively correlated with benevolence, and negatively correlated with revenge, avoidance, and rumination. Hypothesis 2 was partially supported. Unlike the findings of Haslam et al. (2009) and Saroglou and Munoz-Garcia (2008), results of the current study revealed no statistically significant correlation between agreeableness and benevolence. There was no statistically significant negative correlation between agreeableness and avoidance. These results contradict those of Brose et al. (2005), Katovsich (2008), and McCullough and Hoyt (2002). Consistent with reports from Caprara et al. (1996) and McCullough et al. (2001), results support a statistically significant negative relationship between agreeableness and revenge. Intuitively, it would seem that agreeable people would be less vengeful. The finding in the present study of a statistically significant negative correlation between agreeableness and revenge is consistent with the results of Brose et al. (2005) and Katovsich (2008). Agreeableness is a well-established correlate of forgiveness (Glinski & Page, 2010). McCrae and Costa (1987) use the term forgiving as a semantic marker of agreeableness. The failure of this study to provide support for expected statistically significant relationships between agreeableness and avoidance was consistent with McCullough et al. (2001). One might suppose an agreeable person would be more benevolent. It could also be suggested that an agreeable person would be less likely to avoid or have persistent negative ruminations about another person. Published research supports this notion; however, the current study did not.

A more heterogeneous sample could result in a general response set addressing a variety of transgressions or relationships. The previous research dealt with a wide variety of hurtful transgressions other than infidelity. It is possible that other types of transgressions elicit a wider variety of responses. Previous correlations between agreeableness and revenge or avoidance were likely measuring revenge, avoidance, and benevolent motivations from a across a range of transgressions. All participants in this study had the shared experience of discovering the sexual infidelity of their spouses. The only statistically significant correlation with agreeableness was revenge. People high in agreeableness were less likely to respond to revenge motivations even in response to sexual infidelity.

Hypothesis 3

Hypothesis 3 stated that extraversion would be positively correlated with benevolence and revenge, but negatively correlated with avoidance and rumination. Contrary to the results of Brose et al. (2005), this study failed to identify any statistically significant relationship between extraversion and motivations in forgiveness (benevolence, revenge, and avoidance). This research failed to support a statistically significant relationship between extraversion and rumination. The results of this study are consistent with Neff et al. (2007) which contradict Brose et al. (2005) regarding extraversion in forgiveness research.

Hypothesis 4

Hypothesis 4 stated that rumination and forgiveness would be negatively correlated with time since discovery. Time was operationally defined as the length of elapsed time since the initial discovery of infidelity in one's marriage. While results indicated a statistically significant relationship between rumination and time, no corresponding statistically significant result was found between forgiveness and the passage of time. The current study indicates that shorter time since discovery is related to increased levels of rumination; however, time had no statistically significant relationship with forgiveness.

Hypothesis 5

It was hypothesized that rumination would be negatively correlated with benevolence and positively correlated with revenge and avoidance. These findings support Paleari et al.'s (2005) determination that benevolence has a statistically significant negative relationship with rumination. Motivations for benevolence were consistent with reduced levels of rumination. Consistent with findings from Barber et al. (2005) and McCullough et al. (2001), support was found for a statistically significant positive relationship between rumination and revenge. A person experiencing high motivation for revenge is very likely experiencing a high level of rumination. Avoidance was found to have a statistically significant positive correlation with rumination in this study. A person that is actively attempting to avoid a transgressor is likely troubled with rumination about the offense.

McCullough et al. (2010), posits that rumination is based on the amount of time necessary to process forgiveness motivations. The current study provides statistically significant correlations between time since discovery and rumination. A statistically significant relationship was expected between time and forgiveness, but it was not found in this study.

Discovery of Details and Forgiveness

While not empirically verified, popular literature has touted the value of providing detailed descriptive information about infidelity to the offended spouse (Glass, 2003). It is not clear that providing extensive detail would have actual therapeutic benefit or whether it enhances forgiveness. In fact, it would seem that detailed information might increase rumination and be detrimental to healing over time. The current study proposed that contextual information like motivational, logistical, and sexual details specific to acts of sexual infidelity would evoke a differential response in cognitions and forgiveness.

Originally, it was hypothesized that information obtained by the offended spouse early in discovery would become the focus of ruminative processes. Intuitively, an expansive amount of information, for example, would result in greater amounts of rumination. Conversely, if the amount of information specific to the infidelity is restricted, then rumination would remain low. Therefore, less content would suggest less time in rumination, and with less time in rumination, would come a correspondingly lower time in forgiveness. The results of this study did not support this conclusion. While time since discovery indicated an important time-based relationship with rumination, it failed to show a statistically significant relationship to other variables in this study.

Hypothesis 6

Hypothesis 6 stated that the overall number of details regarding sexual infidelity would be negatively correlated with benevolence and forgiveness, but positively correlated with avoidance, revenge, and rumination. Contrary to popular literature that promotes a process of uncovering information relevant to infidelity (Glass, 2003), results of this study indicate there is no statistically significant relationship between an exchange of information specific to infidelity and forgiveness by the offended spouse. This study failed to find support for a statistically significant relationship between total amount of details learned about a spouse's extramarital sexual activity and motivations of forgiveness (benevolence, avoidance, and revenge). Additionally, results did not provide evidence of a statistically significant relationship between infidelity relevant information and rumination. Hypothesis 6 was not supported. There is no empirical verification in the literature and none offered by the current study for the contention that details enhance forgiveness or healing. The failure of these results to provide significance to the relationship between details of a hurtful transgression and the spouse's resulting level of forgiveness and rumination should be considered by clinicians and researchers before

touting the value of providing total access to information and details related to a spouse's extramarital sexual activity.

Hypothesis 7

Hypothesis 7 stated that offended spouses who indicated they had completely or mostly forgiven their partners would endorse a higher degree of knowledge about logistical details of the extramarital transgression than offended spouses who reported they had not forgiven or had only marginally forgiven their partners. Hypothesis 7 was not supported. Analysis failed to identify differences between knowledge of logistical details and people reporting they had completely forgiven or mostly forgiven their spouses and people who were only marginally forgiving of their spouses.

It is reasoned in the popular literature that details and amount of knowledge impact forgiveness. Judgments about the intentionality of infidelity are thought to promote empathy for the offending spouse. Therefore, it might be expected that an offended spouse's determination of responsibility or intentionality of the activity would promote the development of benevolence for the offending spouse (Gunderson & Ferrari, 2008). Determining the intentionality of a hurtful behavior allows the offended spouse to make judgments about the perceived consequences of the hurtful act the offending spouse made before the act was committed. This allows the offended spouse to make the following judgments regarding intentionality. The offended spouse may pass a judgment based on whether or not the offended spouse had an opportunity to avoid the hurtful behavior. Additionally, the offended spouse may make a judgment on whether or not the offending spouse was aware of the resulting pain that the offended spouse would incur and consequences that would result before making the decision for extramarital sexual activity. This sort of information could serve to moderate pain and promote empathy and forgiveness.

A questionnaire designed for the current study sought to identify such information, the knowledge of which would promote forgiveness or increased rumination. Metts (1994) first conceptualization of a hurtful relationship transgression was rules violations. Logistical details were designed to elicit information that might help an offended spouse make a judgment about the intentionality of the extramarital activity. If the activity was sufficient and ongoing to result in extensive planning and manipulation of the environment (i.e., taking time off from work in the middle of the day), then it would appear the offending spouse was highly committed to the extramarital activity. For example, one of the DID items is, "I was told about specific actions my spouse took to keep the affair a secret." Results from this study did not support such information as having an effect on forgiveness nor rumination. Levels of forgiveness and rumination were not significantly affected by or related to the amount of information the offended spouse knew about logistical types of information relevant to the extramarital sexual activity. This study once again failed to support contentions in the popular literature that offended spouse revelations of truthful details promote healing (forgiveness).

Hypothesis 8

Hypothesis 8 stated that offended spouses who indicated they had completely forgiven or mostly forgiven their partners would endorse a higher level of knowledge of motivational details of the extramarital transgression when compared with offended spouses who report they had not forgiven or had only marginally forgiven their partners. This study failed to provide support for a statistically significant relationship between forgiveness and quantity of motivational information the offended spouse knew about his or her spouse's extramarital sexual activity.

Metts (1994) identified interpretive consequences as an important approach to understanding the impact of a relational transgression such as sexual infidelity. She posited that sense could be made of a transgression through clarification of the offending spouse's expected consequences or objectives of involvement from engagement in a severe relationship transgression, extramarital sexual activity. The motivational details from the DID included items that polled for information related to the degree of disrespect for the offended spouse or expected potential harm from the relational transgression. The judgment is based upon the perceived impending disrespect or anticipated harm before the transgression was committed. In other words, the offended spouse will consider the offending spouse's behavior after he or she has contemplated potential harm and expected disrespect of the offended spouse but before the actual transgression occurs. Judgment is based upon the moment that the offending spouse chooses to act in spite of awareness for potential and likely harm to the offended spouse. That judgment may result in an offended spouse who is less forgiving.

The pre-transgression judgment of harm will likely mediate an offended spouse's responses to the actual transgression (Hoyt et al., 2005). These judgments of the offending spouse seem to be impacted by the pre-transgression quality of the relationship rather than the specific features of the transgression (Karremans et al., 2003). The results of this study failed to find evidence that knowledge of motivations for extramarital sexual activity is significantly related to forgiveness. In addition, knowledge of pre-transgression motivations did not significantly affect rumination. It appears that some other feature of

the extramarital sexual activity is mediating responses between the offended spouse's knowledge of the extramarital sexual activity and levels of forgiveness. Perhaps, an understanding for the motivating factors of extramarital sexual activity would be more informative than a simplistic accounting of the amount of knowledge one has about his or her spouse's extramarital sexual activity.

Hypothesis 9

Hypothesis 9 stated that offended spouses who indicated they had completely forgiven or mostly forgiven their partners would endorse a lower level of knowledge regarding sexual details of the extramarital transgression when compared to offended spouses who reported they had not forgiven or had marginally forgiven their partners. The hypothesis was based on the idea that with greater sexual information about the extramarital sexual activity there would be a greater motive for revenge and less overall forgiveness. Metts' (1994) third approach to conceptualization of a relationship transgression is sexual behaviors. She posits that relationships exist upon a continuum. The continuum proceeds from platonic to shared sexual behavior. Results from this study did not support a statistically significant relationship between knowledge of the sexual details regarding his or her spouse's extramarital sexual activity and forgiveness. The results of this study do not appear to support a relationship between memory and forgiveness as reported by Barber et al. (2005), who found that control of angry memories is significantly related to rumination and self-forgiveness.

Summary

Discovery of sexual infidelity often is accompanied by a strong desire to know all information relevant to extramarital sexual infidelity of a spouse (Peluso, 2007). The

current study explored what may affect forgiveness in one spouse after discovering extramarital sexual activity by the other. Contextual information like motivational, logistical, and sexual details specific to acts of sexual infidelity were hypothesized to evoke a differential response in rumination and forgiveness. Popular literature currently promotes a process of healing that begins with encouragement of the offending spouse to reveal an extensive description of all behaviors, sexual or otherwise, relevant to the extramarital sexual activity. Olson et al. indicate that as of 2002 total revelation of details lacked empirical support as a therapeutic technique. A review of the literature since that time has not revealed any other empirical support.

If rumination is instrumental in the process of forgiveness, then it would be likely that a large amount of transgression-relevant information may impact forgiveness through practice effects of rumination. It was hypothesized that increasing amounts of information relevant to the infidelity would be accompanied by increasing levels of rumination and diminishing levels of forgiveness.

The results of this study fail to provide support for the contention that acquisition of infidelity relevant information has a statistically significant relationship to healing or forgiveness. A statistically significant relationship between forgiveness and rumination occurred. No statistically significant results were obtained for details and its effects on rumination or forgiveness. As expected, a statistically significant negative relationship between time since discovery and rumination was observed. People tended to ruminate less as time passed. However, the results of the current study failed to support a relationship between time and forgiveness. Revenge motivations appeared to be important in this with results indicating a statistically positive significant relationship between revenge and rumination as well as neuroticism. Greater levels of revenge motives were associated with lower levels of forgiveness. A statistically significant negative relationship was found between revenge and agreeableness. People with higher levels of agreeableness reported less revenge motive. Rumination had a statistically significant relationship with benevolence, avoidance, and revenge. Benevolence had a statistically significant negative relationship with neuroticism. Processes of forgiveness (revenge, avoidance, and benevolence) were correlated with a single forgiveness item on the questionnaire. The single forgiveness item displayed statistically significant correlations with the TRIM-12, avoidance, revenge, and benevolence subscales.

Limitations

This study's primary limitations were related to the nature of the sample. The limitation of imposing requirements for participation resulted in a sample in which all participants shared the common experience of discovering a spouse's sexual infidelity. The information specific to people who have experienced discovery of sexual infidelity of a spouse comes at the cost of decreased generalization of forgiveness to other populations. Further, since participation was voluntary, individuals more prone to avoidance as a coping style may have chosen not to participate or abandoned their participation if they became too uncomfortable with the topic.

A second area of concern was the racial composition of the sample. Interestingly, this survey resulted in a largely homogeneous sample. As reported in Chapter Three, this sample was predominantly Caucasian. This was quite unexpected because invitations to participate were posted on openly accessible websites and services specific to infidelity.

Hofstede's theory of cultural differentiation would assert that the homogeneity of the sample may have been a function of the cultural reactions of potential participants and the topic of the survey (Hofstede, 1998). It is likely that sexual infidelity would cause a person to call tacit knowledge of cultural lessons of tolerance for uncertainty and indulgence with respect to social norms. Some cultures would likely have reacted with avoidance to the discussion of sex in general. Others may have found the topic insignificant in favor of more defining power relationships within their specific groups. Whatever the mitigating factors that resulted in this sample, it may have impacted the generalizability of the findings. The unique contributions should be replicated with care taken to minimize items that may trigger cultural bias. It remains unclear whether a more racially diverse sample would have produced different results.

Although many of the reported correlations in the present study were statistically significant, the effect sizes were small. There may be other variables that correlate more highly.

Future Research

Results of this study provide support to previously established relationships between neuroticism, agreeableness, and revenge motivations. Many of the expected relationships between personality dimensions (neuroticism, agreeableness) and forgiveness (benevolence, avoidance) were not obtained and suggest a need for further research. Correlations between personality and forgiveness were statistically significant with revenge. Neither avoidance nor benevolence was correlated with Big Five personality factors in this study. Interestingly, revenge was correlated with nearly all study variables; however, it was not correlated with relationship status (married, separated, divorce). Relationship status was reported as one of the following: married, separated, divorced, or remarried. While revenge was not correlated with relationship status, benevolence was associated with relationship status. Perhaps a careful exploration of the relationship between revenge motivations and benevolence motivations might prove fruitful. Collection of a larger and more diverse sample may provide important information on personality types and range of forgiveness not represented in small samples. Future research should consider the implications of motivations of avoidance in the collection of data and understanding of the forgiveness process in close relationships. This would limit findings concerning motivations of avoidance due to a limited sample.

There was some indication that an offended spouse's reason for extramarital activity may be more important in forgiveness than simply an accounting of specific details relevant to the extramarital activity. A careful examination of the offended spouse's reasoning for extramarital activity or the nature of the extramarital sexual activity may impact rumination and forgiveness more than the amount of knowledge the offended spouse has about his or her spouse's extramarital sexual activity. While the original hypothesis presupposed a relationship between quantity of information and resulting rumination and forgiveness, the results of the study failed to support that contention.

Future research should explore the value of providing details of a spouse's extramarital sexual activity and measuring degree of satisfaction with the amount of information provided. The push in popular literature for disclosing information relevant to infidelity is ubiquitous and highlights a need for continuing research in this matter. Carefully controlled clinical studies may clarify whether there is therapeutic value in providing such detail. It would also provide information on people who have a strong avoidance tendency who may not have participated in proportional numbers in this volunteer sample.

APPENDIX A

JUSTIFICATION OF POTENTIAL

REVELATIONS

Potential Revelation Questions and Justifications

Logistical Information (Rules Violations)

Justification

1. I was provided the sexual partners name and/or personal information. Glass (2003)-Re-establishing the primacy of the marital relationship 2. I was told *how/when* my spouse and the sexual partner came to know one another. means changing alliances to include the spouse by providing ESA detail. 3. I was told of actions taken by my spouse to engage in and maintain extramarital sexual activity. Struthers, C. W., Dupuis, R., & Eaton, J (2005)-Intentional actions imply malice or indifference toward the offended spouse. Reeder, G. D., Vonk, R., Ronk, M. J., Ham, J., & Lawrence, M. (2004)4. I know if family resources were used during the planning or maintenance of extramarital Fincham (2000)-Assessing the degree to which the offense is caused by the offender. Greater intentionality results in less forgiveness. sexual activity. 5. I know my spouse *conspired* with the sexual partner to keep extramarital sexual activity a Metts, S. (1994)-Loss of face is an obstacle to forgiveness. secret from me. Aquino, K., Tripp, T. M., & Bies, R. J. (2006) 6. My spouse has given me a sincere apology. Eaton, J. & Struthers, C. W. (2006)-acknowledgement of a transgression and an acknowledgment of the harm that it caused promote forgiveness. (Ohbuchi et al., 1989) 7. I know the general timeframe of my spouse's extramarital sexual activity. Mullet, E. & Girard, M. (2000)-time in transgression affects likelihood of forgiveness. McCullough, M. E., Fincham, F. D., & Tsang, J. (2003)-Time is an intrinsic aspect of forgiveness. Motivational Information (Interpretive Consequences) 1. My spouse believed that the extramarital sexual activity would never be known by me or Cupach, W. & Metts, S. (1994)-The less that is known publicly, the our family members. more likely that forgiveness can occur. Saving face is important in interpersonal satisfaction and relationships. 2. My spouse revealed that he/she felt neglected or dissatisfied in our relationship before the Fehr R., Gelfand, M. J., & Nag, M. (2010)- When offender extramarital sexual activity occurred. perspectives are understood, victims are more motivated to forgive. 3. My spouse revealed a desire for companionship as a reason for extramarital sexual activity. Fehr, R., Gelfand, M. J., & Nag, M. (2010)-Development of empathy 4. My spouse endorsed a need for sexual excitement or freedom as a motivation for extramarital increases the chance of forgiveness. sexual activity. 5. My spouse confirmed or denied the wish for a divorce. Fehr, R., Gelfand, M. J., & Nag, M. (2010)-When offender perspectives are understood, victims are more motivated to forgive.

- 6. My spouse confirmed that alcohol or substance use played a contributing role in the extramarital sexual activity.
- 7. I have been provided an explanation about how or why the extramarital sexual activity was repeated or continued.

McCullough, M. E., Fincham, F. E., & Tsang, J. (2003)-Victims will take steps to avoid similar harm in the future.

APPENDIX B

WEBSITES LISTING AN INVITATION

TO PARTICIPATE

Invitations to participate in this research were posted at the following locations:

http://psych.hanover.edu/research/exponnet.html

www.infidelity.com

www.infidelitysurvival.com

couplesintrouble.com

yahoogroups.com/survivinginfidelity.com

APPENDIX C

HUMAN SUBJECTS INSTITUTIONAL

REVIEW BOARD PROPOSAL

DEPARTMENT HEAD APPROVAL FORM

TO: Barbara Talbot, Office of University Research

btalbot@latech.edu

318-257-5075 phone

318-257-5079 fax

http://research.latech.edu/

FROM: Karen Suggs Roper ksr002@latech.edu 318-523-9021

> Donna B. Thomas, Ph.D. dthomas@latech.edu 318-257-4040

SUBJECT: HUMAN USE COMMITTEE REVIEW

DATE: June 9, 2011

The signature of the Department Head is stating that he is aware of this proposal and survey that are being conducted.

Department of Psychology and Behavioral Sciences

Tilman Sheets, Ph.D.

<u>6.9.11</u> Date

879

STUDY/PROJECT INFORMATION FOR HUMAN SUBJECTS COMMITTEE

TITLE: Forgiving a Severe Relational Transgression: A cognitive processing view of forgiveness.

PROJECT DIRECTOR(S):	Donna B. Thomas, Ph.D. <u>dthomas@latech.edu</u>
	Karen S. Roper ksr002@latech.edu
PHONE:	318-624-4781 or 318-257-4315

DEPARTMENT(S): Department of Psychology and Behavioral Science

PURPOSE OF STUDY/PROJECT: This project explores the unique experiences of the offended spouse following the discovery of sexual infidelity within a marriage. It will explore the relationship, if any, between infidelity relevant information and cognitive processes of forgiveness and rumination. Personality factors of the offended spouse will be surveyed and compared to rumination and processes of forgiveness.

SUBJECTS: Approximately 300 volunteers will complete the web-based survey study of infidelity and forgiveness. Participants are limited to those 18 years of age and older. In addition, only those respondents who report an historical event of discovery of infidelity in a marriage will be invited to complete the study.

PROCEDURE: Participants will respond to an invitation to participant placed on surveymonkey.com and survivinginfidelity.com. Participation will be done through a web-based survey of infidelity and its effects on forgiveness. As respondents endorse appropriate age and condition choices, they will sign informed content where they will be immediately redirected to the full survey online. Participants will endorse traditional demographics like age and gender with more specific information on country of residence, religious values, and personal attitudes toward infidelity. Following completion of the demographics questionnaire, the respondents will complete the TRIM-18, RIO, BFI, and a Discovery of Infidelity relevant Details (DID) questionnaire. Participation is protected through anonymity and responses are confidential. No identifying information will be collected or stored. Responses will be stored on a web-based survey preceding analysis of the data.

INSTRUMENTS AND MEASURES TO INSURE PROTECTION OF CONFIDENTIALITY, ANONYMITY:

Forgiveness-	Transgression of Interpersonal Motivations (TRIM-18) is an 18-item measure of the three established factors of forgiveness: benevolence, avoidance, and vengefulness.
Personality-	The Big Five Inventory (BFI) is a 44-item instrument that
	Provides a quick, efficient inventory of five personality dimensions.
Rumination-	Rumination about an Interpersonal Offense (RIO) is a good measure of rumination about a specific event. It is useful for
	assessing changes in rumination over time or with regards to contextual factors of a specific hurtful event.
Infidelity Revelations-	Discovery of Infidelity relevant Details (DID) is a questionnaire developed for exploration of potential infidelity relevant revelations that may be uncovered during the course of the discovery of the severe relational transgression of infidelity.

RISKS/ALTERNATIVE TREATMENTS: The participant understands that Louisiana Tech is not able to offer financial compensation nor to absorb the costs of medical treatment should you be injured as a result of participating in this research.

BENEFITS/COMPENSATION: None

SAFEGUARDS OF PHYSICAL AND EMOTIONAL WELL-BEING: This study involves no treatment or physical contact. All information collected from the survey will be held strictly confidential. No others beyond researchers will be allowed access to the survey, and access to stored data will be limited to the immediate researchers.

HUMAN SUBJECTS CONSENT FORM

TITLE OF THE PROJECT: Forgiving a Severe Relational Transgression: A cognitive processing view of forgiveness.

PURPOSE OF THE STUDY: This project explores the unique experiences of the offended spouse following the discovery of sexual infidelity within a marriage. It will explore the relationship, if any, between infidelity relevant information and cognitive processes of forgiveness and rumination. Personality factors of the offended spouse will be surveyed and compared to rumination and processes of forgiveness.

PROCEDURE: Approximately 300 volunteers will complete the web-based survey study of infidelity and forgiveness. Participants are limited to those 18 years of age and older. In addition, only those respondents who report an historical event of discovery of infidelity in a marriage will be invited to complete the study.

INSTRUMENTS:

Forgiveness-	Transgression of Interpersonal Motivations (TRIM-18) is an 18-item measure of the three established factors of forgiveness: benevolence, avoidance, and vengefulness.
Personality-	The Big Five Inventory (BFI) is a 44-item instrument that provides a quick, efficient inventory of five personality dimensions.
Rumination-	Rumination about an Interpersonal Offense (RIO) is a good measure of rumination about a specific event. It is useful for assessing changes in rumination over time or with regards to contextual factors of the hurtful event.
Infidelity Revelations-	Discovery of Infidelity relevant Details (DID) is a questionnaire developed for exploration of potential infidelity relevant revelations thatmay be uncovered during the course of the discovery of infidelity.

RISKS AND ALTERNATIVE TREATMENTS: The participant understands that Louisiana Tech is

not able to offer financial compensation nor to absorb the costs of medical treatment should you be injured as a result of participating in this research. The following disclosure applies to all participants using online survey tools: This server may collect information and your IP address indirectly and automatically via "cookies".

BENEFITS/COMPENSATION: Participants will receive no remuneration of any kind.

I, _____, attest with my signature that I have read

and understood the following description of the study, "Forgiving a Severe Relational Transgression: A

cognitive processing view of forgiveness.", and its purposes and methods. I understand that my

participation in this research is strictly voluntary and my participation or refusal to participate in this study

will not affect my relationship with Louisiana Tech University or my grades in any way. Further, I understand that I may withdraw at any time or refuse to answer any questions without penalty. Upon completion of the study, I understand that the results will be freely available to me upon request. I understand that the results of my survey will be confidential, accessible only to the principal investigators, me, or a legally appointed representative. I have not been requested to waive nor do I waive any of my rights related to participating in this study.

Signature of Participant

Date

CONTACT INFORMATION: The principal experimenters listed below may be reached to answer questions about the research, participant's rights, or related matters.

Karen Roper	ksr002@latech.edu	318-624-4781
Donna Thomas, Ph.D.	dthomas@latech.edu	318-257-4315

Members of the Human Use Committee of Louisiana Tech University may also be contacted if a problem cannot be discussed with the experimenters:

Dr. Les Guice (257-3056) Dr. Mary M. Livingston (257-2292 or 257-4315)

APPENDIX D

INSTITUTIONAL REVIEW BOARD

(IRB) APPROVAL



OFFICE OF UNIVERSITY RESEARCH

TO: Mrs. Karen Suggs Roper and Dr. Donna Thomas

FROM: Barbara Talbot, University Research

SUBJECT: HUMAN USE COMMITTEE REVIEW

DATE: June 21, 2011

In order to facilitate your project, an EXPEDITED REVIEW has been done for your proposed study entitled:

"The Relationship between Personality and Forgiveness of Sexual Infidelity in Marriage"

HUC 879

The proposed study's revised procedures were found to provide reasonable and adequate safeguards against possible risks involving human subjects. The information to be collected may be personal in nature or implication. Therefore, diligent care needs to be taken to protect the privacy of the participants and to assure that the data are kept confidential. Informed consent is a critical part of the research process. The subjects must be informed that their participation is voluntary. It is important that consent materials be presented in a language understandable to every participant. If you have participants in your study whose first language is not English, be sure that informed consent materials are adequately explained or translated. Since your reviewed project appears to do no damage to the participants, the Human Use Committee grants approval of the involvement of human subjects as outlined.

Projects should be renewed annually. This approval was finalized on June 21, 2011 and this project will need to receive a continuation review by the IRB if the project, including data analysis, continues beyond June 21, 2012. Any discrepancies in procedure or changes that have been made including approved changes should be noted in the review application. Projects involving NIH funds require annual education training to be documented. For more information regarding this, contact the Office of University Research.

You are requested to maintain written records of your procedures, data collected, and subjects involved. These records will need to be available upon request during the conduct of the study and retained by the university for three years after the conclusion of the study. If changes occur in recruiting of subjects, informed consent process or in your research protocol, or if unanticipated problems should arise it is the Researchers responsibility to notify the Office of Research or IRB in writing. The project should be discontinued until modifications can be reviewed and approved.

If you have any questions, please contact Dr. Mary Livingston at 257-4315.

A MEMBER OF THE UNIVERSITY OF LOUISIANA SYSTEM

P.O. BOX 3092 • RUSTON, LA 71272 • TELEPHONE (318) 257-5075 • FAX (318) 257-5079 AN EQUAL OPPORTUNITY UNIVERSITY

APPENDIX E

AUTHOR PERMISSION TO USE THE

TRANSGRESSION-RELATED

INTERPERSONAL

MOTIVATIONS

INVENTORY

Date:	Thu, 10 Mar 2011 09:39:59 -0500 [03/10/11 08:39:59 CDT]
From:	<u>Michael McCullough <mikem@miami.edu></mikem@miami.edu></u> 🖷
To:	Karen Suggs Roper <ksr002@latech.edu></ksr002@latech.edu>
Subject:	Re: permission to use the TRIM
Dear Karen:	-

Thanks for your note. Please feel free to use the scale. I'd like to hear more about your work as you move forward. Do you know our recent paper in Emotion? You might find it to be of interest for the work you are doing.

Good luck in your work! And say hi to Mark Miller, Tony Young, Mary Livingston, or Jerry Tobacyk for me if you see them. My first academic job was at LA Tech!

All best wishes,

Mike

On 3/9/11 11:03 PM, Karen Suggs Roper wrote: [Hide Quoted Text]

Good Morning Dr. McCullough,

I have enjoyed reading your research. I would like to use the Trim (18 itemsrevenge, avoidance, and benevolence) in conducting dissertation research on the forgiveness of a severe relational transgression within a married couple. I will be looking at memory consolidation issues associated with forgiveness and rumination. I appreciate your interesting research, and I hope to add to this growing body of work.

Best regards,

Karen S. Roper Counseling Psychology

This message was sent using IMP, the Internet Messaging Program.

Michael McCullough Department of Psychology P.O. Box 248185 Coral Gables, FL 33124-0751 e-mail: <u>mikem@miami.edu</u> Phone: (305) 284-8057

www.psy.miami.edu/faculty/mmccullough

APPENDIX F

AUTHOR PERMISSION TO USE THE

RUMINATION ABOUT

INTERPERSONAL

OFFENSE SCALE

.

Author Permission to Use the RIO

Author Permission to us the RIO RE: Rumination About an Interpersonal Offense scale (RIO) Wednesday, March 24, 2010 1:36 PM From: "Wade, Nathaniel G [PSYCH]" <nwade@iastate.edu> Add sender to Contacts To: "Karen Suggs" <karenropercairo@yahoo.com> Message contains attachments

contains attachments PDF 1 File (16KB)

• <u>Rumination about an Interpersonal Offense_RIO_Scale.pdf</u> Here is the RIO . Feel free to use it in your dissertation. If you do use it I would be interested in the results that you find with it. Dr Wade

APPENDIX G

DISCOVERY OF INFIDELITY RELEVANT

DETAILS QUESTIONNAIRE

Discovery of Infidelity Relevant Details

Potential Transgression Revelation Questionnaire

Directions: Please choose EACH item that best describes the process of information discovery during the first three months following the revelation of sexual infidelity within a marriage or cohabiting relationship. If you were not provided the identified information, simply do not check that item.

Logistical Information (Rules Violations)

- I was provided identifying information about the sexual partner like his or her name or other personal information.
- 2. I was told *how/when* my spouse and the sexual partner came to know one another.
- 3. I was told of specific actions taken by my spouse to either continue the extramarital sexual activity or to begin the extramarital activity.
- 4. I know the general time frame of my spouse's involvement in extramarital sexual behavior.
- 5. I was told about family resources used for the promotion of extramarital activity or the maintenance of extramarital activity. (example: Was there internet contact, a secret cell phone, or was contact limited to the confines of the work environment?)
- 6. I was told that my spouse *conspired* with the sexual partner to keep extramarital sexual activity a secret from me or others.
- 7. My spouse has given me a sincere apology.

Motivational Information (Interpretive Consequences)

- My spouse believed that his or her behavior was secret. That is he or she believed the extramarital sexual behaviors would not be discovered by me or others.
- 2. My spouse revealed that he/she felt dissatisfied or neglected in our relationship before the extramarital sexual relationship was begun.
- 3. My spouse either confirmed or denied the wish for a divorce.
- 4. My spouse confirmed that alcohol or substance use played a contributing role in the extramarital sexual activity.
- 5. My spouse revealed a desire for companionship as a reason for extramarital sexual activity.
- My spouse endorsed a need for sexual excitement or freedom as a motivation for extramarital involvement.
- 7. I have been provided and explanation about how or why the extramarital sexual activity was repeated or continued.
- 8. Other. Please briefly explain your personal experiences.

Spectrum of Sexual Activities (Actions of sexual response)

- 1. My spouse reported the viewing of pornography only.
- 2. My spouse confirmed there were hugs, kisses, or heavy petting with sexual partner(s).
- 3. My spouse revealed that oral sex received from extramarital sexual partner.
- 4. My spouse revealed that oral sex given to the extramarital sexual partner.
- 5. My spouse reports the activity of sexual intercourse.

- 6. My spouse admitted to monetary exchange for sexual activity.
- 7. My spouse admitted that the extramarital sexual activity resulted in a pregnancy.
- 8. My spouse reported internet activity with another person, but there was no meeting in person.
- 9. My spouse reported internet activity which developed into meeting in person.
- 10. Other: Please briefly explain if your circumstances are more unique that what the options provided here.

At this time, the DID is for **non-commercial uses only**. If you are interested in using the DID for research purposes, please provide your findings as a professional courtesy to the following email: karenropercairo@yahoo.com

You should reference this dissertation for your research purposes. Thank you for your interest.

Roper, Karen S. (not yet published). Forgiveness: The relationship between personality and conceptualization of a severe relationship transgression. Louisiana Tech University. Ruston, Louisiana.

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