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Reactions to Infidelity: Individual, Gender, and Situational Predictors of Relationship Outcome and Forgiveness

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UNIVERSITY OF MIAMI

REACTIONS TO INFIDELITY: INDIVIDUAL, GENDER, AND SITUATIONAL
PREDICTORS OF RELATIONSHIP OUTCOME AND FORGIVENESS

By

Marcia B. Kimeldorf

A DISSERTATION

Submitted to the Faculty
of the University of Miami
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the degree of Doctor of Philosophy

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Infidelity in romantic relationships can be devastating, and can cause many complex emotional reactions. The Jealousy as a Specific Innate Module (JSIM) hypothesis posits that due to differing reproductive pressures over evolutionary history, men and women have evolved different mechanisms to respond to infidelity. JSIM proposes that men, due to fears of cuckoldry, will respond with intense jealousy to a partner's sexual infidelity. It proposes that women, who are certain of their maternity but may suffer severe consequences if their mate falls in love with another and diverts his resources elsewhere, will respond with intense jealousy to emotional infidelity. These gender effects were examined in a study of participants who had recently been cheated on sexually, emotionally, or both, by romantic partners. Distress, forgiveness, and couple identity were measured. Results among actual victims of infidelity failed to support the JSIM hypotheses. Men and women responded with similar levels of distress to both types of infidelity. Both men and women were less forgiving as sexual infidelity severity increased, yet the severity of sexual infidelity was associated positively and significantly with less forgiveness for women, and it was associated less positively and non-significantly with less forgiveness for men. Men reported more couple identity after infidelity than did women. In a larger sample that used hypothetical scenarios, it was

found that men responded with more upset to sexual infidelity and women responded with more upset to emotional infidelity when using a forced choice method.

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Chapter 1

Literature Review of Forgiveness and Infidelity

Most people desire and pursue committed romantic relationships. Along with friendship and relationships with family members, they tend to be the most fulfilling relationships we have, and many would argue that a relationship with a romantic partner can bring more joy and satisfaction than any other kind of human relationship. However, along with the potential for great joy comes the potential for intense pain. The discovery that one's partner has been unfaithful, or has "cheated," can be an intensely painful experience, eliciting reactions such as rage, hurt, intense distress, loss of trust, decreased personal and sexual confidence, damaged self-esteem, fear of abandonment, and desire to leave the partner (Charny & Parnass, 1995; Sabini & Green, 2004).

Considering how much pain infidelity can bring to the afflicted, it remains remarkably common. According to the 1994 General Social Survey of 884 men and 1,288 women who had ever been married, (Davis & Smith, 1994), 22.7% of men and 11.6% of women reported ever having engaged in extramarital sex. Lauman et al. (1994) reported that 25% of married men and 15% of married women admitted to having engaged in extramarital sex at least once—slightly less than 4% of the sample during the previous year. Shackelford & Buss (1997) estimated that the lifetime prevalence of marital infidelity ranges from 26% to 70% for women and 33% to 75% for men. Due in part to the secretive nature of infidelity and its general social unacceptability, as well as to varying definitions of what constitutes infidelity, these estimates range widely and are very difficult to pin down more precisely.

Regardless of the specific percentages of people engaging in extramarital relationships, the devastation left in the wake of infidelity is apparent anywhere we look. Infidelity receives a great deal of attention on talk shows, soap operas, internet sites, chat forums, and in popular books. It is the most frequently cited reason for divorce among married couples (Shackelford & Buss, 1997). In a national survey of marital therapists, extramarital affairs was second only to physical abuse as being the most damaging problem in romantic relationships. Nevertheless, despite the pain it can cause, not every time an infidelity occurs does the relationship end. Often there are attempts at repairing the relationship, forgiving the straying spouse, and moving on. But, what factors make it more or less likely that a person who has been cheated on will try to forgive his or her partner? Are there sex differences in the likelihood that a person will forgive a romantic partner's infidelity? Does it depend on the nature of the infidelity? And, first, more generally, what general factors tend to lead to forgiveness in such situations?

Forgiveness

Although there is no one definition of forgiveness upon which all researchers agree (Worthington, 1998), most definitions of forgiveness involve a transformation in which the motivation to seek revenge against the transgressor and/or to avoid contact with the transgressor is lessened and prosocial motivation toward the transgressor is restored. McCullough, Worthington and Rachal (1997) defined interpersonal forgiving as “the set of motivational changes whereby one becomes (a) decreasingly motivated to retaliate against an offending relationship partner, (b) decreasingly motivated to maintain estrangement from the offender, and (c) increasingly motivated by conciliation and goodwill for the offender, despite the offender's hurtful actions” (p. 321-322).

McCullough, Pargament and Thoresen (2000) identified a common feature of all definitions of forgiveness. They proposed that when people forgive, their responses toward people who have offended or injured them become more positive and less negative, and that even though the interpersonal offense initially elicited negative thoughts, feelings, motivations or behaviors toward the offending person, those responses become more prosocial when they forgive.

In some senses, forgiveness is a psychological construct (McCullough et al., 2000) because the forgiver changes his thoughts, feelings, motivations and/or behaviors. Several personality traits are associated with the propensity to forgive. Forgiving people tend to be less anxious, depressed and hostile (Mauger, Saxon, Hamill, & Pannell, 1996), less ruminative (Metts & Cupach, 1998), less exploitative, less narcissistic (Davidson, 1993), and more empathic (Tangney et al., 1999) than people who are less forgiving. Self-ratings of the disposition to forgive also correlate negatively with scores of hostility and anger (Tangney et al, 1999).

However, besides its intrapersonal dimension, forgiveness also has an interpersonal dimension: The person who forgives a transgression has to forgive another person (McCullough et al., 2000). Indeed, much research has been conducted to figure out what interpersonal processes facilitate forgiveness. For example, people tend to have more difficulty forgiving transgressions that seem to be intentional, that are severe, and that have more serious consequences (Boon & Sulsky, 1997; Girard & Mullet, 1997). The degree to which an offender apologizes for a transgression and seeks forgiveness also seems to influence a victim's likelihood to forgive (Girard & Mullet, 1997; McCullough, Worthington & Rachal, 1997; McCullough et al., 1998).

Although the literature and scholarly interest in forgiveness has expanded dramatically in recent years, studies of forgiveness thus far have not focused much on differences in forgiveness depending on the type of transgression experienced by the person who has been harmed or on how the dynamics of forgiveness may vary as a result of the type of relationship (Fincham, 2000).

Forgiveness in Close Relationships

However, when considering the topic of infidelity, the afflicted people by definition are involved in a close sexual or romantic relationship. Recent research has looked at forgiveness in close relationships specifically. Even though forgiving someone who has hurt us is often a difficult process that may take substantial time and effort, there are many reasons it may be beneficial. Assuming that the romantic partners have decided to continue the relationship, forgiveness following a transgression has been found to be associated with better relationship functioning and satisfaction, particularly within intimate partner relationships (Fincham & Beach, 2001). Spouses report that the capacity to seek and grant forgiveness is one of the most important factors contributing to their marital longevity and satisfaction (Fenell, 1993).

Several studies have investigated forgiveness of romantic partner transgressions specifically, although most have not separated infidelity-related transgressions from non-infidelity transgressions. McCullough et al. (1998) found that romantic partners who were more satisfied with and committed to their partners also scored higher on measures of the extent to which they had forgiven their partners for the most severe offenses in the histories of the relationship and the most recent offenses in the histories of their relationships. McCullough et al. (1998) also found evidence to support the idea that

relationship closeness facilitates forgiveness and the idea that forgiveness makes the reestablishment of closeness following a transgression easier and smoother. Besides relationship-level variables such as satisfaction, commitment and closeness, forgiveness can also be predicted by offense-level variables like apology and the transgression's impact, and social-cognitive variables like offender-focused empathy and rumination about the offense (McCullough et al, 1998).

Finkel, Rusbult, Kumashiro and Hannon (2002) examined forgiveness of a variety of transgressions in romantic relationships within the context of interdependence theory (Kelley & Thibaut, 1978), linking forgiveness to levels of commitment. They found that compared to less committed individuals, highly committed individuals are more likely to forgive partners' acts of betrayal. In their study of Italian husbands and wives from long term marriages, Fincham, Paleari, and Regalia (2002) found that having a self-identified strong marriage predicted attributing a spouse's negative behavior to benign causes, which in turn facilitated forgiveness, both directly and also via affective reactions and emotional empathy in response to hypothetical negative partner behaviors. Kachadourian, Fincham and Davila (2005) found that having simultaneously strong positive and strong negative feelings toward one's partner was associated with decreased forgiveness after a transgression, but only when the partners thought about the transgression frequently. When the husbands and wives did not ruminate about the transgression, no relationship was found between attitudinal ambivalence and forgiveness.

From this limited review, it is clear that a number of variables contribute to the likelihood that one would be inclined to forgive a romantic partner who has hurt him or her. In addition to these individual level, relationship level and offense level variables

(McCullough, 1998), there may also be sex differences in forgiveness among romantic partners. Fincham, Beach and Davila (2004) found that forgiveness is associated with better conflict resolution among married couples, and that different motivations by the wife and the husband were predictive of greater forgiveness. Couples in their third year of marriage were asked to recall an incident in their relationship where they “felt most wronged or hurt by your partner.” They then rated their levels of marital satisfaction, amount of forgiveness and styles of conflict resolution. Retaliation and benevolence emerged as two dimensions of forgiveness. They found that husbands’ motivation to retaliate predicted poorer wife-reported conflict resolution, and that wives’ motivation toward benevolence predicted husbands’ reports of better conflict resolution. In a second study of longer-term marriages, a third dimension of forgiveness (motivation to avoid) was added. Fincham et al. (2004) again found that wives’ benevolence predicted better conflict resolution, and additionally found that husbands’ level of avoidance in response to the transgression predicted wives’ reports of poorer conflict resolution. This study highlights that there may be sex differences in forgiveness, at least among romantic partners.

Although these studies provide some useful background for considering the nature of forgiveness in romantic relationships, they do not investigate the specific contours of forgiveness within any particular type of transgression—for example, infidelity. As discussed previously, infidelity is a unique and very serious offense and there is a large body of work suggesting that men and women might respond in different ways to infidelity-related transgressions (although this work is only tangentially related to work on forgiveness). This idea, as well as a review of the smattering of studies that have

empirically addressed the specific issue of sex differences in forgiveness in the context of romantic infidelity (e.g., Phillips, 2005; Shackelford, et al., 2002), will be addressed below. First, it is important to review the theoretical and empirical work that has been done on sex differences in response to romantic partner infidelity.

Evolutionary Theories about Responses to Infidelity

In recent years, evolutionary psychologists have paid substantial attention to sex differences in responses to romantic partner infidelity--specifically, whether men and women react differently to infidelity depending on the type of affair. The distinction that receives the most attention in the literature is that between sexual infidelity and emotional infidelity. Sexual infidelity is usually conceptualized as a physical, sexual relationship that has little or no emotional attachment. Emotional infidelity, in contrast, is typically conceptualized as a deep emotional connection or bond that does not have a sexual component.

The Prevailing Evolutionary Hypothesis for Sex Differences in Response to Infidelity

Speaking broadly, the prevailing evolutionary predictions made based on this dichotomy are that men will be more distressed by sexual infidelity in a romantic partner and women will be more distressed by an emotional infidelity by a romantic partner. According to sexual strategies theory (Buss & Schmitt, 1993), the two sexes have faced different adaptive problems and evolutionary pressures because of the biological differences in human reproduction for males and females. Because fertilization and gestation occur internally, women can always be 100% secure that any child they bear is genetically theirs. Men, however, have no such assurance. For a man, a single sexual infidelity by his partner could result in him being cuckolded (unknowingly investing

resources in the care of another man's genetic offspring). Cuckoldry severely compromises a man's evolutionary fitness because a cuckolded man unwittingly diverts a portion of his finite reservoir of time and energy toward helping to ensure the survival of a child to whom he is not genetically related, effectively at the expense of his own present or future children. Researchers have estimated that the rate of cuckoldry in modern western societies is as high as 25% (Baker & Bellis, 1995), a statistic which underscores the significance of this risk.

Researchers with an interest in sexual jealousy have suggested that this fear of cuckoldry would have caused men to evolve a tendency to be particularly distressed upon finding that their partner has been sexually unfaithful. Women's absolute certainty of their maternity eliminates the possibility of cuckoldry. Thus, for a woman, one act of pure sexual infidelity by her partner should not be as catastrophic, since her genetic maternity is not compromised and her investments can remain oriented entirely toward her genetic children. If her husband becomes emotionally involved with another woman, however, there is a risk that his energy, commitments, and resources will go toward supporting the other woman and her offspring. This risk is serious and potentially very costly to a woman, who could then potentially lose all contributions of resource provisioning, protection, and nurturance from the male to help in the raising of her children, which substantially compromises her genetic fitness. Evolutionary theorists (e.g., Daly et al., 1982; Symons, 1979) thus have predicted that women would be particularly distressed by discovering that their partner has been emotionally unfaithful.

Sexual Jealousy as Sexually Dimorphic Evolved Jealousy Mechanism

Therefore, some theorists have proposed that men have evolved a specific innate psychological mechanism designed to respond to threats of sexual infidelity with intense jealousy and that women have evolved an innate psychological mechanism to respond to threats of emotional infidelity with intense jealousy (e.g. Buss et al, 1992). Harris (2000) has termed this hypothesis “jealousy as a specific innate module,” or J-SIM.

The forced-choice hypothetical infidelity paradigm for evaluating the J-SIM hypothesis. Buss, Larsen, Westen, and Semmelroth (1992) developed a forced-choice hypothetical infidelity paradigm to test the J-SIM hypothesis. The paradigm involves asking participants (typically, undergraduate psychology students) to imagine a committed romantic relationship “that they have had, presently have, or would like to have” and then to imagine that the person with whom they have been seriously involved became interested in someone else. Participants are then asked to choose whether a sexual or an emotional infidelity would be more distressing or upsetting to them. Additionally, to contrast sex and love instead of a sexual or emotional infidelity, participants were asked to imagine “your partner trying different sexual positions with that other person” or “your partner falling in love with that other person.”

Buss et al. (1992) reasoned that due to their innate fear of uncertain paternity and potential cuckoldry, men would be more distressed by discovering that their partner had committed a sexual infidelity, and that women, concerned about a potential loss of resources, would be more distressed by discovering that their partner had committed an emotional infidelity. Buss et al. (1992) found significant sex differences for these two questions. Sixty percent of men reported that they would feel greater distress over their

partner's potential sexual infidelity and 83% of women reported that they would feel more distressed over their partner's potential emotional infidelity. Eleven percent of women reported that they would feel more distress over their partner trying new sexual positions, whereas 43% of men reported they would feel that way. Many other researchers (e.g. Buss et al 1999; Buunk, Angleitner, Oubaid, & Buss, 1996; Geary, Rumsey, Bow-Thomas & Hoard, 1995) have since replicated this finding and likewise uncovered a difference between men and women in how distressing they would find their partner engaging in a sexual versus an emotional infidelity using the forced choice paradigm. Harris (2003) conducted a meta-analysis of 32 studies using the forced-choice hypothetical paradigm using estimated log-odds ratios (LOR). These log-odds ratios were computed by taking the odds of picking the "sex" response for male participants and dividing it by the odds of picking the "sex" response for female participants, and using the natural log of this quantity to represent an effect size. An LOR of zero is expected if there is no difference between the sexes. Harris found an estimated overall effect size of 1.00 (95% confidence interval $0.81 < \text{LOR} < 1.19$), which is typically described as a moderate effect size, although the sex effect was stronger among college students (mean $\text{LOR}=1.20$) than older samples (mean $\text{LOR}= 0.67$), $Q(1) = 12.3, p < .001$. Thus, there appears to be relatively robust support for the idea that when given a forced choice between emotional or sexual infidelity, men and women have statistically differing responses with respect to which they find more distressing or upsetting. However, many researchers are unconvinced that a statistically significant sex difference on forced-choice questions with hypothetical scenarios is compelling evidence for an innate sexually dimorphic jealousy mechanism.

Evidence that Weakens the J-SIM Hypothesis

Some researchers have attacked this line of evidence on methodological grounds and others have more broadly argued that while the forced-choice format does seem to show sex differences, it is not sufficient to support the J-SIM theory in light of a considerable body of contradictory evidence. Some methodological problems include the fact that the forced-choice method fails to tap the true experience of jealousy.

Counterarguments related to other lines of evidence are that sex differences in jealousy are not found among actual victims of infidelity, and that psychophysiological studies and homicide statistics fail to show that men are more sexually jealous than women.

Methodological Problems with the Forced-Choice Format

DeSteno et al. (2002) found the same sex difference in as Buss et al. (1992) when using the forced-choice format, but found no sex differences when Likert scales were used. Both men and women responded with greater jealousy to the sexual infidelity than to the romantic infidelity scenario. In another study, DeSteno et al. (2002) found that under the effect of cognitive load (retaining a string of seven digits in short-term memory), the sex difference on the forced-choice measure disappeared. De Steno et al. therefore reasoned that if sex differences are “wired in,” by the force of natural selection, and if they reflect sexually dimorphic emotional tendencies as hypothesized by J-SIM, then reducing the opportunity for reflective processing or self-presentation strategies should further polarize the two sexes’ responses. However, the increase in cognitive load had little effect on men’s responses but caused women to shift their responses toward choosing sexual infidelity as more distressing. This finding suggests that women’s responses to the forced-choice questions may be affected by inferences or self-

presentation strategies. Harris (2003) suggested that some of the variance between the sexes on the forced-choice measure may be due to men being more willing than women to admit the importance of sex in their lives, or it may be due in part to cultural expectations for what men and women are expected to value. In this vein, Harris and Christenfeld (1996) proposed that men and women might not differ in how much they care about different kinds of infidelity, but rather only in what they think each implies, with women assuming a man in an emotional relationship must also be having sex, but a man's purely sexual relationship might not involve love, whereas men assume an emotional relationship for a woman is possible without sex, but not a sexual one without love.

Methodological Problems with Tapping the Construct of Jealousy

Other researchers have suggested that Buss et al (1992)'s use of the words "distress" and "upset" in their forced-choice paradigm may obfuscate some more subtle feelings and reactions that men and women have to a partner's infidelity, and may not fully tap the construct of jealousy. Sabini and Green (2004) found less variability between the sexes from the forced choice method when they added more specific emotion terms. Moreover, they found that sexual infidelity was associated with anger and blame, and emotional infidelity was associated with hurt feelings. Likewise, Buunk and Dijkstra (2004) found that across both sexes, sexual infidelity primarily caused feelings of betrayal and anger while emotional infidelity primarily evoked feeling threatened, although women responded with more betrayal-anger than men did to emotional infidelity.

Data from Actual Victims of Infidelity

Many researchers interested in the idea of a sexually dimorphic mechanism for jealousy wondered whether these same results would be seen among actual victims of infidelity, rather than among undergraduate college students (many of whom had never experienced infidelity) imagining a hypothetical scenario. Berman and Frazier (2005) used the forced-choice infidelity paradigm with a sample of dating college students, all of whom reported on a real current or past romantic relationship and some of whom had been victims of infidelity. Berman and Frazier found that among those who had never actually been betrayed by a romantic partner, men were about 2.5 times as likely as women to say that imagining their partner “enjoying sexual activities” was worse than an emotional outside attachment, but among participants who had actually been victims of infidelity, there was no gender difference in their responses to the forced-choice question: Fifty-three percent of betrayed participants of both genders reported that sexual aspects were worse than emotional ones. Likewise, Hansen (1987) found that male and female college students did not differ in their assessment of how much damage their partner’s sexual infidelity caused to the relationship. Finally, Harris (2003) found that male and female students did not differ in how much they focused on sexual versus emotional aspects of a mate’s affair. These findings add further support to the idea that responses to imagined hypothetical scenarios may not be the same as responses to real-life occurrences.

Psychophysiological Studies

Some researchers have attempted to test the J-SIM hypothesis using physiological data because of concerns that self-report data may be subject to response biases. Data in

support of the J-SIM theory would show that men have greater reactivity to sexual infidelity and women have greater reactivity to emotional infidelity. Although a Buss et al. (1992) study showed that men evinced greater heart rate and electrodermal activity (EDA) in response to imagined sexual infidelity, and that women showed the opposite pattern, it later became clear that for only one of the three measures (EDA) was there actually significantly greater reactivity in response to emotional versus sexual infidelity (Harris, 2000). Harris (2000) found that men do indeed show greater signs of autonomic arousal when imagining sexual infidelity relative to emotional infidelity, but they also show greater reactivity to sexual than emotional imagery that is not related to infidelity. This fact calls into question whether greater reactivity is really synonymous with greater distress.

In contrast, Harris (2000) found that women did not show greater autonomic arousal to emotional infidelity imagery than to sexual infidelity imagery, and that women who had experienced a sexually committed relationship showed greater reactivity to the sexual infidelity imagery than to the emotional infidelity imagery. Grice and Seely (2000) found, consistent with what J-SIM theory would predict, that men showed greater heart rate increases to sexual relative to emotional imagery, and women showed the opposite, but for electrodermal activity, contrary to J-SIM predictions, men showed greater reactivity to the emotional infidelity imagery and women to the sexual infidelity imagery. A third measure, electromyography (EMG) showed no sex differences. Based on this rather inconsistent pattern of evidence regarding the J-SIM theory, Harris (2003) concluded that the existing psychophysiological studies fail to show clear evidence for

men experiencing greater reactivity in response to sexual infidelity and for women experiencing greater reactivity in response to emotional infidelity.

Homicide Data

Harris (2003) reviewed homicide statistics and meta-analyzed all available studies of jealousy-inspired homicides to investigate whether there is indeed a sex difference in the extent to which sexual infidelity inspires homicide. Although Daly et al. (1982) suggested that male jealousy leads to homicide proportionally more often than it does for women, and that male jealousy focuses more on sexual betrayal while female jealousy focuses more on emotional betrayal, Harris refuted these claims. Men commit more criminal offenses overall than women do (80%, according to the U.S. Bureau of Justice Statistics, 1992), and women commit about 21% of jealous murders (Wilt, 1974). Thus, Harris suggests that sexual jealousy-induced rage occurs in roughly equal amounts in both sexes, but men simply may have a lower threshold for intense violence overall, perhaps because they are more confident in their likelihood of success (since they are physically stronger, or for other reasons; Harris, 2003; Siegel, 1992). Harris (2003) concluded that the data on homicide offered no evidence for a sexually dimorphic universal sexual jealousy mechanism.

In sum, although the forced-choice hypothetical scenario paradigm does tend to show sex differences in response to infidelity, with men being more upset or distressed than women by sexual infidelity and women being more upset or distressed than men by emotional infidelity, this may be an artifact of the method. These results are not found among actual victims of infidelity, and psychophysiological studies and analysis of jealousy-induced homicides fail to show evidence for sexual dimorphism in responses to

infidelity. Thus, it seems that overall, support for the J-SIM theory is lacking, at least with respect to immediate reactions to infidelity.

Possible Sexually Dimorphic Responses to Infidelity: Forgiving vs. Breaking Up

But, after the initial emotional reaction, how do people really behave in the longer term after they discover that their partner has been unfaithful? Do they break up or do they stay together? And, do they forgive their partner? Might the J-SIM theory's predictions about sex differences in responses to infidelity be shown among actual infidelity sufferers when faced with the choice to forgive their partners or end the relationship? Although there are many factors that are involved in the complex decision to break up with a partner or forgive after an infidelity, the evolutionary theory that gave rise to the J-SIM hypothesis also leads to the hypothesis that there are sex differences in the decision to forgive a partner or break up, depending on the nature of the affair. Shackelford, Buss and Bennett (2002) investigated whether sex differences exist in the likelihood that a person, when faced with a betrayal by a romantic partner, would break up with that partner or forgive him or her and stay together. Like previous researchers interested in reactions to infidelity, they hypothesized that because of the different adaptive problems that men and women have historically faced over evolutionary history, the two sexes would respond differently to different types of infidelity. Specifically, they hypothesized that men, relative to women, would find it more difficult to forgive a sexual infidelity than an emotional infidelity, and that men, relative to women, would be more likely to terminate a current relationship following a partner's sexual infidelity than an emotional infidelity. Participants (undergraduate men and women) were first presented with the same forced-choice dilemmas presented above in the Buss et al. (1992) study,

and again, Shackelford, Buss and Bennett (2002) found sex differences for men and women regarding whether a partner's sexual intercourse with another person or a partner's emotional attachment to another person would be more upsetting, as well as regarding whether imagining a partner trying different sexual positions with another person or imagining her falling in love with another person was more upsetting.

After this initial replication, the authors proceeded to the question of forgiveness. Participants were then asked whether it would be more *difficult to forgive* their partner for having "passionate sexual intercourse with that other person" or for becoming "deeply emotionally attached to that other person;" as well as which of these two actions would cause participants to be "*more likely to break up with*" their partner. Sixty-five percent of men, and 52 percent of women, said that they would find forgiving a sexual infidelity more difficult than an emotional infidelity. Fifty-four percent of men, and forty-two percent of women, endorsed being more likely to break up with a partner if she were sexually unfaithful than if she was emotionally unfaithful. Although the percentages of men versus women endorsing these two options were statistically significantly different, it could be argued that this difference is not evidence for sexual dimorphism, since, for example, more than half of both men and women said forgiving a sexual infidelity would be more difficult. The last two dilemmas asked participants to imagine that their partner had been both sexually *and* emotionally unfaithful and asked (1) whether the partner's sexual intercourse with another person or emotional attachment to another person would be *more difficult to forgive* and (2) which aspect would be *more likely* to lead the participant to *break up* with his or her partner. Almost 58% of men and 41% of women indicated that it would be more difficult to forgive the sexual rather than emotional aspect

of a partner's infidelity, and 49% of men and 41% of women indicated that the sexual aspect would make the participant more likely to break up with his or her partner.

Shackelford et al. (2002) concluded from these analyses that relative to women, men have more difficulty forgiving a partner's sexual infidelity and are more likely to end a relationship as a result of a partner's sexual infidelity, and that relative to men, women have more difficulty forgiving a partner's emotional infidelity and are more likely to end a relationship as a result of a partner's emotional infidelity. Furthermore, they perceived that these sex differences were consistent with an evolutionary perspective specifying that sex differences in mating were designed by natural selection as solutions to sex-differentiated adaptive problems (Buss & Schmitt, 1993).

A major limitation to Shackelford et al.'s work on this point, again, is the reliance on imagined scenarios. A clear gap in the research exists to investigate whether in fact actual breakups are more likely to result after a purely sexual encounter when committed by a woman versus a man, and whether women indeed are less likely to forgive a partner than men are when the partner actually falls in love with another person when sexual intercourse has not transpired. In attempts to remedy this deficiency, Phillips (2005) asked people who had actually been victims of infidelity within a past or current relationship to report on their experiences and how they responded to the infidelity. Although she expected (in line with J-SIM), that for women, infidelity that was perceived to have had a strong emotional component would be associated with greater likelihood of relationship dissolution and lower levels of forgiveness, this was not found. For both males and females, the likelihood of relationship dissolution was higher when the affair was primarily emotional versus primarily sexual. Thus, Shackelford et al.'s (2002)

findings seem to be yet another example of data that only show sex differences when using a hypothetical paradigm.

Chapter 2

The Present Study

In the present study, I extended the above work in several ways. First, rather than relying on hypothetical scenarios like Shackelford et al. (2002), or asking actual infidelity victims to report retrospectively like Philips (2005), the study presented herein had the methodological advantages of tracking people's actual experiences with infidelity as they unfolded and measuring their level of forgiveness over time. Also, because the participants were asked to provide specific details about the nature of the infidelity, this study was poised to shed light on whether emotional and sexual infidelities are forgiven differently and whether there are differences in how men and women forgive real infidelity transgressions. The present study also enabled an analysis of a third category of romantic infidelity: those that have both an emotional and a sexual component.

Method

Participants

The sample consisted of 68 participants (47 female; 21 male; mean age 18.8, SD = 1.3) whose romantic partners had recently been unfaithful. The sample was derived from a larger sample of students who enrolled in a longitudinal study of forgiveness. Participants enrolled in the study within approximately one week of being harmed by another person in a way that they considered serious and wrong. Any study participant was considered eligible for the present study if the person he or she identified as having hurt him or her was a (a) husband/wife, (b) girlfriend/boyfriend, or (c) casual dating partner. Participants were students at the University of Miami in Coral Gables, FL. They were informed of the study and invited to participate either through presentations in their

introductory or upper level psychology classes or by flyers posted around campus. Those in introductory psychology classes participated to fulfill an experiment participation requirement for their course. They also received up to \$100 if they completed the entire study. Other participants received up to \$100 for their participation without course credit.

Measures

The measures that were used in the study are provided in Appendix A.

The Romantic Partners Questionnaire (RPQ). After enrolling in the longitudinal study (that is, after participants were harmed by a relationship partner), they completed a variety of questionnaires. The Romantic Partners Questionnaire is a measure containing several sets of items. The first set of items were multiple choice questions designed to get information about the length of the relationship between the participant and his/her partner before the transgression and the current status of the relationship. The next series of items in the Romantic Partners Questionnaire, unlike the above which all participants who had been hurt by a romantic partner could complete, were only to be answered by those participants who experienced an *infidelity* of either a sexual, emotional, or combined nature. These items asked subjects to rate how sexual versus emotional they perceived their partner's infidelity to be, asked which aspect made them more upset, and, on a Likert-type scale, asked how upset they are now by the physical unfaithfulness and by the emotional unfaithfulness, (1 = *not upset at all*; 5 = *extremely upset*). The last set of items asked participants about various behavioral aspects of the infidelity (i.e., specific sexual and emotional acts in which their partner may have engaged.)

Transgression-Related Interpersonal Motivations (TRIM) Inventory (McCullough et al., 1998). Forgiveness toward the unfaithful partner was measured using the

Transgression-Related Interpersonal Motivations (TRIM) Inventory-18-Item Form (McCullough et al., 2003; McCullough, Root, & Cohen, 2006). The TRIM measures the three motivational processes thought to underlie forgiveness. The Revenge subscale consists of 5 items that measure motivation to seek revenge (e.g., “I’ll make him/her pay”). The Avoidance subscale consists of 7 items that measure motivation to avoid contact with a transgressor (e.g., “I live as if he/she doesn’t exist, isn’t around”). The Benevolence subscale consists of 6 items that measure the desire for good for the perpetrator (e.g., “Even though his/her actions hurt me, I have goodwill for him/her”). Each subscale displays good internal consistency reliability ($\alpha > .85$). Items are rated on a 5-point Likert-type scale. Lower Revenge and Avoidance scores, and higher Benevolence scores, are indicative of more forgiveness for the rated individual.

The End-of-Study Romantic Partner Questionnaire (ESRPQ). (McCullough & Kimeldorf, 2005). The participant’s current feelings about his or her romantic partner were assessed during the participant’s last visit to the lab using the ESRPQ. In addition to some measures not relevant to the current inquiry, participants answered a series of multiple-choice questions about their current relationship with the romantic partner who hurt them, including whether they were still in a relationship, whether they were friends, and, if the relationship ended how and under what terms the relationship ended. They then completed a series of questions by Fincham (2005) which were designed to measure couple identity, commitment/dedication, trust, stability, and willingness to sacrifice. Subjects were asked to rate “whether the following statements apply to you and the romantic partner who hurt you” on a 7-point Likert-type scale (1 = *Strongly disagree*, 7 =

Strongly agree). This ten item scale has excellent reliability (Chronbach's alpha = .93). Participants completed these items during their last visit referring to "this point in time."

In the last part of the ESRPQ, participants responded to a series of True/False items regarding whether they had forgiven the romantic partner, and the presence or absence of other feelings toward the partner (e.g., "I will never forgive him/her," "I am sure that he/she will never do something like this again."). Those who were no longer romantically involved with the romantic partner answered some additional True/False questions about whether they would consider reuniting with that person and their understanding of the partner's feelings about them (e.g. "I would take him/her back if he/she were interested.").

Covariates. Several questions were included to obtain additional information about the relationships participants had with their partners and about personality dimensions of the participants. These, which included initial degree of pre-transgression closeness, extent to which offender apologized or made amends to the participant, neuroticism of the participant, and agreeableness of the participant, were indexed and used as covariates in the analyses. The initial degree of pre-transgression closeness between the participant and the offender was assessed using three written items (e.g. "... please indicate how close you were to the person who hurt you before the offense") on a 7-point Likert-type scale (0= *Not at all close*, 6= *Extremely close*) and the Inclusion of Other in the Self Scale (Aron, Aron, & Smollan, 1992), which is a diagrammatic item of circles labeled "self" and "other" that instructs participants to circle the picture that best described their relationship, ranging from 1 (no overlap) to 7 (almost complete overlap). The extent to which the offender apologized or made amends to the participant was

assessed using two items, (e.g., to what extent has he or she made amends for what he/she did to you?) that participants rated with a 7-point Likert-type scale (0 = *Did not make amends at all*, 6 = *Completely made amends*). Neuroticism was assessed using items from the Big Five Inventory (John & Srivastava, 1999) which asked participants to rate the extent to which they see themselves as someone who (e.g., can be tense, can be moody, gets nervous easily) on a five point Likert-type scale (1= *strongly disagree*, 5= *strongly agree*). Agreeableness was also assessed using the Big Five Inventory asking participants about the extent to which they see themselves as someone who (e.g. is helpful and unselfish with others, is generally trusting.)

Hypothetical Responses to Infidelity Questionnaire. The HRIQ, (asked of all introductory psychology students at the beginning of the semester), was adapted from Buss et al. (1992) and Shackelford et al. (2002) and has similar instructions to those questionnaires. Participants were asked to think about a serious or committed relationship they have had, would like to have, or are currently having, and then to imagine a series of infidelity situations and indicate how they would feel if they experienced each type. The HRIQ involves forced-choice questions, like Buss et al.'s (1992) measure and Shackelford et al.'s (2002) measure, and also asks subjects to rate on a Likert-type scale how upset/distressed they *would be* to imagine their romantic partner in a series of sexual and emotional scenarios with another person (1 = *not at all*; 5 = *extremely*). This was done to replicate DeSteno et al.'s (2002) study, which used Likert-type scales instead of forced-choice questions. These Likert-type questions were very similar to those described above in the Romantic Partners Questionnaire.

Procedure

Over the course of several semesters, research assistants visited undergraduate psychology courses to describe the study, and other students saw flyers around campus that advertised the study. As prospective participants encountered significant transgressions in their daily lives they enrolled in the study and provided complete informed consent procedures. Interested and eligible participants completed an initial screening packet, which included a request to briefly describe the offense, several other measures that are not relevant to the current inquiry, and the Romantic Partners Questionnaire. Participants then returned the initial packet to the laboratory and began completing TRIM questionnaires online one per day for twenty-one days. Participants were then scheduled for three short visits to the lab, during which they completed writing tasks, and a fourth visit three weeks later during which they performed additional tasks not relevant to the present study. During their fifth and final visit to the lab, participants underwent a diagnostic interview to assess symptoms of anxiety and depression, and then they completed a final questionnaire, including the ESRPQ described above. When the study was over, participants were debriefed carefully (Aronson et al, 1990). Once all of their questions were answered, they were thanked for their participation and dismissed.

Data Analysis

Reactions to actual infidelity. To investigate whether there were gender differences in responses to sexual and emotional infidelity, it was first necessary to categorize the nature of the infidelity that each participant experienced. I did this in several ways. First, I ran analyses using the Likert-type scale variable asking participants “How sexual versus emotional was your partner’s outside relationship with someone

else?” which ranged from 1 (*entirely sexual*) to 5 (*entirely emotional*) and treating this as a continuous variable. Eight participants described the outside relationship as “1- *entirely sexual*”, sixteen said it was “2-*mostly sexual*”, fourteen said it was “3- *equally sexual and emotional*”, six said it was “4- *mostly emotional*”, and three said it was “5- *entirely emotional*.” Scores on this item were also dichotomized according to a median split, resulting in two groups of participants—a group whose partners’ infidelity was “mostly sexual,” and a group whose partners’ infidelity was “mostly emotional.”

In another attempt to categorize the data, I investigated the specific sexual and emotional behaviors that each participant reported his or her partner engaged in with the outside partner. I examined the frequency of the various behaviors, and ran cross tabulations to see whether endorsement of certain behaviors seemed to subsume and/or implicitly include other, less “severe” behaviors, (e.g., when sexual intercourse has occurred, French kissing also has usually occurred.) The data lent itself well to such an analysis: For example, 25 students who indicated that their partner had had intercourse with another person also indicated that their partner had kissed another person, whereas only 5 students who indicated that their partner had had intercourse with another person indicated that their partner had *not* kissed that other person.

Thus, two Guttman-type scales were created, wherein items that are less reflective of the two infidelity constructs were more readily endorsed. For the Guttman-type variable measuring severity of sexual infidelity, participants received a score that corresponded to the most severe sexual behavior that their partners engaged in (0 = no sexual nature to the infidelity; 1 = kissing, “French” kissing, and “making out”; 2 = touched someone else/was touched by someone else with clothes on; 3 = touched

someone else/was touched by someone else with clothes off; 4 = performed oral sex on someone else/received oral sex from someone else; 5 = had intercourse with someone else; 6 = had anal intercourse with someone else, had sexual contact with more than one person at different times). Participants were also given the choice “It was more than kissing, less than sex, but I have no idea what happened.” In those cases, if other behaviors were not also endorsed, the participant received a 3. Similarly, for the Guttman-type variable measuring severity of romantic infidelity, participants received a score that corresponded to the most severe emotional behavior that their partners engaged in (0 = no emotional nature to the infidelity; 1 = flirted with someone else; 2 = went on a date with someone else; 3 = had emotional feelings for someone else; 4 = told secrets about him/herself to someone else; 5 = told secrets about me to someone else; 6 = fell in love with someone else; 7 = told someone else that he/she loved them).

Despite instructions to circle all the behaviors that their partners had engaged in with the outside person, in many instances only one behavior was circled, e.g. “partner had intercourse with someone else.” It is unclear in these instances whether participants did not follow directions accurately, whether they were not aware of the other specific sexual behaviors their partner had engaged in, or whether this was truly the only sexual behavior their partner had engaged in with an outside person. The hierarchy of severity was thus created based on logical assumptions of which behaviors are likely to subsume or implicitly imply other behaviors, but unfortunately, it was not possible to compute a coefficient of reproducibility for these data.

Once these Guttman-type variables were created, I analyzed the data using these scales as continuous variables of *degree* of sexual and *degree* of emotional infidelity and

also as dichotomous variables using a reasonable median split for severity. After several attempts at the analysis, it was determined that there was no added benefit to dichotomizing the data, and I ran all further analyses using continuous predictors. Thus, there were two main independent variables pertaining to degree of sexual versus emotional infidelity: The first was a self-report measure of how sexual versus emotional the outside relationship was, and the second (which was further divided into two sub-variables) was a behavioral index of the actual (sexual and emotional) behaviors the partner engaged in with the extra-dyadic person.

It is noteworthy that 80.4% of people (37) who finished the study reported that they had broken up with their partner by the time of the final lab visit three weeks later. 6.5% of people reported that they did not break up, (3) and 13% (6) reported that they were never “officially” in a relationship. This issue will be addressed in the discussion section.

I examined several different dependent variables to assess three main constructs of interest: (1) How upset or distressed participants were, which for ease of description will be referred to as the construct “distress,” (2) forgiveness, and (3) couple identity, commitment and trust. I assessed how distressed the cheated-on person felt with the Likert-type scale items “How upset are you by the physical unfaithfulness” and “how upset are you by the emotional unfaithfulness” described above. I assessed the amount of forgiveness the cheated-on person felt toward the person who had cheated on him using the TRIM-18 and the two dichotomous (yes/no) measures of forgiveness of sexual and emotional infidelity. I assessed the degree of post-transgression couple identity,

commitment and trust using the Fincham (2005) scale described above. I will present results for these three dependent variables separately below.

I included several covariates. The analyses controlled for initial degree of pre-transgression closeness between the participant and the offender, extent to which the offender apologized or made amends to the participant, and Big Five Inventory (John & Srivastava, 1999) measures of Agreeableness and Neuroticism, which are the strongest Big Five predictors of forgiveness (McCullough, 2001). I initially put other covariates into the models, but they failed to improve the model fit. These included an item asking participants how painful the offense was at the time of filling out the Romantic Partners Questionnaires, and a measure of the number of days that had elapsed from the transgression until the day when the participant filled out the RPQ.

Replication of Hypothetical Responses to Infidelity. To provide a replication of Buss et al.'s (1999) study and Shackelford et al.'s (2002) study of gender differences in responses to sexual and emotional infidelity based on hypothetical scenarios, data were collected from 1,614 undergraduate students over the course of four semesters. The students were given the exact same forced choice items used by Buss et al. (1999) and Shackelford et al (2002), and were also given similar questions using a Likert-type scale, to see whether the gender differences would then disappear, as DeSteno et al. (2002) found. I analyzed these data using one way ANOVAs with gender (male, female) as the independent variable.

Chapter 3

Results

Descriptive Statistics

Means and standard deviations for the major study variables are given in Table 1. Table 2 lists the correlations among major study variables.

Gender Differences in Distress after Experiencing a Real Infidelity

I ran a regression analysis using the Likert-type scale item assessing how distressed participants were by the physical unfaithfulness as the dependent variable and using gender, the sexual Guttman-type variable of sexual infidelity severity, and the interaction of gender and the sexual Guttman-type variable of sexual infidelity severity as predictors. This analysis did not show evidence of a gender difference in how distressed participants were by a sexual infidelity ($F(1, 65) = .847, p = .362$) or a gender by severity of sexual infidelity interaction ($F(4, 54) = .745, p = .566$). This analysis also did not show a main effect for sexual severity $F(6, 54) = 1.435, p = .218$. I ran another regression using the Likert-type item assessing distress by the emotional unfaithfulness as the dependent variable and using gender, the emotional Guttman-type variable, and their interaction as predictors. The effect of gender was not significant ($F(1, 67) = .570, p = .454$), nor was the effect of emotional infidelity severity $F(6, 54) = 1.745, p = .128$, and neither was the gender by emotional infidelity severity interaction ($F(6, 54) = .188, p = .979$).

I ran similar models using participants' *perceptions* of how sexual versus emotional their partner's outside relationship was as the independent variable (instead of the behavioral Guttman-type variables). Using distress by the sexual infidelity as the

dependent variable, there was no main effect for gender ($F(1, 65) = .085, p = .771$), and there was no interaction between gender and how sexual versus emotional the infidelity was ($F(4, 55) = .724, p = .567$). Using distress by the emotional infidelity as the dependent variable, again, there was no main effect for gender ($F(1, 65) = 2.628, p = .111$), and there was no interaction between gender and how sexual versus emotional the infidelity was ($F(4, 55) = .505, p = .732$). Thus, I did not find evidence that men and women were differentially distressed by the specifically sexual and emotional natures of the infidelities that their partners committed.

Gender Differences in Forgiveness Responses to Real Infidelity

I ran general linear models similar to those described above using forgiveness as measured by the TRIM-18 as the dependent variable. I ran an analysis using the TRIM-18 as the dependent variable and using gender, the Guttman-type variable of sexual infidelity severity, and the interaction of these two as predictors. In this model, the effect of gender was not significant $F(1, 47) = 2.106, p = .155$; nor was the interaction of gender and the severity of sexual infidelity, $F(4, 37) = .590, p = .672$. The main effect for severity of sexual behaviors was nearly significant, $F(5, 37) = 2.344, p = .06$.

I re-ran these models with some covariates that have been reliably related to forgiveness in previous research (McCullough, 2001): the Neuroticism of the participant, the Agreeableness of the participant, the degree to which the offending partner apologized or made amends to the participant, and the degree of closeness between the participant and the transgressor before the transgression. In these analyses, the interaction of gender and the severity of sexual infidelity became statistically significant, $F(4, 28) = 3.170, p = .029$. The main effect for severity of sexual infidelity also became

significant, $F(5, 28) = 6.326, p < .001$. The main effect for gender remained non-significant, $F(1, 42) = .503, p = .484$. In this model, Neuroticism of the participant was a significant predictor, $F(1, 28) = 19.436, p < .001$. Equating participants on Neuroticism, a factor highly correlated with forgiveness, improved the model and enabled the significant main effect for severity of sexual infidelity and the significant interaction effect of gender and the severity of sexual infidelity to reach statistical significance.

To further explore this main effect for gender and the gender*severity of sexual infidelity interaction, I ran separate regression models for men and women with severity of sexual infidelity as the predictor and the same covariates included in the models. For women, the effect of severity of sexual infidelity on TRIM scores was significant, $beta = .408, t_{.05}(23) = 2.477, p = .021$, indicating that forgiveness decreased as the severity of the sexual infidelity increased. Although the effect of sexual infidelity severity was in the same direction for men, $beta = .282$, it was statistically non-significant, $t_{.05}(8) = .976, p = .358$. In other words, severity of sexual infidelity was associated positively and significantly with less forgiveness for women, but it was associated less positively and non-significantly with less forgiveness for men. Figure 1 shows the slopes and intercepts for men and women.

Next, I ran models for emotional infidelity. I ran an analysis using the TRIM-18 as the dependent variable and using gender, the Guttman-type variable of emotional infidelity severity, and the interaction of these two as predictors. In this model, the effect of gender was not significant ($F(1, 49) = 2.151, p = .151$), nor was the effect of emotional infidelity severity ($F(6, 37) = 1.816, p = .123$), nor their interaction ($F(5, 37) = .950, p = .461$). Then, I re-ran these analyses with the same covariates mentioned above,

but gender remained non significant $F(1, 44) = 2.833, p = .103$, as did emotional infidelity severity $F(6, 29) = 1.755, p = .144$, and their interaction $F(4, 29) = 1.282, p = .300$.

Similarly to the analyses run above for how distressed participants reported being, I next ran models using participants' *perceptions* of how sexual versus emotional their partner's outside relationship was as a predictor (instead of the behavioral Guttman-type variables) along with gender and the interaction of the two, and again using the TRIM-18 measure of forgiveness as the dependent variable. The effect of gender was not significant ($F(1, 47) = .960, p = .334$), nor was the effect of self-reported degree of sexual versus emotional nature of the outside relationship ($F(5, 37) = 1.075, p = .390$), nor their interaction ($F(4, 37) = .475, p = .753$). When adding the covariates, the effect of gender remained non-significant ($F(1, 42) = .439, p = .513$), as did the effect of self-reported degree of sexual versus emotional nature of the outside relationship ($F(5, 28) = 2.170, p = .086$) and their interaction ($F(4, 28) = .089, p = .985$).

Gender Differences in Couple Closeness, Trust, and Commitment Responses to Real Infidelity

I conducted a separate set of analyses using the set of items from Fincham (2005) to see if other effects could be predicted by severity of sexual and emotional infidelity. Specifically, I analyzed the data to investigate whether there is a relationship between the (sexual or emotional) severity of the outside relationship and the degree of resultant feelings of couple identity, commitment/dedication, trust, stability, and willingness to sacrifice. For ease of description, for the rest of these analyses, I will refer to this collection of constructs as "couple identity."

I ran a general linear model using the mean score on the Fincham (2005) couple identity scale as the dependent variable and using the sexual Guttman-type variable, gender, and their interaction as predictors. In this model, the effect of gender was non-significant ($F(1, 40) = 1.743, p = .197$), as was the interaction effect ($F(4, 29) = 1.979, p = .124$). There was a significant main effect for severity of sexual infidelity ($F(6, 29) = 2.449, p = .049$), which means that the more severe the sexual infidelity, the less couple identity participants endorsed.

I then re-ran these analyses with the same covariates mentioned above. In this model, the effect of gender became significant ($F(1, 35) = 5.225, p = .032$), with men endorsing greater overall resultant couple identity than women (for males, mean = 2.72, SD = 1.95; for women, mean = 2.20, SD = 1.24). The effect of severity of sexual infidelity also became significant ($F(5, 22) = 2.917, p = .036$), wherein the more severe the sexual infidelity, the less couple identity participants endorsed. The interaction remained non-significant ($F(4, 22) = 1.928, p = .141$). In this model, both Neuroticism of the participant and Agreeableness of the participant were significant predictors, Neuroticism ($F(1, 22) = 8.520, p = .008$), Agreeableness ($F(1, 22) = 4.932, p = .037$). Controlling for Neuroticism and Agreeableness improved the model and enabled the main effect for severity of sexual infidelity and the main effect of gender to reach statistical significance.

I ran similar general linear model analyses using the mean score on the Fincham (2005) couple identity scale as the dependent variable and using the emotional Guttman-type variable, gender, and their interaction as predictors. In this model, the effect of gender was significant ($F(1, 41) = 6.136, p = .019$) with men endorsing greater overall resultant couple identity than women (for men, mean = 2.68, SD = 1.86; for women, mean

= 2.29, SD = 1.35). The effect of severity of emotional infidelity was also significant ($F(6, 30) = 3.371, p = .012$). Surprisingly, as the severity of the emotional infidelity increased, so did the resultant couple identity that participants endorsed. The interaction was not significant $F(4, 30) = 1.488, p = .231$.

I re-ran this same model adding all of the covariates described above, and, in this case, controlling for these variables did not improve the relationship between the predictors and couple identity. The main effect for gender remained significant ($F(1, 37) = 5.966, p = .023$) with men reporting greater overall resultant couple identity than women (for males, mean = 2.72, SD= 1.95; for women, mean = 2.28, SD = 1.29). The effect of severity of emotional infidelity was not significant ($F(6, 22) = 1.473, p = .233$), nor was their interaction ($F(4, 22) = .428, p = .787$). While adding the covariates caused the effect of emotional infidelity to become non-significant, none of the individual covariates were significant contributors to this change. In summary, then, men tended to rate their commitment, closeness, and trust in their partners as higher than women did. In addition, as the severity of sexual infidelity increased for both men and women, participants' ratings of their feelings of closeness, commitment, and trust in their partners decreased, and as the severity of emotional infidelity increased, participants' ratings of their feelings of closeness, commitment, and trust in their partners increased.

Gender Effects on Hypothetical Questionnaire

I analyzed the hypothetical questions asked of a sample of 1614 undergraduate students using multiple ANOVAs, comparing the two genders on each of the 14 items. Means, standard deviations, significance values, and effect sizes for these analyses can be found in Table 3. Results will first be presented for the forced choice questions. When

asked whether they would be more upset or distressed by: (a) imagining your partner enjoying passionate sexual intercourse with another person (choice 1) or (b) imagining your partner forming a deep emotional attachment to another person, (choice 2) the mean for females was 1.78 (SD = .450) and the mean for males was 1.46 (SD = .558), $F(1, 1611) = 164.6, p < .001$. When asked whether they would be more upset or distressed by (a) imagining your partner trying different sexual positions with that other person (choice 1) or (b) imagining your partner falling in love with that other person (choice 2), the mean for females was 1.95 (SD = .442) and the mean for males was 1.69 (SD = .586), $F(1, 1611) = 106.930, p < .001$. When asked which would be more difficult to forgive: (a) your partner has passionate sexual intercourse with that other person (choice 1) or your partner becomes deeply emotionally attached to that other person (choice 2), the mean for females was 1.64 (SD = .624) and the mean for males was 1.45 (SD = .630), $F(1, 1607) = 33.900, p < .001$. When asked for which action you would be more likely to break up with your partner, (a) your partner has passionate sexual intercourse with that other person (Choice 1) or (b) your partner becomes deeply emotionally attached to that other person (Choice 2), the mean for females was 1.65 (SD = .557) and the mean for males was 1.46 (SD = .587), $F(1, 1610) = 44.525, p < .001$. All of these results suggest that men anticipated feeling more distressed by, and experiencing more difficulty forgiving, sexual infidelity, whereas the converse was true for females.

Participants were then asked to imagine that they discovered the person they are seriously involved with *both* becomes deeply emotionally attached to another person *and* has passionate sexual intercourse with that other person. When asked which aspect of your partner's involvement would be more difficult for you to forgive, (a) your partner's

sexual intercourse with that other person, (Choice 1) or (b) your partner's emotional attachment with that other person, (choice 2), the mean for females was 1.59 (SD = .500) and the mean for males was 1.38 (SD = .513), $F(1, 1610) = 69.503, p < .001$. When given the same choices and asked which aspect of your partner's involvement would be more likely to lead you to break up with your partner, the mean for females was 1.62 (SD = .501) and the mean for males was 1.44 (SD = .520), $F(1, 1610) = 50.685, p < .001$. These results are highly consistent with those of Shackelford et al (2002), although as Table 3 shows, the effect sizes for the gender differences that I obtained were rather small in magnitude.

When looking at the Likert-scale items, most questions also showed a significant gender difference. Each of the significant results showed women reporting more upset and distress than men (see Table 3). For example, when asking how upset/distressed participants felt imagining their partner enjoying passionate sexual intercourse with another person on a scale from 1 (*not at all upset/distressed*) to 5 (*extremely upset/distressed*) the mean for females was 4.49 (SD = .799) and the mean for males was 4.34 (SD = .893), $F(1, 1611) = 12.312, p < .001$ (Cohen's $d = 0.18$; effect size $r = 0.09$). Again, most effect sizes were quite small in magnitude, but they suggest that women anticipated having stronger negative reactions to nearly all aspects of both sexual and romantic infidelity than the men did. The one Likert-scale item for which men appeared to endorse slightly more distress than women asked "how upset/distressed does it make you to imagine your partner trying different sexual positions with that other person," and was non-significant ($F[1, 1612] = 2.67, p = .102$). The mean for males was 3.98 (SD = 1.169) and the mean for females was 3.88 (SD = 1.183).

In summary, results from this portion of my study were similar to findings from other investigators who used hypothetical scenarios. Like Shackelford et al. (2002), I found that men generally endorsed being more distressed by sexual options and women endorsed being more distressed by emotional options on forced-choice measures. On Likert-type scale items, women endorsed being more distressed than men by all scenarios except the one mentioned just above, which was not significant.

Chapter 4

Discussion

Infidelity is a serious and potentially devastating event in romantic relationships, and discovering that a partner has been unfaithful frequently causes a great deal of upset, distress, anger and jealousy. Often, the offense is perceived as so serious and hurtful that it leads to the dissolution of the relationship. The Jealousy as a Specific Innate Module (J-SIM) hypothesis posits that due to differing evolutionary pressures with which men and women had to contend over evolutionary time, men would respond with more hurt, anger and jealousy to a sexual infidelity, whereas women would respond with more hurt, anger and jealousy to an emotional infidelity. Taken one step further, some researchers who subscribe to this hypothesis (e.g. Shackelford, Buss & Bennett, 2002) argue that men whose partners are sexually unfaithful would find it more difficult to forgive the infidelity and would be more likely to end the relationship than women whose partners were sexually unfaithful, and that women whose partners are emotionally unfaithful would find it more difficult to forgive the infidelity and would be more likely to end the relationship than men whose partners were emotionally unfaithful. The present study, unlike many of its predecessors, did not rely on hypothetical data; it was designed to shed further light on the viability of the J-SIM hypothesis by studying actual victims of infidelity beginning within one week of their being cheated on by their romantic partners. The measures included in the study enabled an investigation of potential gender differences in resultant distress responses, forgiveness, and couple identity after transgressions that were primarily sexual, primarily emotional, or a combination of both.

The study also presented a replication of previous work on hypothetical reactions to infidelity and offered some new findings.

Emotional Distress

While many of the supporters of the J-SIM hypothesis are specifically interested in sexually dimorphic reactions of jealousy, this study, like the original Buss et al (1992) study, operationalized bad feelings one may experience after being cheated on using the construct of distress. I did not find evidence of a significant gender difference in emotional distress reactions to infidelity, either when I analyzed the data by participants' own categorization of the outside relationship as primarily sexual or primarily emotional, or when I examined the severity of the behaviors their partner engaged in with the outside person. Additionally, I did not find a main effect for type of infidelity, demonstrating that, in this sample at least, there was no evidence that one type of infidelity is more distressing than another. I did not even find that participants were more distressed as the severity of the infidelity increased (regardless of type). Men and women were both quite distressed by sexual, emotional, and combined infidelities. Thus, perhaps questioning how upset or distressed participants were is not the best and most sensitive way to assess true emotional feelings that arise after one's partner has been unfaithful, as Sabini and Green (2004) suggested. Or, it may be that men and women, in today's society, really are similarly distressed by all types of infidelities. It is similarly plausible that many additional (highly personalized and individual) psychological reactions are activated as modern day men and women discover that their partners have been unfaithful, and that these reactions are extremely difficult to capture in a study of this type. Regardless of the explanation, the present study did not support the J-SIM hypothesis that men and women

would respond with different levels of emotional distress, depending on the nature of the infidelity (or, at all).

Forgiveness

When I looked at forgiveness of sexual infidelity using only gender, severity of sexual infidelity, and their interaction, there were no significant findings. However, due to a substantial previous body of work showing that there are certain personality-related and situation-related constructs that are correlated with forgiveness, (e.g. McCullough, 2001), I was able to analyze the data on forgiveness more fully by including several of these theoretically relevant covariates. When I did this, I found that forgiveness was significantly affected by the severity of the sexual infidelity that a participant's partner engaged in—particularly for women. I found that the more behaviorally severe the sexual infidelity, the more unforgiving participants were. This finding in itself offers a significant contribution to the literature, since there are very few studies that have examined forgiveness of infidelity in particular, and fewer that have found that as the behaviors involved in the sexual infidelity become more egregious, partners become less forgiving.

There was also a significant interaction effect between sexual severity and forgiveness for men and for women. While for both men and women increased severity of sexual infidelity was associated with less forgiveness, the effect was significant and more positive for women than it was for men. One possible explanation for this finding involves the expectations that men and women of college age have toward their partners. Perhaps more young men than young women go off to college with the intent to experiment and engage in other relationships while still involved with a primary partner

and thus they are less surprised and more forgiving of their partners than women are when they discover their partner has been unfaithful. On a related note, it may be that women in college expect a certain degree of low-level sexual infidelity like kissing and touching from their romantic partner, but are more blindsided and thus less forgiving of their partners engaging in sexual intercourse than men were, since they had not considered engaging in such extra-dyadic behaviors themselves.

Additionally, this study did not take into consideration whether the cheated on partner had also engaged in infidelity behaviors themselves, or had come close, or had at least considered it. Having considered cheating oneself might mitigate the pain upon discovering a partner has been unfaithful and thus aid in forgiveness, as the cheated-on partner sees his relationship partner as “only human.” Indeed, Exline et al. (2008) found in that people are more forgiving toward others who have harmed them if they see themselves as capable of committing a similar offense. It is thus plausible that men in my sample were more prepared for this eventuality than were women. Additionally, perhaps partners who had also engaged in infidelity had “gotten it out of their system,” and had less reason to seek revenge than those who remained faithful themselves. Because of the relatively small sample size of this study, it is difficult to draw more definitive conclusions.

Unlike the results for sexual infidelity, I did not find significant main effects or interaction effects for emotional infidelity. Emotional severity did not predict degree of forgiveness, even when controlling for the relevant constructs typically associated with forgiveness. These results were replicated when I used participants’ own categorization of the nature of their partner’s infidelity. Explanations for these findings are not easy to

generate. Perhaps the severity of the emotional infidelity did not affect forgiveness because once a romantic partner is seen as compromising the emotional closeness of the pair bond, the severity becomes irrelevant. For example, even if a participant's partner only flirted with another person, the participant may have considered it only a matter of time before more serious emotional infidelity behaviors were committed. In college populations at least, a partner's emotional infidelity, regardless of severity, may be perceived as more indicative of a character flaw than a sexual infidelity. Sexual infidelity might be seen as a simple biological "weakness," whereas just kissing is much less offensive and easier to forgive (in that the cheater showed some restraint) than is sexual intercourse.

On a related note, perhaps participants' forgiveness of emotional infidelity was not affected by its severity because any emotional infidelity decreases a person's desire to stay friends with the offending partner after breaking up. (As reported previously, only a small percentage of the participants in the study reported still being with their partner after the transgression; most of them had dissolved the relationship.) This fact might have changed the way people thought about their answers on the forgiveness measure, or changed what people thought of when they read "forgiveness," (in the case of questions that asked about "forgiveness" directly,) and might have changed it differentially for sexual and for emotional infidelity. As participants who had already ended the relationship with their straying partner were asked questions about forgiveness, they might have conceptualized it differently than those who were still trying to make the relationship work.

It is also worth considering that Shackelford et al. (2002) oversimplified a question and confounded two very different constructs in the title of their article (“Forgiveness or break up: Sex differences in responses to a partner’s infidelity.”) It is possible that phrasing it this way creates a false dichotomy. It is not a given that by choosing to stay together, the cheated on partner has automatically forgiven the transgressor, nor is it clear that when partners break up, infidelity transgressions cannot still be forgiven. As addressed previously, many factors that were not addressed in the present study also may have contributed to participants’ desire to end their relationships and their capacity or willingness to forgive transgressions.

Couple Identity

I found a main effect for severity of sexual infidelity in predicting couple identity, both with and without the theoretically relevant covariates. As the severity of sexual infidelity increased, couple identity decreased. This result is not surprising, as sexual infidelity has been shown to be disruptive and damaging to relationships. The surprising result was the significant gender effect that emerged when I added the covariates. I found that men reported more resultant couple identity after sexual infidelity than women did. It is unclear why this would be. Perhaps men were less willing to admit that having their partners cheat on them would lead them to feel less couple identity, and conversely, perhaps women endorsed less couple identity after experiencing an infidelity than men did because they were less ashamed to admit it. This argument is along a similar vein to the hypothesis made by Harris (2003) that cultural expectations about what men and women are expected to value is relevant to their choices on questionnaires. Future

research should investigate whether this finding applies to other, larger and more diverse, samples.

The most puzzling couple identity finding was that as the severity of the emotional infidelity increases, couple identity also increases. One possible explanation could be that many of these young (presumably new at love) participants, after discovering that their partners had developed strong emotional feelings for someone else, had intense and deep conversations about their own relationship with their partners. These conversations (perhaps including an evaluation of the strengths and weaknesses of the relationship, reminiscing about the good times, apologies, affectionate hugs, “make up sex,” etc) could have arguably left participants feeling closer to the person who cheated on them. Similarly, as participants experienced hurt at learning of their partners’ infidelities, they might have internalized this hurt and, when answering the couple identity questions, resolved their cognitive dissonance by thinking, “this person hurt me so much, and made me feel so bad, that I must be very close to them.” Another possibility involves the phrasing of the couple identity questions. Perhaps, for people who had just been cheated on, these questions also inadvertently measured rumination or reminiscing about the relationship, in addition to measuring couple identity, trust, and commitment. As an example, one item states “at this point in time, I like to think of my partner and me more in terms of ‘us’ and ‘we’ than ‘me’ and ‘him/her.’” Participants who were thinking about the good old days of the relationship, rather than the reality of the present, might have endorsed this item. Or, participants who were not “over” their partners might have considered it true that they *like to* think of their partner and themselves that way despite the infidelity. Another item states, “at this point in time, I

feel that I want this relationship to stay strong no matter what rough times we encountered.” Participants might have endorsed this item because they conceptualized the infidelity as an example of the “rough times.” A fourth possibility is that this finding is simply a fluke of small sample sizes, and would be unlikely to be replicated in larger samples. Thus, future research should continue to investigate this phenomenon and attempt to parse out from whence comes this perplexing result.

Hypothetical Scenario Data

In addition to investigating enrolled participants’ actual reactions to infidelity shortly after they experienced a partner’s infidelity, this study replicated results from Buss et al.’s (1999) study and Shackelford et al.’s (2002) study of students’ responses to hypothetical infidelity scenarios.

When analyzing the forced choice questions in particular, I found, like Buss et al.’s (1990) findings and Shackelford et al.’s (2002) findings, that men reported being more distressed or upset by the sexual scenarios and women reported being more distressed by the emotional scenarios. Again, however, the effect sizes for most of these differences were small. The largest effect size of all the forced choice items in my sample was also the largest in Shackelford et al.’s sample: the question that directly asked which would upset or distress participants more: (a) imagining your partner enjoying passionate sexual intercourse with another person or (b) imagining your partner forming a deep emotional attachment to another person. Shackelford et al (2002) had a medium to large effect size for this item, (and small effect sizes on all other items) and I found an effect size of .301 on this item. This may be a result of the evocative nature of the

question, including the phrase “passionate sexual intercourse” which might conjure up more vivid images for men than other questions.

Interestingly, on these forced-choice questions, while men had lower means than women on all of them, the men’s means were typically close to an even split. For example, when asked which would upset or distress them more, imagining their partner enjoying passionate sexual intercourse with another person (choice 1), or forming a deep emotional attachment to that other person (choice 2), the mean for males was 1.46. A mean of 1.5 for men would indicate that exactly half the men felt that imagining their partner enjoying passionate sexual intercourse would be more upsetting, and exactly half the men felt that imagining their partner forming a deep emotional attachment would be more upsetting. With this sort of data, it is hard to argue that they offer compelling evidence of a specific innate module in men that causes them to be more upset by sexual infidelity than by emotional infidelity. Additionally, men did not even endorse the more “sexual” choice for all of the questions. For example, when asked which would upset them more, imagining your partner trying different sexual positions with another person (choice 1) or imagining your partner falling in love with another person (choice 2), the mean for men was 1.69. Thus, there were more men who chose that their partner falling in love with another person would be more upsetting than there were men who chose that their partner trying sexual positions would be more upsetting.

When using a Likert-type scale instead of a forced choice, unlike Bartlett and DeSteno (2002), I did not find that the sex effects disappeared. In contrast, the differences remained, with women reporting a higher degree of distress than men. In fact, this was the case for every Likert scale item for which a significant difference was

found. There was only one item in which men were more upset or distressed than women, and it was not significant. Thus, it may be that women anticipate feeling more upset or distressed in general by a transgression or hurtful act by a romantic partner, or that they are willing to admit it more fully than are men. Additionally, the effect sizes favoring women on the Likert-type scale items that pertained to emotional infidelity were much larger than were the Likert-type scale items pertaining to sexual infidelity. This again may underscore that women are more willing to acknowledge strong feelings of distress about emotional infidelity than men are.

Conclusion

The study presented herein explored reactions to sexual, emotional, and combined infidelity in a sample of people who had actually recently been cheated on by a romantic partner. The study investigated participants' distress, forgiveness, and couple identity, and measured participants' reactions both within seven days of learning of the infidelity, and three to four weeks later. The current body of work on forgiveness of actual infidelity remains limited, particularly with samples that have recently experienced an infidelity, as opposed to samples of people who are instructed to recall their reactions to infidelity years after it occurred. It is my hope that these results have shed some light on the way that people forgive sexual and emotional infidelity.

Several main findings emerged from this study. One is that as sexual infidelity severity increases, people become less forgiving. This finding was unequivocally seen in the data presented above. Another is that as sexual severity increases, couple identity decreases. A third important finding is that infidelity more often than not leads to dissolution of the relationship in college samples.

It may be equally important to discuss what this research did not find. Proponents of the JSIM hypothesis expect that men will be more upset and jealous by sexual infidelity and that women will be more upset and jealous by emotional infidelity. Although jealousy per se was not studied in this sample, the data failed to show persuasively that men and women who actually experience infidelity show any differences in how distressed they become. While my sample size was fairly small, I believe that in modern day societies, one cannot reliably predict how men and women will respond to emotional and to sexual infidelities from their sex. It may be that results of this study did not support the JSIM hypothesis because there was not sufficient power to detect such a result, but it is also possible that the JSIM hypothesis is overly simplistic or incomplete. It seems much more likely that Harris (2003) is correct that men and women actually have evolved more general, less content-specific jealousy mechanisms that respond to all sorts of cues in the environment that might signal threats to romantic relationships.

Limitations and Directions for Future Research

The present study had several limitations. First, like much psychological research, this study relied on undergraduate students. It is quite plausible that the experiences of undergraduate students at a private university in South Florida are not representative of the true range of human experience, due to many demographic, environmental and cultural factors. Also, due to the transient nature of college relationships, it would be a mistake to over-generalize these results and presume that older, more experienced people would react the same way to infidelity as college students, most of whom were under age 20. When other factors that are likely to affect older couples are brought into the

equation, such as being married, living together, owning a home, having children, and in general, having much more intertwined lives, the motivation to seek and grant forgiveness might be much higher. In older samples, the deliberation is likely much deeper and more profound, the emotions experienced potentially stronger, and the repercussions of ending the relationship clearly much more wide-reaching. Further research that can expand this work to include older populations while still managing to gather the data within a week after the transgression transpired would be very valuable indeed and would undoubtedly shed much further light on the issue.

Another limitation to the study is its overall small sample size. Data was collected for this study over four semesters, and in this time, despite the devotion of a dedicated team of researchers, only 68 people who had been cheated on were entered into the study. Of those 68, only 50 completed even one measure of the TRIM-18 forgiveness scale. Thus, many of the conclusions drawn from this study are based on only 50 people. There really is no way to say definitively what would have been uncovered if gathering data on many more participants had been feasible.

Social psychology would benefit from further studies investigating the specific individual and situational factors that lead to a greater likelihood to forgive a sexual or emotional infidelity. The field would also profit from studies that, like mine, measure forgiveness in participants shortly after they are harmed, but that can extend the work to include older and more experienced participants. As my study and others have shown, infidelity is extremely distressing and upsetting to participants and has far-reaching deleterious effects. Increased understanding of the factors that facilitate forgiveness of sexual and emotional infidelity will not only benefit science, but also in turn can inform

future treatments to help people recover from the pain of discovering that a partner has been unfaithful.

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12. For this question, please circle only one answer, (A) or (B). For which action would you be *more likely* to *break up* with your partner?

- (A) Your partner has passionate sexual intercourse with that other person.
 - (B) You partner becomes deeply emotionally attached to that other person.
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Please think of a serious or committed romantic relationship that you have had in the past, that you are currently having, or that you would like to have. Imagine that you discover that the person with whom you've been seriously involved both becomes deeply emotionally attached to another person and has passionate sexual intercourse with that other person. For each question, please choose only one answer.

13. Which aspect of your partner's involvement would be *more difficult* for you to *forgive*?

- (A) Your partner's sexual intercourse with that other person.
- (B) You partner's emotional attachment with that other person.

14. Which aspect of your partner's involvement would be *more likely* to lead you to *break up* with your partner?

- (A) Your partner's sexual intercourse with that other person.
- (B) You partner's emotional attachment with that other person.

Romantic Partners Questionnaire

Please answer the following questions about you and the romantic partner who hurt you. (If none of the answers perfectly describe your situation, please pick the best choice.)

1. Before your partner hurt you, how long had the two of you known each other?
 - 1) Less than two weeks
 - 2) Between 2 weeks and 2 months
 - 3) Between 2 months and 6 months
 - 4) Between 6 months and 1 year
 - 5) Between 1 and 2 years
 - 6) Between 2 and 5 years
 - 7) More than 5 years

2. Before your partner hurt you, how long had the two of you been intimately involved? (having a physical relationship of any sort, including holding hands or kissing, sexual intercourse, etc.)
 - 1) Less than two weeks
 - 2) Between 2 weeks and 2 months
 - 3) Between 2 months and 6 months
 - 4) Between 6 months and 1 year
 - 5) Between 1 and 2 years
 - 6) Between 2 and 5 years
 - 7) More than 5 years

3. Before your partner hurt you, had you mutually agreed to be in an exclusive relationship? (that is, was it discussed and you both clearly agreed that you would be romantically involved only with each other?)
 - 1) Yes, we had agreed to be in an exclusive relationship
 - 2) We had never discussed it, but I thought it was “assumed.”
 - 3) No, in fact, we had talked about how it was NOT exclusive
 - 4) No, we never discussed it, and it was obvious to both of us that it was NOT exclusive.

4. Since your partner hurt you, did the two of you break up, at least for a little while?
 - 1) Yes
 - 2) No
 - 3) I don’t know. We haven’t spoken since it happened.
 - 4) We were never really “officially” in a relationship.

5. Are you and the person who hurt you in a romantic relationship now?

- 1) Yes
- 2) No
- 3) I don't know. We haven't spoken since it happened.
- 4) We were never really "officially" in a relationship.

6. If you are not still in a romantic relationship with the person who hurt you, who decided to end it?

- 1) I did it.
- 2) He/She did it.
- 3) It was mutual.
- 4) We are still together.
- 5) I don't know. We haven't spoken since it happened.

7. If you and the person who hurt you broke up after he/she hurt you, did you get back together?

- a) Yes
- b) No
- c) We did not break up at all
- d) We were never "officially" in a relationship, so we never technically broke up.

8. If you and the person who hurt you broke up after he/she hurt you and you are no longer romantically involved, are you friends now?

- a) Yes, we broke up and now we are friends.
- b) No, we broke up and now we are not friends.
- c) We are still together.
- d) I don't know. We haven't spoken since.
- e) I haven't decided yet.

PLEASE READ: If the way that your romantic partner hurt you involved infidelity ("cheating") in some way (including emotional or physical cheating,) please answer the next series of questions. If NOT, please skip the next page and continue where you see the word APPLE

9. Would you qualify your partner's infidelity as more Sexual or more Emotional?

- a) more sexual than emotional
- b) more emotional than sexual
- c) equally sexual and emotional

10. How sexual versus emotional was your partner's outside relationship with someone else?

| | | | | |
|--------------------|---------------|---------------------------------|------------------|-----------------------|
| 1 | 2 | 3 | 4 | 5 |
| Entirely Sexual | Mostly Sexual | Equally Sexual and Emotional | Mostly Emotional | Entirely Emotional |

11. Are you more upset by the physical unfaithfulness or the emotional unfaithfulness?

- a) more upset by the physical unfaithfulness
- b) more upset by the emotional unfaithfulness
- c) equally upset by both the physical and the emotional unfaithfulness

12. On a scale from 1-5, how upset are you by the physical unfaithfulness?

| | | | | |
|---------------------|--------------|---------------------|------------|--------------------|
| 1 | 2 | 3 | 4 | 5 |
| Not upset at all | Hardly upset | Moderately upset | Very upset | Extremely upset |

13. On a scale from 1-5, how upset are you by the emotional unfaithfulness?

| | | | | |
|---------------------|--------------|---------------------|------------|--------------------|
| 1 | 2 | 3 | 4 | 5 |
| Not upset at all | Hardly upset | Moderately upset | Very upset | Extremely upset |

14. Please read all the choices carefully and Circle all that apply: If there was a sexual nature to the infidelity, which of the following was your partner involved in? If you are not sure, take your best guess about which ones happened. If there was no sexual nature, choose "n)."

- a) partner kissed someone else
- b) partner engaged in "French" kissing, necking, "making out"
- c) partner touched someone else/was touched by someone else with clothes ON
- d) partner touched someone else/was touched by someone else with clothes OFF
- e) partner performed oral sex on someone else
- f) partner received oral sex from someone else
- g) partner had intercourse with someone else
- h) partner had anal intercourse with someone else
- i) partner had sexual contact with more than one other person at the same time
- j) partner had sexual contact with more than one person at different times
- k) partner had phone sex with someone else
- l) It was more than kissing, less than sex, but I have NO idea what happened
- m) Other _____
- n) there was no sexual nature to the infidelity at all

15. Please read all the choices carefully and Circle all that apply: If there was an emotional nature to the infidelity, which of the following was your partner involved in? If you are not sure, take your best guess about which ones happened. If there was no emotional nature, choose "i)."

- a) partner had emotional feelings for someone else
- b) partner flirted with someone else
- c) partner went on a date with someone else
- d) partner fell in love with someone else
- e) partner told secrets about him/herself to someone else
- f) partner told secrets about me to someone else
- g) partner told someone else that he/she loved them...
- h) other _____
- i) there was no emotional nature to the infidelity

TRIM-18

For the following questions, please circle the number that best indicates your current thoughts and feelings about the person who hurt you; that is, we want to know how you feel about that person TODAY.

| | Strongly Disagree 1 | Disagree 2 | Neutral 3 | Agree 4 | Strongly Agree 5 |
|--|---------------------------|---------------|--------------|------------|------------------------|
| 1. I'll make him/her pay. | 1 | 2 | 3 | 4 | 5 |
| 2. I am trying to keep as much distance between us as possible. | 1 | 2 | 3 | 4 | 5 |
| 3. Even though his/her actions hurt me, I have goodwill for him/her. | 1 | 2 | 3 | 4 | 5 |
| 4. I wish that something bad would happen to him/her. | 1 | 2 | 3 | 4 | 5 |
| 5. I am living as if he/she doesn't exist, isn't around. | 1 | 2 | 3 | 4 | 5 |
| 6. I want us to bury the hatchet and move forward with our relationship. | 1 | 2 | 3 | 4 | 5 |
| 7. I don't trust him/her. | 1 | 2 | 3 | 4 | 5 |
| 8. Despite what he/she did, I want us to have a positive relationship again. | 1 | 2 | 3 | 4 | 5 |
| 9. I want him/her to get what he/she deserves. | 1 | 2 | 3 | 4 | 5 |
| 10. I am finding it difficult to act warmly toward him/her. | 1 | 2 | 3 | 4 | 5 |
| 11. I am avoiding him/her. | 1 | 2 | 3 | 4 | 5 |
| 12. Although he/she hurt me, I am putting the hurts aside so we could resume our relationship. | 1 | 2 | 3 | 4 | 5 |
| 13. I'm going to get even. | 1 | 2 | 3 | 4 | 5 |
| 14. I forgive him/her for what he/she did to me. | 1 | 2 | 3 | 4 | 5 |
| 15. I cut off the relationship with him/her. | 1 | 2 | 3 | 4 | 5 |
| 16. I have released my anger so I can work on restoring our relationship to health. | 1 | 2 | 3 | 4 | 5 |
| 17. I want to see him/her hurt and miserable. | 1 | 2 | 3 | 4 | 5 |
| 18. I withdraw from him/her. | 1 | 2 | 3 | 4 | 5 |

Revenge Subscale: Items 1, 4, 9, 13, and 17

Avoidance Subscale: Items 2, 5, 7, 10, 11, 15, and 18

ESRPQ

Since your partner hurt you, did the two of you break up, at least for a little while?

- 1) Yes
- 2) No
- 3) I don't know. We haven't spoken since it happened.
- 4) We were never really "officially" in a relationship.

Are you and the person who hurt you in a romantic relationship now?

- 1) Yes
- 2) No
- 3) I don't know. We haven't spoken since it happened.
- 4) We were never really "officially" in a relationship.

If you are not still in a romantic relationship with the person who hurt you, who decided to end it?

- 1) I did it.
- 2) He/She did it.
- 3) It was mutual.
- 4) We are still together.
- 5) I don't know. We haven't spoken since it happened.

If you and the person who hurt you broke up after he/she hurt you, did you get back together?

- a) Yes
- b) No
- c) We did not break up at all
- d) We were never "officially" in a relationship, so we never technically broke up.

If you and the person who hurt you broke up after he/she hurt you and you are no longer romantically involved, are you friends now?

- a) Yes, we broke up and now we are friends.
- b) No, we broke up and now we are not friends.
- c) We are still together.
- d) I don't know. We haven't spoken since.
- e) I haven't decided yet.

Please put a number between 1 (strongly disagree) and 7 (strongly agree) in the space before each statement to indicate whether the following statements apply to you and the romantic partner who hurt you.

| | | | | | | |
|-------------------|----------|-------------------|----------------------------|----------------|----------|----------------|
| Strongly Disagree | Disagree | Slightly Disagree | Neither Agree nor Disagree | Slightly Agree | Agree | Strongly Agree |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

- At this point in time, I tend to think about how things affect ‘us’ as a couple more than how things affect ‘me’ as an individual.
- At this point in time, I am more comfortable thinking in terms of ‘my’ things than ‘our’ things
- At this point in time, I like to think of my partner and me more in terms of "us" and "we" than "me" and "him/her."
- At this point in time, I feel that I want this relationship to stay strong no matter what rough times we encountered.
- At this point in time, my relationship with my partner is more important to me than almost anything else.
- At this point in time, I am not particularly dedicated to this relationship.
- At this point in time, I can always depend on my partner, especially when it comes to things that are important to me.
- At this point in time, even when my partner makes excuses which sound rather unlikely, I am confident that he/she is telling the truth.
- At this point in time, I trust my partner and I am willing to let him/her engage in activities that other partners find too threatening.
- At this point in time, I am confident that my partner would not cheat on me, even if the opportunity arose and there was no chance that he/she would get caught.

For each of the statements below, please choose True or False: If neither choice applies perfectly, choose the best option.

| | | |
|--|------|-------|
| I have forgiven the sexual aspects of the infidelity. | True | False |
| I have forgiven the emotional aspects of the infidelity. | True | False |
| I still feel very strongly about him/her. | True | False |
| This is one of the worst things that ever happened to me. | True | False |
| I feel sorry for him/her. | True | False |
| I am sure that he/she will never do something like this again. | True | False |
| I will never forgive him/her. | True | False |
| I do not feel hurt anymore. | True | False |
| I am not sure about my feelings for him/her. | True | False |
| He/she is not sure about his/her feelings for me. | True | False |

If you and the person who hurt you are no longer romantically involved, please answer the following. If you are still romantically involved, please tell the administrator that you have finished.

| | | |
|---|------|-------|
| I would take him/her back if he/she were interested | True | False |
| He/she doesn't want us to be together now. | True | False |
| He/she wants me back | True | False |
| I would never consider dating him/her again | True | False |
| I never want to speak to him/her again | True | False |

Table 1
Means and Standard Deviations for Major Study Variables

| Variable | Female | | | Male | | | Total | | |
|--|--------|------|----|-------|------|----|-------|-------|----|
| | M | SD | N | M | SD | N | M | SD | N |
| Length of intimate relationship with romantic partner * | 4.38 | 1.39 | 47 | 3.33 | 1.24 | 21 | 4.06 | 1.42 | 68 |
| How sexual versus emotional was partner's outside relationship? (1 = <i>entirely sexual</i>) (5 = <i>entirely emotional</i>) | 2.45 | 1.21 | 47 | 2.68 | .95 | 19 | 2.52 | 1.14 | 66 |
| How upset by physical unfaithfulness? (1 = not at all upset; 5 = extremely upset) | 3.91 | 1.32 | 47 | 4.00 | .78 | 21 | 3.94 | 1.17 | 68 |
| How upset by emotional unfaithfulness? (1 = not at all upset; 5 = extremely upset) | 4.19 | 1.23 | 47 | 3.86 | .85 | 21 | 4.09 | 1.139 | 68 |
| Sexual Guttman-type variable (0 = no sexual aspect to infidelity; 6 = most severe sexual behaviors) | 3.76 | 2.02 | 45 | 3.90 | 1.67 | 21 | 3.8 | 1.91 | 66 |
| Emotional Guttman-type variable (0 = no emotional aspect to infidelity; 7 = most severe emotional behaviors) | 2.89 | 2.17 | 47 | 2.67 | 2.13 | 21 | 2.82 | 2.14 | 68 |
| Mean TRIM-18 | 3.12 | .79 | 34 | 2.93 | .76 | 16 | 3.06 | .78 | 50 |
| Mean Couple Identity (Fincham) | 2.29 | 1.36 | 30 | 2.68 | 1.86 | 12 | 2.400 | 1.50 | 42 |
| Pre-transgression closeness | 5.43 | .65 | 47 | 5.00 | .68 | 21 | 5.30 | .68 | 68 |
| Degree to which partner apologized or made amends | 3.07 | 1.98 | 46 | 2.57 | 1.59 | 21 | 2.91 | 1.87 | 67 |
| Participant Neuroticism | 25.76 | 7.10 | 45 | 22.32 | 7.07 | 19 | 24.73 | 7.21 | 64 |
| Participant Agreeableness | 30.36 | 7.14 | 45 | 33.11 | 5.41 | 19 | 31.17 | 6.75 | 64 |

*Question asked "Before your partner hurt you, how long had the two of you been intimately involved? (having a physical relationship of any sort, including holding hands or kissing, sexual intercourse, etc.)" Choices were: (1) Less than two weeks, (2) Between 2 weeks and 2 months, (3) Between 2 months and 6 months, (4) Between 6 months and 1 year, (5) Between 1 and 2 years, (6) Between 2 and 5 years, (7) More than 5 years

Table 2
Correlations among major study variables

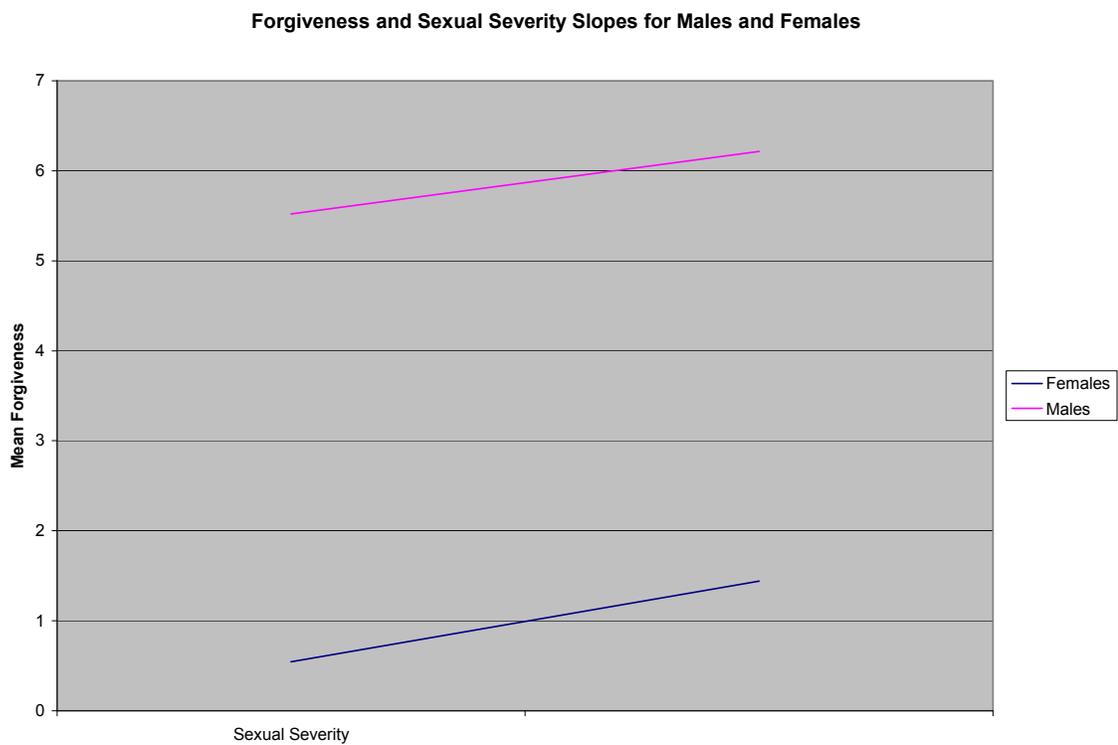
| | Upset by physical | Upset by emotional | Sexual Guttman-type scale | Emotional Guttman-type scale | Mean TRIM-18 | Mean Fireham | Pre-trans closeness | Apology/Amends | Neuroticism | Agreeableness |
|------------------------------|-------------------|--------------------|---------------------------|------------------------------|--------------|--------------|---------------------|----------------|-------------|---------------|
| Upset by physical | 1 | 0.128 | 0.156 | 0.031 | 0.254 | -0.199 | 0.167 | .263* | -0.022 | 0.115 |
| Upset by emotional | 0.128 | 1 | 0.149 | .315** | .473** | -.418** | 0.115 | -0.161 | 0.094 | 0.126 |
| Sexual Guttman-type scale | 0.156 | 0.149 | 1 | .266* | .370** | -0.31 | 0.055 | 0.039 | 0.045 | -0.199 |
| Emotional Guttman-type scale | 0.031 | .315** | .266* | 1 | 0.231 | -0.037 | 0.077 | -0.177 | 0.128 | -0.132 |
| Mean TRIM-18 | 0.254 | .473** | .370** | 0.231 | 1 | -.727** | -0.018 | -.290* | .324* | -0.055 |
| Mean Fireham | -0.199 | -.418** | -0.31 | -0.037 | -.727** | 1 | .317* | 0.277 | -.367* | -0.024 |
| Pre-trans closeness | 0.167 | 0.115 | 0.055 | 0.077 | -0.018 | .317* | 1 | 0.255 | 0.115 | 0.091 |
| Apology/Amends | .263* | -0.161 | 0.039 | -0.177 | -.290* | 0.277 | 0.225 | 1 | -0.189 | 0.163 |
| Neuroticism | -0.002 | 0.094 | 0.045 | 0.128 | .324* | -.367* | 0.115 | -0.189 | 1 | -.363** |
| Agreeableness | 0.115 | 0.126 | -0.199 | -0.132 | -0.055 | -0.024 | 0.091 | 0.163 | -.363** | 1 |

Table 3

Means, Standard Deviations, F values, Significance values and Effect sizes for Hypothetical Infidelity Questions (HRIQ)

| Question | | Mean | SD | F | Sig. | Cohen's d | Effect size r |
|--|----------------|--------------|--------------|---------|------|-----------|---------------|
| Which would upset or distress you more? Imagining your partner (A) enjoying passionate sexual intercourse with that other person (B) forming a deep emotional attachment to that other person | Female Male | 1.78 1.46 | .450 .558 | 164.569 | .000 | .631 | .301 |
| Which would upset or distress you more? (A) Imagining your partner trying different sexual positions with that other person (B) Imagining your partner falling in love with that other person | Female Male | 1.95 1.69 | .442 .586 | 106.930 | .000 | .501 | .243 |
| Which action would be <i>more difficult</i> for you to <i>forgive</i> ? Your partner (A) has passionate sexual intercourse with that other person (B) becomes deeply emotionally attached to that other person | Female Male | 1.64 1.45 | .624 .630 | 33.900 | .000 | .303 | .150 |
| For which action would you be <i>more likely</i> to <i>break up</i> with your partner? Your partner (A) has passionate sexual intercourse with that other person. (B) becomes deeply emotionally attached to that other person | Female Male | 1.65 1.46 | .557 .587 | 44.525 | .000 | .332 | .168 |
| <i>Which aspect</i> of your partner's involvement would be <i>more difficult</i> for you to <i>forgive</i> ? Your partner's sexual intercourse with that other person (B) You partner's emotional attachment with that other person | Female Male | 1.59 1.38 | .500 .513 | 69.503 | .000 | .415 | .203 |
| <i>Which aspect</i> of your partner's involvement would be <i>more likely</i> to lead you to <i>break up</i> with your partner? Your partner's (A) sexual intercourse with that other person (B) emotional attachment with that other person | Female Male | 1.62 1.44 | .501 .520 | 50.685 | .000 | .353 | .174 |
| How upset/distressed does it make you to imagine your partner enjoying passionate sexual intercourse with that other person? | Female Male | 4.49 4.34 | .799 .893 | 12.312 | .000 | .177 | .088 |
| How upset/distressed does it make you to <u>imagine your partner trying different sexual positions with that other person?</u> | Female Male | 3.38 3.98 | 1.18 1.17 | 2.673 | .102 | -.085 | -.042 |
| How difficult would it be for you to forgive your partner for <u>having passionate sexual intercourse with that other person?</u> | Female Male | 4.28 4.09 | .906 1.00 | 16.011 | .000 | .199 | .099 |
| How likely is it that you would break up with your partner if he or she <u>had passionate sexual intercourse with that other person?</u> | Female Male | 4.43 4.35 | .867 .950 | 3.574 | .059 | .088 | .044 |
| How upset or distressed does it make you to imagine your partner forming a deep emotional attachment to that other person? | Female Male | 4.61 4.15 | .753 .981 | 109.851 | .000 | .526 | .254 |
| How upset/distressed does it make you to <u>imagine your partner falling in love with that other person?</u> | Female Male | 4.67 4.17 | .741 1.10 | 117.923 | .000 | .532 | .257 |
| How difficult would it be for you to forgive your partner for <u>becoming deeply emotionally attached to that other person?</u> | Female Male | 4.27 3.69 | .956 1.20 | 116.852 | .000 | .536 | .259 |
| How likely is it that you would break up with your partner if he or she <u>became deeply emotionally attached to that other person?</u> | Female Male | 4.56 4.27 | .781 .994 | 44.579 | .000 | .324 | .160 |

Figure 1



Lower numbers indicate more forgiveness