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EVOLUTION AND THE BIG-5 PERSONALITY FACTORS: INDIVIDUAL

DIFFERENCES IN RESPONSE TO SEXUAL AND EMOTIONAL INFIDELITY

A Thesis

Presented to the

Faculty of

California State University,

San Bernardino

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts

in

Psychology

by

Lesley Marie Johnson

June 2000

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Approved by:

2/18/2000 Date

Dr. Robert E. Cramer, Chair, Psychology

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ABSTRACT

The evolutionary perspective on human mating can be logically extended to sex differences in distress to emotional and sexual infidelity. To date, most of the research has focused only on sex differences in subjective distress to emotional and sexual infidelity. This research was designed to examine "within-sex" differences in response to infidelity using the Big-5 personality factors. Responses to emotional and sexual infidelity were examined, such as violence, seeking counseling and confiding in friends. Male and female undergraduates were asked to think about a serious romantic relationship and then to imagine their partner's committing sexual or emotional infidelity. Participants indicated which of the two infidelities was most distressing. Participants were then asked to indicate the likelihood that they would engage in 28 specific responses. Predictive links were established between several personality factors and the likelihood of the participant's responses following a partner's infidelity. For example, Agreeable, Emotionally Stable participants were unlikely to have an affair and ask friends about someone new following their partner's emotional or sexual infidelity. Participants scoring high on Intellect-Openness

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reported that talking to their partner following his/her sexual or emotional infidelity was highly likely. However, only emotional infidelity would prompt Agreeable, Extraverted and Conscientious participants to talk to their partner. Discussion focused on expanding our understanding of sex differences and the role played by select personality factors in response to sexual and emotional infidelity.

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Education would be much more effective if its purpose was to ensure that by the time they leave school every boy and girl know how much they do not know, and be imbued with a lifelong desire to know it. ~ Sir William Haley

I would like to give special thanks to Dr. Robert Cramer. There are no words to match my gratitude for all that Dr. Cramer has done for me; knowledge was the least of what he taught me. Above all else, he has shaped my attitude and for that I owe him an immeasurable amount of thanks.

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To Mom and Dad - I Love You

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INTRODUCTION

Many factors have been found to influence interpersonal attraction and dating/mating preferences. These factors include: propinquity (Nahemow & Lawton, 1975; Newcomb, 1961; Segal, 1974); interpersonal negotiation (Duck & Miell, 1983); physical appearance (Green, Buchanan, & Heuer, 1984; Hatfield & Sprecher, 1986; Sprecher, 1989; Walster, Aronson, Abrahams, & Rottman, 1966); genetic similarity (Rushton & Nicholson, 1988) and sharing similar attitudes, values and beliefs (Byrne, 1971; Clore & Byrne, 1974; Cramer, Weiss, Steigleder, & Balling, 1985; Lott & Lott, 1986, 1972). Based on Darwin's (1871) concept of sexual selection, more recent work has focused on the importance of a women's reproductive value and on a man's resource potential for mate selection and reproductive success. It has been speculated that women may be more threatened by the potential loss of economic stability (e.q. educational achievement, social status, earning potential) and emotional infidelity, whereas men are more concerned with physical attributes (e.g. attractiveness, health, youth) and the potential loss of sexual exclusivity (Buss, Larsen, Westen, & Semmelroth, 1992; Cramer, Abraham, Fernandez, & Mahler, 1999; Cramer, Manning-Ryan, Johnson, &

Barbo, in press). Explanations for these sex differences have come from an evolutionary perspective as well as traditional social learning perspectives. However, the social learning perspective does not appear to be as adequate as the evolutionary perspective in explaining these sex differences (Cramer, Abraham, Johnson, & Manning-Ryan, 1999; Cramer et al., in press; Wiederman & Allgeier, 1993). To date, the research has focused only on <u>sex</u> <u>differences</u> in subjective distress to emotional and sexual infidelity. In contrast, the present research is designed to investigate individual differences in response to sexual and emotional infidelity using the Big-5 model of personality as a theoretical starting point. <u>Evolution vs. Social Learning Theory</u>

Evolutionary theorists have argued that sex differences in human mate selection were the result of natural selection (Buss, 1987; Buss, 1994; Buss & Barnes, 1986; Daly & Wilson, 1983; DeKay & Buss, 1992; Symons, 1979; Trivers, 1972; 1985). More specifically, evolutionary theorists believe that complex psychological adaptations occurred in response to sex-specific problems humans encountered early in the evolutionary process (e.g., Buss, 1990; Buss, 1991a). Hence, it is conceivable that some

adaptations differ in men and women to the extent that each sex encountered different reproductive obstacles (Buss & Schmitt, 1993). In other words, men and women are assumed to possess psychological adaptations that are selected because they are adaptive.

In theory, natural selection favored men who were less sexually discriminating and more desirous of sex with a variety of partners. Women, on the other hand, who were more concerned with seeking a mate with resource potential were more favored by natural selection. Thus, men who had a strong liking for sex with many partners probably had more offspring than men who were monogamous, therefore ensuring the survival of some offspring. Women have different obstacles such as a long gestation period, child bearing and rearing, and protection. Women who tended to choose mates that had resource potential were more likely to have offspring that survived than women who chose mates that did not provide for them or their offspring. These differences in reproductive strategy, are therefore believed to have an impact on men and women's sexual selection (Buss & Schmitt, 1993; DeKay & Buss, 1992; Daly & Wilson, 1992).

An alternative explanation for the sex differences in human mate selection lies in traditional social learning

theory. In theory, men and women differ in sexual selection based on differential socialization. Men and women are taught to value relationships for different reasons, and therefore their mate selection tactics and their concerns regarding potential loss are different (White & Mullen, 1989; Wiederman & Allgeier, 1992; Wiederman & Allgeier, 1993). In theory, if men and women were reared identically, within a family and a culture, then there would be no apparent sex differences in their sexual selections. According to social learning theory, sexual activity may be more salient to men's self-concept and self-esteem. However, the opportunity to be nurturant with a relationship may be more salient to a women's self-concept and self-esteem (Josephs, Markus, & Tafarodi, 1992). It has indeed been found that men, compared to women, reported more frequent sexual urges (Jones & Barlow, 1990) more frequent sexual arousal (Knoth, Boyd, & Singer, 1988) and more frequent sexual desire (Beck, Bozman, & Qualtrough, 1991). Also, men, compared to women, rated sexual activity as being more important in a relationship. Women, on the other hand, place more importance than men do on the emotional intimacy and personal investment in a relationship (Houston, 1981; Peplau, Rubin, & Hill, 1977)

With regard to sexual selection, it then follows that men would be more focused on a sexual threat and women would be more focused on an emotional threat because of the way culture influenced each sex (Wiederman & Allgeier, 1992; Wiederman & Allgeier, 1993).

It is important to mention that one of the most glaring problems with a social learning theory of human mate selection is that this traditional view simply pushes the relevant questions of explanation further back. After elaborating this social learning view that men and women were taught to value sexual selection differently, the question of why and how such differential learning takes place within a culture, as well as why there is a substantial amount of cross cultural similarity with regard to mate selection (Buss, 1989; Buunk, Angleitner, Oubaid, & Buss, 1996; Flinn, 1988), remains unanswered (Buss, 1992).

The traditional social learning assumption that something was "learned" from one's culture is not sufficient to explain sex differences in human mate selection. Rather, it is merely a description of the current state of affairs (e.g., Buss, 1994; Wiederman & Allgeier, 1993). In contrast, when human mate selection is viewed from an evolutionary perspective/approach, the

" culture" consists of individuals who possess psychological adaptations (mechanisms) which were shaped by natural selection (Lumsden, 1989; Tooby & Cosmides, 1992). <u>Human Mate Selection From an Evolutionary Perspective</u>

According to the evolutionary psychology of mate selection, females compared to males, are expected to prefer mates with <u>resource potential</u> and males, compared to females are expected to prefer mates with a high likelihood of reproductive success. According to <u>sexual strategies</u> <u>theory</u> (Buss & Schmitt, 1993), females prefer mates who are intelligent, ambitious and have good earning potential. For example, because women invest heavily in gestation, child bearing and rearing, and protection, they can, in theory, increase their reproductive success by selecting a partner who can and will contribute personal and material resources to the task of sheltering and provisioning her and her child. Therefore, women prefer men with <u>resource potential</u> because these men possess the means to garner material

resources which they may be willing to share.

Males, on the other hand, prefer young and attractive mates because those particular traits are linked to fertility. Men prefer physically attractive women because attractiveness is a proximal cue to a women's age and

general health (Buss, 1994; Kenrick & Keefe, 1992; Symons, 1979). Consistent with these predictions, women have been found to prefer a socially dominant (e.g. mature, high social status, material resources) partner, and men have been found to prefer a young, healthy, physically attractive partner (Buss, 1989; Buss & Barnes, 1987; Cramer, Schaefer, & Reid, 1996; Kenrick & Keefe, 1992; Landolt, Lalumiere, & Quinsey, 1995; Sprecher, 1989; Townsend, 1989; Wiederman, 1993; Wiederman & Allgeier, 1992). Buss (1989), for example, conducted an ambitious five year study involving 37 cultures. Females, more than males, preferred a socially dominant partner (e.g. mature, high social status, material resources), and males, more than females, preferred a young physically attractive partner. This suggested a degree of psychological unity or species-typicality of men and women that surpassed geographical, racial, political, ethnic and sexual diversity.

Evolutionary Perspective on Emotional and Sexual Infidelity Mate selection criteria have been logically and empirically linked to sex differences in response to emotional and sexual infidelity (Buss, 1994; Buss et al., 1992; Buss & Schmitt, 1993; Cramer et al., in press;

Symon's, 1979) and to jealousy (Dijkstra & Buunk, 1998). For example, females, more than males, are predicted to be more distressed by a mate's emotional infidelity because it signals a potential threat to the males commitment to the relationship, and therefore to the continued access to critical material resources and economic stability which may be critical for the survival of her children. Conversely, males, more than females, are predicted to be more distressed by a mate's sexual infidelity because men have evolved a mate selection strategy that places a premium on sexual exclusivity and the resultant increase in paternity certainty. Psychological and physiological evidence has been found to support the sex-linked prediction described above (Buss et al., 1992). Buss et al. (1992) presented two scenarios to college students: (a) "Imagine your partner forming a deep

emotional attachment to another person" and (b) "Imagine your partner enjoying passionate sexual intercourse with another person." Participants were asked to choose which of the two infidelities would distress or upset them more. The majority of men (60%) chose the sexual infidelity scenario as more distressing whereas only 17% of the women did so. In contrast, 83% of the women and only 40% of the men were

more distressed by the emotional infidelity. Hence, imagining a romantic partner's emotional attachment to a rival was more distressing for women than for men. However, in contrast, the men reported being more distressed than the women by imagining a partner's sexual infidelity. In a cross-cultural comparison (i.e. Germany, the Netherlands and the United States), Buunk et al. (1996) found support for the predicted sex differences in response to emotional and sexual infidelity (for additional cross cultural evidence see: Buss et al., 1999; Cramer et al., 1999a; Geary, Rumsey, Bow-Thomas, & Hoard, 1995; Wiederman & Kendall, 1999).

Critics of the evolutionary perspective have proposed an alternative analysis to explain the sex differences in response to emotional and sexual infidelity. This alternative analysis is, in part, based on recognizing that the imagined infidelities may be logically related. In other words, the imagined infidelities are not independent of each other (DeSteno & Salovey, 1996; Harris & Christenfeld, 1996). Harris and Christenfeld argued that when a forced-choice format is used, participants logically report more distress to the infidelity (e.g. sexual or emotional) which implies that the other infidelity has

occurred as well. They argued that the apparent sex differences were not the result of evolved tendencies, but rather, are a result of sex differences in the learned relationship between love and sex. In short, "men think women have sex only when in love and women think men have sex without love" (p. 364). Therefore, women are more distressed upon learning of their partner's emotional infidelity because it implies that he is also sexually unfaithful. Sexual infidelity, while still troubling, is less distressing because women acknowledge that "men often have sex without being in love" (p. 364). In contrast, men have learned a different relationship between the two infidelities. Men perceive sexual infidelity as more distressing, compared to emotional infidelity, because they assume a women's sexual infidelity denotes she is also in love. Emotional infidelity, on the other hand, is less distressing because men acknowledge that "women can be in love without having sex" (p. 364). Hence, the sex differences reflect variation in the way men and women logically relate the infidelities, rather than evolved mate selection strategies.

Harris and Christenfeld (1996) found support for the previously reported sex differences in subjective distress

to emotional and sexual infidelity. However, the predicted sex differences regarding the inferential link between emotional and sexual infidelity were only partially supported. Females were, as predicted, more likely to report that emotional infidelity implied sexual infidelity than to report that sexual infidelity implied emotional infidelity. However, males did not report a stronger inferential link between sexual infidelity and emotional infidelity than between emotional infidelity and sexual infidelity (see also DeSteno & Salovey, 1996).

Extending the Evolutionary Perspective to Other Violationsof-Trust_.

To date, most of the research has justifiably focused of sex differences in response to emotional and sexual infidelity because of the seriousness of their consequences. For example, across a variety of cultures, male sexual jealousy has been found to be a major cause of serious harm to women, including wife beating and homicide (Daly & Wilson, 1988; Daly, Wilson, & Weghorst, 1982). However, although emotional and sexual infidelity are recognized as serious violations-of-trust, they are neither the only ones that can fundamentally affect a relationship

nor the only ones that can be satisfactorily addressed by

an evolutionary perspective. The alternative explanation offered by Harris and Christenfeld (1996) has intuitive appeal, however, the validity of the analysis appears to be limited to sex differences in response to emotional and sexual infidelity. Their alternative analysis does not readily extend to other, more specific "violations-oftrust" (see Cramer et al., 1999a; Cramer et al., in press).

The evolutionary perspective maintains that men and women are more likely to form relationships with potential partners who possess characteristics (e.g. resource potential or <u>reproductive value</u>) that are consistent with their mate selection strategies (Buss & Schmitt, 1993). Therefore, it is reasonable to assume that men and women trust that their partners will endeavor to maintain these characteristics during the relationship. Women trust that their mates will continue to possess the ability to provide economic stability for the family, while men trust that their mates will maintain a level of general health and physical attractiveness, and also remain sexually accessible (i.e. reproductively valuable). Any violation of these specific trusts should be distressing to both partners. However, an evolutionary perspective predicts sex differences in response to the violations-of-trust that

threaten relationship factors such as economic security, social status, health, attractiveness and sexual accessibility. Accordingly, Cramer et al. (in press) investigated sex differences in response to emotional and sexual infidelity and to additional violations-of-trust that reflected male/female selection strategies. For example, male interests included sexual exclusivity (fidelity) and physical attractiveness, and female interests included emotional attachment and economic security. They compared male and female responses to: (a) the loss of emotional attachment; (b) sexual infidelity; (c) the loss of economic security (e.g. partner losing a job, no longer able to work, no longer desiring to work); the loss of physical attractiveness (e.g. partner (d) gaining about 100 pounds, no longer making an effort to look attractive); and (e) the loss of sexual intimacy. Cramer et al. confirmed previous findings that females, compared to males were distressed more by the loss of emotional attachment, and males, compared to females were distressed more by sexual infidelity. Consistent with the evolutionary perspective, they found the men were more distressed than women by their mates loss of physical attractiveness or the loss of sexual intimacy. Women, on

the other hand, were more distressed than men by the loss of economic security (see also Cramer et al., 1999a).

Cramer et al. (in press) also investigated Harris and Christenfeld's (1996) hypothesis that when men and women select between emotional and sexual infidelity the one that distressed them the most in a forced-choice format, they select the infidelity which implied that a partner has engaged in the other infidelity as well. Consequently, women report that emotional infidelity is distressing because it implies that a partner is also sexually unfaithful. In theory, women have learned that a partner's sexual infidelity does not mean that a partner is emotionally unfaithful as well. Men, on the other hand, report that sexual infidelity is distressing because it implies that a partner is also emotionally unfaithful. Unlike women, men have learned that emotional infidelity does not mean a partner is sexually unfaithful as well.

To test the likelihood that the occurrence of one violation-of-trust implied that the other violation was occurring or would occur, participants were asked to rate each pair of violations twice. The order of the violations were reversed, representing, in theory, the "logical belief" of women and men respectively (DeSteno & Salovey,

1996; Harris & Christenfeld, 1996). For example, the participants rated the likelihood of a partner being sexually unfaithful after learning the partner was emotionally unfaithful, <u>and then</u> the likelihood of partner being emotionally unfaithful after learning the partner was sexually unfaithful.

Cramer et al. (in press) provided a serious challenge to explanations of the sex differences based on the perceived relatedness of the violations-of-trust (DeSteno & Salovey, 1996; Harris & Christenfeld, 1996). Using DeSteno and \$alovey's differential infidelity implication (DII) (see DeSteno & Salovey, 1996 for a complete description), Cramer et al. could neither confirm previously reported findings nor demonstrate that the alternative analysis could be extended to other violations-of-trust. That is, Harris and Christenfeld (1996) reported that, although women believe that emotional infidelity implied sexual infidelity, as well, the men did not believe that the infidelities were related in a manner consistent with the "logical belief hypothesis." In addition, DeSteno and Salovey (1996) reported that women believe emotional infidelity implies sexual infidelity, but they predicted

that men would not relate the infidelities in any specific

manner. However, Cramer et al., found the opposite. Men did report that sexual infidelity implied emotional infidelity, but the women did not report that the infidelities were related in a manner predicted by the alternative analysis. They concluded that, the alternative analysis does not provide a satisfactory general explanation for why men and women differed in their reported distress to violations-oftrust. Rather, the more parsimonious explanations for the observed sex differences in subjective distress to the violations-of-trust are provided by an evolutionary perspective (Cramer et al., in press).

Another Challenge to the Alternative Analysis

In their critique of the alternative analysis, Buss, Larsen and Westen (1996) described a simple procedural test of the argument that the sexual asymmetries in subjective distress to emotional and sexual infidelity covary with how men and women have learned to rationally link the

infidelities. They suggested asking men and women to imagine a partner being emotionally <u>and</u> sexually unfaithful, and then to indicate which <u>component</u> of the infidelity was the most distressing. Using this procedure to determine which infidelity men and women find the most distressing should logically eliminate their inclination to choose the infidelity that serves as the basis for inferring that the other infidelity is occurring as well. An evolutionary perspective is not expected to be so easily challenged by the use of this procedure to test its hypotheses.

In order to test the scientific merit of an evolutionary perspective and the alternative analysis regarding sex differences in subjective distress to a partner's emotional and/or sexual infidelity, Cramer, Abraham, Johnson, and Manning-Ryan (1999) tested three hypotheses. The first hypothesis was derived from an evolutionary perspective and the alternative analysis. Men and women were asked to imagine a partner being emotionally or sexually unfaithful, and then to indicate which infidelity was the most distressing. Results indicated that more women than men were distressed by imagining a partner forming a deep emotional attachment to another person, and more men than women were distressed by imagining a partner enjoying passionate sexual intercourse with another person. Because these results were compatible with an evolutionary perspective and the alternative analysis, they cannot serve as the basis for evaluating the scientific merit of the two positions. The second hypothesis was derived from the

alternative analysis, and asserted that men would report that sexual infidelity implied that co-occurrence of emotional infidelity more so than the reverse, and that women would report that emotional infidelity implied the co-occurrence of sexual infidelity more so than the reverse. Results testing the second hypothesis were not consistent with the alternative analysis. For men, sexual infidelity did not imply the co-occurrence of emotional infidelity more reliably than the reverse. And for women, the relationship between sexual and emotional infidelity was in accord with the "male perspective," rather than the predicted "female perspective." The third hypothesis was derived from an evolutionary perspective. Men and women were asked to imagine a partner being emotionally and sexually unfaithful, and then to indicate which component of the infidelity would be the most distressing. Results testing the third hypothesis were consistent with an evolutionary perspective. That is, more men than women were distressed by the sexual component of a partner's infidelity, and more women that men were distressed by the emotional component of a partner's infidelity. Observing distress results consistent with the first and third hypotheses validated the explanatory and predictive power

of an evolutionary perspective. As a result, Cramer et al. (1999b) provided strong support for an evolutionary perspective of the sex differences in subjective distress to emotional and sexual infidelity (for additional evidence see Buss et al., 1999).

The Big-5 Personality Factors

Several researchers have postulated that at least five major personality dimensions are needed to capture the ways in which individuals differ: Emotional Stability versus Neuroticism, Extraversion (Surgency), Agreeableness, Conscientiousness, and Intellect-Openness to new experiences (McCrae & Costa, 1987; Goldberg, 1981). These five dimensions of personality offer a powerful description because each factor pertains to behavior in a wide variety of situations and because these factors are nearly independent. Costa, McCrae and Dye (1991) describe the five factors as follows: (a) Neuroticism is defined by a tendency to experience unpleasant emotions relatively easily. Components of Neuroticism include anxiety, hostility, depression, self-consciousness, impulsiveness and vulnerability; (b) Extraversion is defined by a

tendency to seek new experiences and to enjoy the company of other people. Components of Extraversion include warmth,

gregariousness, assertiveness, activity, excitement seeking and positive emotions; (c) Agreeableness is defined by a tendency to be compassionate toward others and not antagonistic. It implies a concern for the welfare of other people. Components of Agreeableness include trust, straightforwardness, altruism, compliance, modesty and tender-mindedness; (d) Conscientiousness is defined by a tendency to show self-discipline, to be dutiful and to strive for achievement and competence. People high in Conscientiousness are likely to complete whatever task they say they will perform. Components of Conscientiousness include competence, order, dutifulness, achievement striving, self-discipline and deliberation; and (e) Intellect-Openness to experience is the hardest of the five factors to define. Roughly speaking, this dimension is defined by a tendency to enjoy new culturally related experiences, especially intellectual experiences, the arts, fantasies and any new experience that exposes the person to new ideas. Components of Intellect-Openness to experience include fantasy, esthetics, feelings, actions, ideas and values.

The Big-5 personality structure has been placed in social context. Buss (1991b), for example, explored the

role of the Big-5 in performing actions that produced upset in one's spouse and eliciting actions from one's spouse that were upsetting. For example, wives, whose husbands were low on Agreeableness and Emotional Stability, reported condescension, abuse, unfaithfulness, inconsiderateness, alcohol abuse, emotional constriction and self-centeredness in their husbands. Low Intellect among males predicted major classes of upset, including upset due to neglect, inconsiderateness, abuse, self-absorption, moodiness, sexual withholding, alcohol abuse and emotional constriction. Husbands high in Extraversion were likely to upset their wives by being condescending. Husbands low on Conscientiousness tended to upset their wives by being condescending. Husbands low on Conscientiousness tended to

upset their wives by being unfaithful.

The pattern of upset husbands experienced when married to wives with certain personality factors showed some

similarities when compared with the pattern wives experienced. Husbands, whose wives were low on Agreeableness also reported that their mates upset them by being condescending, possessive-dependent-jealous,

unfaithful and self-centered. Consistent with the husbands pattern, low Intellect was linked with alcohol abuse and emotional constriction in the wives.

The most distinctive pattern Buss reported was associated with the Extraversion factor. Highly Extraverted females appeared to upset their husbands not only by being condescending, but also by being abusive and physically self-absorbed. Overall, Buss demonstrated that mates with certain personality dimensions reliably performed and elicited actions that evoked upset in their partners.

Buss (1992) explored the relationship between the five factor model and usage of manipulation tactics within close relationships. People who scored low on Surgency tended to use debasement tactics (e.g. lower myself so she'll do it, look sickly so she'll do it, etc.) suggesting submissiveness. Those people who scored high on Agreeableness tended to use pleasure induction tactics (e.g. tell her that she will enjoy it, show her how much fun it is). Agreeableness was also linked with the use of reason tactics (e.g. explain why you want her to do it, give reasons for doing it, point out all the good things that will come from doing it). Those who scored low on the Agreeableness factor, on the other hand, tended to use coercion tactics (e.g. demand that she do it, criticize for not doing it, yell at her so she'll do it) and silent

treatment tactics (e.g. ignore her until she agrees to do it, be silent until she agrees to do it, don't respond to her until she does it). Those who scored high on Conscientiousness tended to use reason tactics. Emotionally Stability was linked reliably to regression. That is, those who scored low on this factor tended to use regression (e.g. pout until she does it, sulk until she does it, whine until she does it). Low scores on Emotional Stability also tended to use coercion and monetary reward (e.g. promise to buy something if she does it, give small gift or card before asking her to do it, offer money so she will do it). In comparison, those who scored high on Emotional Stability tended to use hardball tactics (e.g. threats of withholding money, physical violence, deception). Those who scored high on Intellect-Openness tended to use reason tactics and pleasure induction. High scorers on Intellect-Openness also tended to use the social comparison tactic (e.g. compare spouse to others who would perform the act, mention that everyone else is doing it), however, that link was small in magnitude. Once again, Buss (1992) demonstrated the importance of the five personality factors with regard to the use of manipulation tactics in close relationships and the humanistic merit of placing the Big-5 factors in social

context.

Statement of the Problem

The present study is designed to investigate individual differences in response to emotional and sexual infidelity and by doing so place the Big-5 model of personality in another important social context. There are two categories of individual differences of interest: (a) biological sex and (b) personality factors. If asked to imagine emotional and sexual infidelity in a close romantic relationship in a forced choice format, recall that from an evolutionary perspective women are expected to be more distressed than men by emotional infidelity and men are expected to be more distressed than women by sexual infidelity. However, having made that choice (i.e. sexual or emotional infidelity as most distressing), how do men and women respond to the infidelity? Several hypotheses can be tested. An illustrative sample follows: If the threat from a man's emotional infidelity is diversion of his love or economic resources to the rival, the value of the male endures despite his infidelity. Therefore, one way to respond to the threat would be by eliminating the rival. Hence, women, compared to men are more likely to respond aggressively toward a rival (i.e. confront rival, badmouth

rival, harass rival, make trouble for rival; see Paul & Galloway, 1994).

Because an unfaithful woman loses her value, the male is expected to reduce his investments in her. Hence, men are more likely to respond aggressively toward the partner (i.e. physically hurt partner, demand: stay away from others) or end the relationship (Johnson, Manning-Ryan, Barbo, & Cramer, 1997). According to Daly and Wilson (1988) men often end the relationship with violence or divorce after a sexual infidelity, regardless of whether the infidelity was a consequence of choice or of forcible rape. Females, compared to males, are more likely to respond verbally. Hence, females are more likely to give greater weight to responses such as: verbalizing disappointment, talking it over or seeking counseling for self/partner (Johnson et al., 1997).

Personality is the second individual difference that will be investigated. What are the implications of personality for the ways in which men and women respond to sexual and emotional infidelity? The Big-5 factors are expected to be intuitively linked to a variety of response options to sexual and emotional infidelity. For example, people who score high on the Agreeableness factor may be

more likely to verbalize their disappointment or seek counseling. People who are low on Extraversion may be more likely to do nothing or put in more time at work. People who score low on Conscientiousness may be more likely to embarrass their partner and the rival, or have an affair. In comparison, those who score high on Conscientiousness may be more likely to leave the relationship. Men and women who are low on Emotional Stability may be more likely to physically hurt their partner or themselves, destroy property, confront rival or harass rival.

Secondarily, the present research was designed to investigate preferences for short-term and long-term mates and perceived mating success as predictors of response to emotional and sexual infidelity. Illustrative hypotheses follow: People who have high mating success may be more likely to leave the relationship, call up old boyfriend/girlfriend or have an affair. However, people who have low mating success may be more likely to try harder to make partner happy, forgive partner or confront rival.

METHOD

Participants

Two hundred (100 males, 100 females) undergraduates from California State University, San Bernardino were

recruited either individually or from group situations. The average age of the participants was 25.85 years old. The participants identified themselves as: Caucasian, 44.5% (<u>n</u> = 89). Hispanic, 29% (<u>n</u> = 58), African American, 9% (<u>n</u> = 18), Pacific Islander, 2% (<u>n</u> = 4) and other 2.5% (<u>n</u> = 5). Participants reported that 41.5% were "single and not in a committed relationship" (<u>n</u> = 83), 33.5% were "single and in a committed relationship" (<u>n</u> = 67), 18.5% were "married" (<u>n</u> = 37), 4.5% were divorced (<u>n</u> = 9) and 2% reported other (<u>n</u> = 4). Ninety-two percent of the participants reported having had "some college" and 8% were "college graduates." Participants were naïve to the experimental design and were treated in accordance with ethical principles adopted by the American Psychological Association (1992).

Materials and Procedure

Materials included a demographics questionnaire, The Relationship Dilemmas Questionnaire (RDQ) with paired sexlinked violations-of-trust, the 40 item Big-5 Mini-Marker Set (Saucier, 1994), a Perceptions of the Opposite Sex Scale (POSS, adapted from Landolt, Lalumiere, & Quinsey, 1995) and a Mating Preference Scale (MPS, adapted from Landolt et al, 1995).

After agreeing to participate and signing the informed

consent (see Appendix I), participants were asked to complete a series of questionnaires. A demographics questionnaire (see Appendix A) asked participants to indicate their gender, age, sexual orientation,

relationship status, educational level, and race/ethnicity.

Participants were then asked to complete the 40-item Mini-Marker Set (see Appendix B). This scale was designed to measure five personality factors using a short scale format. Participants were asked to respond to forty traits in terms of how descriptive the traits are about oneself. A 9-point Likert-type scale anchored with the phrases, 1 = <u>Extremely Inaccurate</u> and 9 = <u>Extremely Accurate</u> was used to measure each trait.

The RDQ was designed to determine which of two sexlinked violations-of-trust was most distressing. The instructions, adapted from Buss et al. (1992), asked participants to "Please think of a serious committed romantic relationship that you have had in the past, that you currently have, or that you would like to have. What would distress or upset you more?" (p. 252). Participants were then instructed to circle either A or B (see Appendix

Ċ).

After responding to sexual and emotional infidelity,

participants indicated how distressing the violation <u>they</u> <u>circled</u> was to them on a 0 to 100 point scale, with 0 indicating <u>not distressing</u> and 100 indicating <u>extremely</u> <u>distressing</u>. Participants then indicated how distressing the violation <u>they did not circle</u> was to them on a 0 to 100 point scale, with 0 indicating <u>not distressing</u> and 100 indicating <u>extremely distressing</u> (see Appendix D).

Following the subjective distress ratings, participants indicated the likelihood that they would engage in a particular response option to the violation-oftrust they circled on a 0 to 100 point scale, with 0 indicating <u>definitely would not do</u> and 100 indicating <u>definitely would do</u> (see Appendix E). The response options were selected, in part, from an extensive list of actions and motives developed by Paul and Galloway (1994).

Following completion of the RDQ, participants were asked to complete the POSS (see Appendix F). This scale was designed to measure perceived mating success (Landolt et al., 1995). Participants were asked to respond to eight items on a Likert-type scale ranging from 1 to 7, where 1 = <u>disagree</u> and 7 = <u>agree</u>.

Following completion of the POSS, participants were asked to complete the MPS (see Appendix G). This scale was

designed to measure the participants preferences and motivations with regard to short-term and long-term mating (Landolt et al., 1995). Participants were asked to respond to eight items using a 7-point Likert-type scale, where 1 = <u>disagree</u> and 7 = <u>agree</u>.

The questionnaires were administered individually, with the estimated time of completion being approximately 1 hr. Following completion of the battery, participants were debriefed (see Appendix I).

RESULTS

Percentages of men and women reporting more distress to emotional and sexual infidelity are reported in Table 1. As predicted, and consistent with previously reported results, sex differences in response to emotional and sexual infidelity were obtained. That is, more men than women reported being distressed by their partner's sexual infidelity, and more women than men reported being distressed by their partner's emotional infidelity, χ^2 (1, N = 200) = 18.91, p < .001, ϕ^2 = .09. The effect size (ϕ^2) revealed that participant sex accounted for 9% of the variance in the choice of infidelity (i.e. sexual or emotional infidelity) evoking the most subjective distress.

Table 1

Percentage of Men and Women Selecting Emotional/Sexual

	Par	<u>ticipants</u>
	Men	Women
Sexual Infidelity	76	46
Emotional Infidelity	24	54

Infidelity as the Most Distressing

Due to the exploratory nature of this study an alpha level was set at $\underline{p} < .10$. In order to test the hypotheses that: (a) women, compared to men, were likely more to respond aggressively toward a rival, (b) men were more likely to respond aggressively toward the partner, and (c) females, compared to males, were more likely to respond verbally, a series of 2 x 2 ANOVAS (Participant sex x Infidelity choice) were conducted on the response option likelihood ratings. The ANOVA results are presented in Table 2. Several main effects were found for participant sex (see Table 3). Men were more likely than women to: confront the rival, harass the rival, make trouble for the rival, ask friends about someone new, destroy property,

have an affair(s), and do nothing.

Women were more likely than men to: verbalize their disappointment, look more attractive regularly, and seek counseling for themselves and/or their partner.

Main effects for infidelity choice were also observed (see Table 3). Sexual infidelity, compared to emotional infidelity, was more likely to lead to: showing anger, socializing without partner, asking friends about someone new, leaving the relationship, and destroying property. Emotional infidelity, compared to sexual infidelity, was more likely to lead to: talking it over, trying harder to make partner happy, forgiving partner, changing self, monopolizing partner's free time, and finally seeking counseling for themselves and/or their partner.

In addition to the main effects, several interactions were also observed. Men ($\underline{M} = 77.07$) were more likely than women ($\underline{M} = 68.96$) to leave the relationship in response to a sexual infidelity, and women ($\underline{M} = 58.76$) were more likely than men ($\underline{M} = 41.67$) to leave in response to an emotional infidelity. Men were more likely to have an affair in response to a sexual infidelity ($\underline{M} = 27.84$) than to an emotional infidelity ($\underline{M} = 14.86$), and women were more likely to have an affair in response to an emotional infidelity ($\underline{M} = 9.85$) than to a sexual infidelity ($\underline{M} = 5.89$). Men were more likely to forgive in response to an emotional infidelity ($\underline{M} = 64.88$) than to a sexual infidelity ($\underline{M} = 31.17$), and men ($\underline{M} = 64.88$) were more likely than women ($\underline{M} = 49.31$) to forgive in response to a sexual infidelity. Finally, men ($\underline{M} = 53.38$) were more likely than women ($\underline{M} = 34.69$) to change self in response to an emotional infidelity, and more likely to change self in response to an emotional infidelity ($\underline{M} = 30.13$).

Table 2

	-		· · ·
Response Options	Sex(S)	Infidelity(I)	SxI
Confront Rival	6.37°	1.80	0.04
Harass Rival	13.10°	1.07	0.97
Badmouth Rival	0.37	0.08	1.48
Make trouble for rival	7.66°	2.84	0.23
Show Anger	1.49	5.68°	0.03
Embarrass Partner	1.47	0.95	0.05
Talk it over	1.65	4.67 ^b	0.34

F-Ratios for Main Effects and Interactions

Table 2 cont.

Response Options	Sex(S)	Infidelity(I)	SxI
Try harder to make			1
partner happy	0.09	24.32 ^c	0.93
Keep partner from	· · · · · · · · · · · · · · · · · · ·		
going out	0.75	0.57	0.40
Check up on where			
partner is	0.88	0.22	0.34
Socialize without			
partner	2.66	8.10°	1.56
Ask friends about	· ·		
someone new	2.98	6.13°	2.18
Leave the relationship	0.83	21.29 ^c	6.51°
Physically hurt partner	0.01	0.04	1.47
Get drunk	0.18	0.05	0.19
Put in more time at		,	·
work	0.45	2.00	0.003
Verbalize Disappointment	3.35ª	0.81	0.10
Destroy Property	3.78 ^b	3.66 ^b	0.43
Forgive Partner	2.61	29.57°	2.77
Change Self	2.59	6.30 ^b	4.32 ^b

Table 2 cont.

Response Options	Sex(S)	Infidelity(I)	SxI
Monopolize partner's			· · · · · · · · · · · · · · · · · · ·
free time	0.11	5.23 ^b	0.28
Demand: "Stay away			en Alton en alton antes Alton en alton alton
from others"	0.92	0.15	0.37
Call up old boyfriend/	· · ·		
girlfriend	0.16	0.78	0.69
Look more attractive	,	an an an Alaman an A Alaman an Alaman an Al	
regularly	13.16°	0.15	0.14
Seek counseling for			
self/partner	3.82 ^b	3.09ª	0.44
Have an affair(s)	9.85°	1.10	3.89 ^b
Physically hurt self	2.52	0.003	0.33
Do nothing	8.02°	1.45	1.28
<u>Note</u> df = 1, 196; a =	<u>p</u> < .10; b	= <u>p</u> < .05; c = <u>p</u> <	.01.

Table 3

Likelihood of Engaging in Response Options

	4			
		Main	Effect Mea	ans
Response Options	Emotional	Sexual	Male	Female
			· · · ·	
Confront Rival	52.31	63.23	66.29°	51.65°
Harass Rival	22.98	32.76	38.57°	19.33°
Badmouth Rival	42.04	44.35	46.29	40.61
Make trouble for	· ·			r
rival	17.65	30.17	33.67°	16.91°
Show Anger	70.90ª	79.61ª	75.19	77.24
Embarrass Partner	32.41 ^b	39.22 ^b	40.51	32.62
Talk it over	86.37	75.39	75.19	84.15
Try harder to make	2			
partner happy	60.08°	34.02°	40.36	48.00
Keep partner from				
going out	24.29	22.05	24.60	21.25
Check up on where	· · · ·			
partner is	32.13	33.24	30.35	35.26
Socialize without				
partner	66.08°	76.02°	71.03	73.25

Table 3 cont.

Main Effect Means Female Response Options Emotional Sexual Male Ask friend about 36.06° 51.93[°] 53.34 38.15 someone new Leave the relationship 53.50ª 74.01^a 68.57 63.45 Physically hurt 8.24 9.05 8.23 9.24 partner 26.99 Get drunk 26.34 27.90 25.29 Put in more time at work 38.74 45.04 41.92 43.25 Verbalize 74.19 69.90^ª 77.32^ª disappointment 72.71 Destroy Property 8.22^b 18.27^b 18.99^b 9.71^b Forgive Partner 54.10^ª 31.26ª 39.26 41.08 Change Self 40.44^b 31.02^b 35.71 33.68 Monopolize partner's free time 25.94^b 16.28^{b} 17.72 22.37 Demand: "Stay away 13.88 14.92 from others" 11.49 10.97

Table	3.	cont	

Effect	

Response Options	Emotional	Sexual	Male	Female
Call up old boy/				
girlfriend	22.77	26.21	25.00	24.74
Look more attracti	ve			
regularly	55.77	47.78	41.46 ^c	60.33°
Seek counseling fo	or			
self/partner	40.65ª	28.78ª	26.71 ^ª	40.11ª
Have an affair(s)	11.39	19.56	24.72 ^c	8.03 ^c
Physically hurt se	elf 1.99	2.80	3.70	1.27
Do nothing	13.54	12.02	17.91°	7.31°
<u>Note</u> . df = 1, 196;	a = <u>p</u> < .1	0; b = <u>p</u> <	.05; c = <u>p</u>	2 < .01.

The Big-5 factors were constructed by summing eight

specific trait descriptors for each factor. See Appendix B for the traits constituting each factor. The negative items were reversed scored. Thus, high scores on a factor indicated possessing more of that factor.

In order to test the intuitive hypotheses that: (a) Agreeable people were more likely to verbalize their disappointment or seek counseling, (b) Conscientiousness people were more likely to leave the relationship and (c) Emotionally Unstable people were more likely to physically hurt their partner or themselves, destroy property, confront a rival or harass a rival, a point bi-serial correlation was calculated. Table 4 indicates the relationship between the Biq-5 personality factors and response options to <u>emotional infidelity</u> selected as most distressing. Because the focus was on personality, the analyses reported below were collapsed across sex. Emotionally Stable participants were less likely to make trouble for rival, socialize without partner, ask friends about someone new, get drunk, put in more time at work, call up old boyfriend/girlfriend, and look more attractive regularly.

Agreeable participants were more likely to talk it over with their partner. They were also less likely to ask friends about someone new, physically hurt their partner and have an affair(s).

Highly Extraverted participants were less likely to make trouble for the rival, destroy property, demand: "stay away from others, and do nothing. In addition, they were more likely to talk it over with their partner.

Highly Open/Intellectual participants were less likely to embarrass their partner, keep partner from going out, physically hurt their partner, destroy property, have an affair(s), and do nothing. Additionally, they were more likely to talk it over with their partner and verbalize their disappointment.

Conscientiousness participants were less likely to make trouble for the rival, physically hurt their partner, get drunk, put in more time at work, destroy property, demand: "stay away from others," have an affair(s), and do nothing. They were also more likely to talk it over with their partner.

Table 4

Correlations Between Big-5 Personality Factors and Response Options to Emotional Infidelity Selected as the Most Distressing

	<u>Big-5 Factor</u>	<u>rs</u>		
Response Options EMOS	AGR EXT	INTC	CON	
Confront Rival11	0903	.09	.02	
Harass Rival07	18 .02	05	05	

Table 4 cont.

~		Big	g-5 Factor:	<u>5</u>	i
Response Options	EMOS	AGR	EXT	INTC	CON
Badmouth Rival	17	.03	01	08	10
Make trouble for					
rival	22 ^b	08	19 ^ª	05	23 ^b
Show Anger	01	01	.03	01	03
Embarrass Partner	03	12	06	20ª	02
Talk it over		,			
with partner	.18	.39°	.22 ^a	.37°	.28 ^b
Try harder to make	e				
partner happy	07	.09	.14	.05	.01
Keep partner from	,			·	
going out	04	.01	13	29°	13
Check up on where					
partner is	10	.09	.01	12	11
Socialize without			1		
partner	21ª	.08	.12	.17	.04
Ask friends about	•				
someone new	20ª	25 ^b	07	12	14
Leave the					
relationship	.01	01		.01	13

Table 4 cont.

*		B	ig-5 Fact	ors	•
Response Options	EMOS	AGR	EXT	INTC	CON
Physically hurt					
partner	09	19 ^a	11	32°,	28 ^b
Get drunk	30 [°]	16	03	07	29 ^c
Put in more time	,			-	
at work	22 ^b	.05	.08	.02	19 ^ª
Verbalize			· .		
disappointment	05	.11	.16	.21ª	04
Destroy Property	02	14	23 ^b	35°	35°
Forgive Partner	.14	.03	15	.00	.07
Change Self	13	05	08	.14	.01
Monopolize				1	
partner's free					
time	02	.16	.07	12	.06
Demand: "Stay				:	
away from				:	
others"	01	.00	20ª	19	21ª
Call up old boy/					
girlfriend	24 ^b	.10	06	16	09

Table 4 cont.

	<u>Big-5 Factors</u>			<u>S</u>		
Respo	nse Options	EMOS	AGR	EXT	INTC	CON
		· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·			·
Look	more					
att	ractive					
reg	ularly	31°	.00	.02	02	06
Seek	counseling					
for	self/					
par	tner	.03	.09	.13	.05	.11
Have	an affair(s)	03	37°	17	37°	22 ^b
Physi	cally hurt					
sel	f	.03	13	.05	12	10
Do no	thing	12	11	22 ^b	28 ^b	21ª
<u>Note</u> .	a = <u>p</u> < .10,	; <u>q</u> = d	.05; c =	<u>p</u> < .01.	· .	
EMOS	= Emotional S	Stability;	AGR = A	greeablene	ss; EXT =	-
Extra	version; INT(C = Intell	ect/Open	ness; CON	=	۶.
Consc	ientiousness		,			

In order to examine the relationship between the Big-5 personality factors and response options to <u>sexual</u> <u>infidelity</u> selected as the most distressing, a point biserial correlation was calculated (see Table 5). Once

again, because the focus was on personality, the analyses were collapsed across sex. Emotionally Stable participants were less likely to badmouth the rival, make trouble for the rival, keep partner from going out, check up on where partner is, ask friends about someone new, get drunk, put in more time at work, monopolize partner's free time, demand: "stay away from others," call up an old boyfriend/girlfriend, and have an affair(s). Moreover, they were more likely to forgive their partner.

Agreeable participants were less likely to confront the rival, harass the rival, badmouth the rival, make trouble for the rival, ask friends about someone new, get drunk, destroy property, and have an affair(s). In addition, they were more likely to change self, look more attractive regularly, and seek counseling for themselves and/or their partner.

Highly Extraverted participants were less likely to get drunk and less likely to demand: "stay away from others." They were also more likely to badmouth the rival, socialize without their partner, and destroy property.

Intellectual/Open participants were more likely to talk it over with their partner, socialize without their partner, verbalize disappointment, look more attractive

regularly, and have an affair(s).

Conscientious participants were less likely to ask friends about someone new, get drunk, have an affair(s), and do nothing. Additionally, they were more likely to socialize without their partner.

Table 5

Correlations Between Big-5 Personality Factors and Response Options to Sexual Infidelity Selected as the Most Distressing

	an a	. <u>I</u>	<u>Big-5 Factor</u>	<u>s</u>	
Response Options	EMOS	AGR	EXT	INTC	CON
Confront Rival	08	18 ^b	.10	13	06
Harass Rival	09	24 ^c	.06	01	09
Badmouth Rival	23°	19 ^b	.19 ^b	.02	.01
Make trouble for					
rival	16ª	23 ^b	.12	.04	.03
Show Anger	13	.01	.10	.06	.09
Embarrass Partner	10	12	.04	.07	08
Talk it over		n An an Anna an A			
with partner	.05	.03	.07	.18 ^ª	.08

Table 5 cont.

		Bi	g-5 Facto	<u>ors</u>	
Response Options	EMOS	AGR	EXT	INTC	CON
			· · · · · · · · · · · · · · · · · · ·		· · · ·
Try harder to make	9				and and an and an and an
partner happy	.03	.12	03	.07	03
Keep partner from		an an Alban Na Alban Na Alban			
going out	17ª	09	03	04	07
Check up on where					
partner is	28 ^c	.08	05	.01	04
Socialize without					
partner	12	.08	.19 ^ª	.26°	.24 ^c
Ask friends about					
someone new	27°	26 ^c	.09	.09	15ª
Leave the					
relationship	14	04	00	.08	.05
Physically hurt					
partner	03	.06	00	.04	.06
Get drunk	23 ^b	28 ^c	21 ^b	.07	17ª
Put in more time					
at work	24 ^c	01	.07	.13	.06
Verbalize					
Disappointment	.00	03	.12	.18 ^ª	.08

Table 5 cont.

		Bi	.g-5 Fact	cors	
Response Options	EMOS	AGR	EXT	INTC	CON
· .	· · · · · · · · · · · · · · · · · · ·				<u> </u>
Destroy Property	13	22 ^b	.21 ^b	.03	09
Forgive Partner	.18 ^b	.15	05	.08	05
Change Self	.08	.20 ^b	.10	.13	.06
Monopolize	1				
partner's free	· · ·				
time	26°	.01	10	04	03
Demand: "Stay					
away from		· · ·			
others"	22 ^b	06	16ª	01	04
Call up old		· · ·		. ,	
boy/girlfriend	25°	09	.10	.11	13
Look more					
attractive					
regularly	16ª	.16ª	.11	.17 ^a	04
See counseling fo	r		(
self/partner	.04	.17ª	.01	.11	.05
Have an affair(s)	26°	29 ^c	.09	.18 ^ª	25°
Physically hurt				- -	
self	.03	12	05	11	03

Table 5 cont.

Big-5 Factors

Response Options EMOS AGR EXT INTC CON Do nothing -.06 -.10 -.06 -.08 $-.17^{a}$ <u>Note</u>. a = p < .10; b = p < .05; c = p < .01. EMOS = Emotional Stability; AGR = Agreeableness; EXT = Extraversion; INTC = Intellect/Openness; CON = Conscientiousness

In order to test the hypotheses that participants with a high perceived mating success were more likely to leave the relationship, call up an old boyfriend/girlfriend or have an affair, a correlation was calculated. Table 6 indicates the relationship between perceived mating success and engaging in a particular response option. The POSS scores were obtained by summing eight specific items. The negative items (four and eight) were reversed scored. Thus, high scores on the POSS indicated a high degree of perceived mating success.

For participants choosing emotional infidelity as the most distressing, those people with higher levels of perceived mating success indicated a greater likelihood of showing anger, leaving the relationship, physically hurting their partner, verbalizing their disappointment, calling up an old boyfriend/girlfriend, looking more attractive regularly, and finally having an affair(s). Additionally, participants choosing emotional infidelity as the most distressing, those people with higher levels of perceived mating success indicated a lesser likelihood of forgiving their partner.

For participants choosing sexual infidelity as the most distressing, those people with higher levels of perceived mating success indicated a greater likelihood of showing anger, changing self, and calling up an old boyfriend/girlfriend.

Table 6

Correlations Between Attitudes Toward the Opposite Sex and Response Options

	Most Distressing Infidelity		
Response Option	Emotional	Sexual	
Confront Rival	.07	.08	
Harass Rival	.09	.03	

Table 6 cont.

	Most Distressing Infidelity		
Response Option	Emotional	Sexual	
Badmouth Rival	.09	.11	
Make trouble for rival	02	.11	
Show Anger	.21ª	.17 ^a	
Embarrass Partner	.03	03	
Talk it over with partner	.05	.15	
Try harder to make partner			
happy	.05	02	
Keep partner from going out	03	.13	
Check up on where partner i	.s .13	.04	
Socialize without partner	01	.05	
Ask friends about someone	•		
new	.13	02	
Leave the relationship	.22 ^a	.03	
Physically hurt partner	.19 ^ª	.13	
Get drunk	04	.12	
Put in more time at work	02	14	
Verbalize Disappointment	.21 ^ª	.00	
Destroy Property	.03	.02	
Forgive Partner	28 ^b	.02	

Table 6 cont.

	<u>Most Distressing In</u>	fidelity
Response Option	Emotional	Sexual
Change Self	18	.16ª
Monopolize partner's free		
time	05	01
Demand: "Stay away from		
others"	04	.00
Call up old boy/girlfriend	.23 ^b	.20 ^b
Look more attractive		
regularly	.20ª	.22 ^b
Seek counseling for		
self/partner	.01	.15
Have an affair(s)	.20ª	.07
Physically hurt self	.10	.08
Do nothing	- 17	.02
<u>Note</u> . $a = p < .10; b = .10; $.05; $c = p < .01$.	
$\underline{n} = 78$ for emotional		
$\underline{n} = 122$ for sexual		
	<u> </u>	

DISCUSSION

An evolutionary analysis of human mating has generated

a substantial amount of empirical evidence (Buss, 1989; Buss & Barnes, 1996; Cramer et al., 1996; Cramer et al., in press; Kenrick & Keefe, 1992; Landolt et al., 1995; Wiederman, 1993; Wiederman & Allgeier, 1992), and general interest (Batten, 1992; Buss, 1994; Degler, 1991; Fisher, 1992; Wright, 1994). More specifically, integrative concepts such as <u>sexual selection</u> (Darwin, 1871), and heuristic theories like parental investment theory (Trivers, 1972; 1985) and <u>sexual</u> strategies theory (Buss & Schmitt, 1993) provide powerful explanations for the general findings that women, more so than men, prefer an economically stable and socially dominant partner, and men, more so than women, prefer a young, healthy and physically attractive partner. These mate selection criteria also have been logically and empirically linked to sex differences in distress to emotional and sexual infidelity (Buss et al., 1992; Buunk et al., 1996; Wiederman & Allgeier, 1993). The initial results of the present study were consistent with this integration; more women than men reported being distressed by emotional infidelity, and more men than women reported being distressed by sexual infidelity.

Although it was hypothesized that women, compared to men, were more likely to respond aggressively toward the

rival (i.e. confront rival, badmouth rival, harass rival, make trouble for rival), (Paul & Galloway, 1994) no evidence was found suggesting that women are more reactive toward a rival. On the contrary, the results of the present study suggested that men were more likely than women to confront the rival, harass the rival and make trouble for the rival.

Because an unfaithful woman loses her value, the male reduces his investments in her. Therefore, it was hypothesized that aggressive behavior was more likely to be focused primarily at the partner, not the rival. Unexpectedly, the present study found that men were more likely than women to react toward the rival. According to Buss and Shackelford (1997), "aggression is highly contextspecific, triggered only in contexts in which specific adaptive problems are confronted and the adaptive benefits are likely to be reaped." (p. 611). For example, contexts related to reproduction appear to be the most salient in the exhibition of aggression.

Research on human aggression invariably focuses on male intrasexual aggression, simply because of its prevalence (Campbell, 1995; Campbell, Muncer, & Bibel, 1998). Typically, aggression is viewed as pathological

because of the resulting nefarious outcomes. Although, from an evolutionary viewpoint, behavior is only seen as pathological if the mechanisms that govern it are operating in a manner inconsistent with the function for which they were designed to perform (Malamuth & Heilmann, 1998). Aggression, in the present study appears to fulfill a functional design that may have been adaptive ancestrally (e.g., male-male competition).

Because males can biologically produce more offspring than females, fertile females become a valuable resource for which men compete. For example, a number of studies reported that male involvement in violent crimes (i.e., assault, manslaughter, homicide) involved issues related to male status (e.g. Buss, 1996; 1999; Buss & Shackelford, 1997; Wilson & Daly, 1985; 1997). Homicides typically result from the escalation of verbal and/or physical confrontations from which neither party can afford to back down (Buss, 1999; Buss & Shackelford, 1997). In fact, in their analysis of crime statistics, Wilson and Daly's (1985) point out that men and women are equally likely to be robbed, however, men are more likely to be killed during the robbery. This finding suggests that men may be more inclined to escalate confrontations because backing down

may indeed result in irreparable harm to resources and reputation (Buss, 1999; Buss & Shackelford, 1997, Wilson & Daly, 1985; 1997). This irreparable damage to reputation, as a result of backing down, may account for why men responded more aggressively toward the rival (i.e., confront the rival, harass the rival and make trouble for the rival) in the present study.

The unexpected finding that men respond more aggressively toward a rival can also be explained from a developmental viewpoint. Reproductive demands differ for males and females in adulthood and as a result developmental sex differences are expected (Geary, 1999). Early in life, young males engage in play fighting, which provides the experience needed for dominance-related encounters in adulthood. "Play incorporates many physical components of adult behavior patterns, such as those used in aggression, but without their immediate functional consequences" (Walters, 1987, p. 360). Play provides delayed benefits because a person practices behaviors that are essential for survival and reproduction in adulthood. Often times, sex differences in play patterns mirror sex differences in adulthood (Geary, 1998). For example, Keeley (1996) found differences in the frequency of rough and

tumble play. At approximately three years of age boys begin engaging in various forms of play fighting (e.g., wrestling) as well as group level competitive play (e.g., football) more than girls. Thus, this type of play fighting can be viewed as an evolved strategy to practice the competencies that are associated with male-male competition (Geary, 1998).

Paul, Foss and Galloway (1993) suggested two possibilities why women may be more emotionally and confrontationally reactive toward a rival. The first possibility concerned dependency with regard to the relationship. The extent that one is dependent on a relationship, having few or no options, one should shift the focus of aggression from the partner to the rival in order to retain the partner and expel the rival.

If the threat from a man's emotional infidelity is diversion of his love or resources to the rival, the value of the male endures despite his infidelity. Therefore, the threat can be removed by eliminating the rival (Paul & Galloway, 1994). Once again, women's dependence on male resources is a critical factor. Schuster (1983) suggested that women's extreme violence against their rivals was related to extreme dependence of their husbands resources.

Dependency may be a critical explanation as to why no evidence was found suggesting that women are more reactive toward a rival. Approximately 40% of the sample reported being single and not in a committed relationship and

approximately 33% reported that they were single and in a committed relationship, therefore, it could be that courting women are not dependent on their partner's resources.

The second possibility why women may be more emotionally and confrontationally reactive toward a rival is that women are keeping their options open about partners (Paul, Foss, & Galloway, 1993). This view is compatible with an evolutionary view that female fitness is critically dependent on choosing a mate with the best possible resources (Trivers, 1972). If women react toward the rival, it allows them to eliminate the rival and at the same time engage in behaviors than will help repair, revise or improve the relationship and still have the option of ending the relationship or looking for a better one (Paul, Foss, & Galloway, 1993). Although no evidence was found in the present regarding reactivity to the rival, women were found to look more attractive regularly. This finding is

compatible with an evolutionary perspective that female

fitness is dependent on selecting the best possible mate (Trivers, 1972). Looking more attractive regularly could heighten the tie with the partner through fear and/or loss and it could possibly attract a better mate (Paul, Foss, & Galloway, 1993).

In the present study, women, more so than men, were found to verbalize disappointment as well as seek counseling for self and/or partner. Beginning at a very young age, as well as extending throughout adulthood, boys and girls tend to separate themselves into same-sex groups. Consequently, boys and girls may grow up in different social cultures. The boys social culture consists of play fighting and the organization of themselves into competing groups. However, the girl's social culture is more consistently communal. For example, girls tend to demonstrate greater empathy, more concern for the well being of other girls, more nurturing intimacy, and they give more social and emotional support. The results of the present study concerning women (e.g., more likely to verbalize disappointment and to seek counseling) can be linked to the early social behavior of girls which is focused on developing and maintaining a network of personal relationships (Geary, 1999).

The present study indicated that an evolutionary perspective can be extended to explaining sex differences in one particular response option to emotional and sexual infidelity. That is, men were more likely than women to leave the relationship in response to a sexual infidelity, and women were more likely than men to leave the relationship in response to an emotional infidelity. Men have evolved a mate selection strategy that places a premium on sexual exclusivity and the resultant increase in paternity certainty (Buss, 1994; Buss et al., 1992; Buss & Schmitt, 1993; Symons, 1979; Cramer et al., in press). Therefore, leaving a relationship in response to sexual infidelity is adaptive for men because paternity certainty may be called into question. However, leaving a relationship in response to an emotional infidelity is adaptive for women because continued access to critical material resources and economic stability may be called into question.

Personality was the second individual difference of interest in the present study. What role does personality play for the ways in which people respond to emotional and sexual infidelity? Predictive links were established between several personality factors and the likelihood of

the participant's responses following a partner's emotional infidelity. For example, Emotionally Stable participants were less likely to make trouble for the rival, socialize without partner, ask friends about someone new, get drunk, put in more time at work, call up an old boyfriend/girlfriend and look more attractive regularly.

Agreeable participants were more likely to talk it over with their partner. However, they were less likely to ask friends about someone new, physically hurt their partner and have an affair(s).

Highly Extraverted participants were less likely to make trouble for the rival, destroy property, demand: "stay away from others" and do nothing. In addition, they were more likely to talk it over with their partner.

Highly Intellectual/Open participants were less likely to embarrass their partner, keep partner from going out, physically hurt their partner, destroy property, have an affair(s) and do nothing. Additionally, they were more likely to talk it over with their partner and verbalize disappointment.

Finally, Conscientiousness participants were less likely to make trouble for the rival, physically hurt partner, get drunk, put in more time at work, destroy property, demand: "stay away from others," have an affair (s) and do nothing. They were also more likely to talk it over with their partner. Given the meaning of each of these five personality constructs it is not surprising that the responses seem to be in accordance with that particular personality factor.

Buss (1992) explored the relationship between the five-factor model and the usage of manipulation tactics within close relationships. Similar to the present study's findings, he too, found that participants scoring high on Conscientious and Intellect/Openness tended to use reason tactics (explain why you want s/he to do it, give reasons), which is similar to the present project's response option of "talking it over".

Predictive links were also established between several personality factors and the likelihood of the participant's responses following a partner's sexual infidelity. For example, Emotionally Stable participants were less likely to badmouth rival, make trouble for rival, keep partner from going out, check up on where partner is, ask friends about someone new, get drunk, put in more time at work, monopolize partner's free time, demand: "stay away from others," call up an old boyfriend/girlfriend, look more

attractively regularly and have an affair(s). Moreover, they were more likely to forgive their partner.

Agreeable participants were less likely to confront the rival, badmouth the rival, make trouble for the rival, ask friends about someone new, get drunk, destroy property and have an affair(s). In addition, they were more likely to change self, look more attractive regularly and seek counseling for self and/or partner.

Highly Extraverted participants were less likely to get drunk and less likely to demand: "stay away from others." They were also more likely to bad mouth rival, socialize without partner and destroy property.

Intellectual/Open participants were more likely to talk it over with partner, socialize without partner, verbalize disappointment, look more attractive regularly and have an affair(s). Finally, conscientious participants were less likely to ask friends about someone new, get drunk, have an affair(s) and do nothing. Additionally, they were more likely to socialize without their partner.

One interesting point to make is that some of the response options emerge in almost all of the five factors. For example, following an emotional infidelity, Agreeable, Extraverted, Intellectual/Open and Conscientious

participants were more likely to talk it over with their partner. However, this was not unexpected given the meaning of these constructs. Also, following a sexual infidelity, Emotionally Stable, Agreeable, Extraverted, and

Conscientious participants were less likely to get drunk.

As a secondary analysis, the present study was interested in investigating the relationship between perceived mating success (Perceptions of the Opposite Sex Scale) and engaging in a particular response option. For participants choosing emotional infidelity as the most distressing, those people with higher levels of perceived mating success indicated a greater likelihood of showing anger, leaving the relationship, physically hurting their partner, verbalizing disappointment, calling up an old boyfriend/girlfriend, looking more attractive regularly and having an affair(s). In addition, they reported a lesser likelihood of forgiving their partner.

For participants choosing sexual infidelity as the most distressing, those people with higher levels of perceived mating success indicated a greater likelihood of showing anger, changing self, calling up an old boyfriend/girlfriend and looking more attractive regularly. It is not surprising that people were likely to show

anger following an emotional and sexual infidelity. However, it was surprising that those who reported having a high level of mating success would leave the relationship following an emotional infidelity but not following a sexual infidelity. If one has a high level of mating success it should not be a problem to find another partner if the current partner is unfaithful.

It was also not surprising that those people who reported having a high level of mating success were more likely to change themselves or look more attractive regularly following an emotional or sexual infidelity. Once your partner has been unfaithful it is likely that you will want to physically look your best to attract another partner. Once again, it is not surprising that participants who reported a high level of mating success were more likely to call up an old boyfriend/girlfriend following an emotional or sexual infidelity. Those people with a high level of mating success believe they will be able to attract another mate without a problem. Therefore, they may enjoy engaging in revenge tactics before looking for another partner.

In summary, sex differences in subjective distress conform to predictions derived from an evolutionary

perspective. This research is just one step toward placing the Big-5 model of personality in to a social context by linking its factors to response options to a partner's emotional and sexual infidelity. The present research focused on only a few response options following a partner's infidelity. However, these are not the only responses a person could engage in following their partner's infidelity. Hence, future research should explore additional response options to emotional and sexual infidelity, resulting in a greater understanding of sex differences and the role played by select personality factors. Combining an evolutionary perspective with a cultural/social perspective appears to provide the most comprehensive explanation of understanding how men and women respond to emotional and sexual infidelity.

	Appendix A: Demogra	phic Scale	
1.	Gender (Please Circle): Male	Female	
2.	Age:		
3.	Sexual Orientation: (Please Check One)		
	Gay or Lesbian		
-	Heterosexual		
. *	Bisexual		
4.	Relationship Status: (Please Check One)	
	Single, not in a serious rela	tionship	
	Single, in a serious relation	ship	
	Married	· · · · · · · · · · · · · · · · · · ·	
	Divorced		
	Other		
5.	Education Level: (Please Check One)		
. • • .	Some High School	Some College	· · · · · · · · · · · · · · · · · · ·
	High School Graduate	College Graduate	
6.	Please indicate the race/ethnicity you		
	Caucasian	African Americ	an
	Hispanic:	Asian:	
	Mexican American American/Chicano	Japanese Chinese	
	Puerto Rican	Korean	
	Cuban	Vietnamese	
	Other	Asian India Cambodian	n
		Laotian	· · · · · · · · · · · · · · · · · · ·
		Filipino	
		Other	
	Pacific Islander:		
	Hawaiian	American India	an:
	Samoan	Aleut	· · ·
	Guamanian	Eskimo	
	Other		
	Other Non-white:		

Appendix B: 40-Item Mini-Marker Scale

How Accurately Can You Describe Yourself? Please use this list of common human traits to describe yourself as accurately as possible. Describe yourself as you see yourself at the present time, not as you wish to be in the future. Describe yourself as you are generally or typically, as compared with other persons you know of the same sex and of roughly your same age.

Before each trait, please write a number indicating how accurately that trait describes you, using the following rating

scale.

		INACC	CURATE		?		ACCURA	ŢE	
Extrem	ely	Very	Moderatel	y Slightly		Slightly	Moderately	Very	Extremely
1	······ ·	2	3	4	5	6	7	8	9

	с		· · · ·
Bashful ^c	Energetic ^c	Moody ^a	Systematic ^e
Bold ^c	Envious ^a	Organized ^e	Talkative ^c
Careless ^e	Extraverted ^c	Philosophical ^d	Temperamental ^a
Cold ^b	Fretful ^a	Practical ^e	Touchy ^a
Complex ^d	Harsh ^b	Quiet ^c	Uncreative ^d
Cooperative ^b	Imaginative ^d	Relaxed ^a	Unenvious ^a
Creative ^d	Inefficient ^e	Rude ^b Uni	tellectual ^d
Deep ^d	Intellectual ^d	Shy ^c	Unsympathetic ^b
Disorganized ^e	Jealous ^b	Sloppy ^e	Warm ^b
Efficient ^e	Kind ^b	Sympathetic ^b	Withdrawn ^c

a = emotional stability, b = agreeableness, c = extraversion,

d = intellect, e = conscientiousness

Appendix C: Paired Violations-of-Trust 1(A) Your partner forming a deep emotional attachment to another person.

1(B) Your partner enjoying passionate sexual intercourse

with another person.

Appendix D: Item 1 on the RDQ

Please think of a serious, committed romantic relationship that you have had in the past, that you currently have, or that you would like to have. Please **CIRCLE A** <u>or</u> **B** to indicate which of the following events would be more upsetting or distressing to you.

1. (A) Your partner forming a deep emotional attachment to another person.

(B) Your partner enjoying passionate sexual intercourse with another person.

Please use the 0-100 point scale below to respond to the next two items:

Indicate how distressing the choice you **CIRCLED ABOVE** is to you by putting any number between 0 and 100 in the following space.

Next, indicate how distressing the choice you **DID NOT CIRCLE ABOVE** is to you by putting any number between 0 and 100 in the following space.

Appendix E: Response Options for Sexual and Emotional Infidelity

NEXT, please indicate the likelihood you would engage in a particular response to the item that **DISTRESSED YOU THE MOST** described above (Question 1) using the 0-100 point scale below. Put any number from 0-100 in the space provided.

0----I---I-25%-I----I---50%----I----I-75%-I----I---100% definitely chance chance chance definitely would not would do would do would do would do do Confront Rival Badmouth Rival Harass Rival Make trouble for rival Show Anger Verbalize Disappointment Embarrass Partner Destroy Property Talk it over with partner Forgive Partner Try harder to make partner happy Change Self Keep partner from going out Monopolize partner's free time Check up on where partner is Demand: "Stay away from others" Socialize without partner Call up old boy/girlfriend Ask friends about someone new Look more attractive regularly Leave the relationship Seek counseling for self/partner____ Physically hurt partner Have an affair(s) Get drunk Physically hurt self Put in more time at work Do nothing

Appendix F:

Perceptions of the Opposite Sex Scale

Using the scale below, please indicate the extent to which you agree or disagree with the following statements by putting any number between 1 and 7 in the space provided.

1-----5-----6-----7 disagree agree

- 1. Members of the opposite sex that I like, tend like me back.
- 2. Members of the opposite sex notice me.
- 3. I receive many compliments from members of the opposite sex.
- 4. Members of the opposite sex are not very attracted to me.
- 5. I receive sexual invitations from members of the opposite sex.
- 6. Members of the opposite sex are attracted to me.
- 7. I can have as many sexual partners as I choose.
- 8. I do not receive many compliments from members of the opposite sex.

Appendix G:

Mating Preferences Scale

Using the scale below, please indicate the extent to which you agree or disagree with the following statements by putting any number between 1 and 7 in the space provided.

1-----6-----7 disagree agree

- 1. I prefer short-term sexual relationships.
- 2. Ideally, I would have many sexual partners.
- 3. Ideally, I would have one steady partner.
- 4. I prefer a long-term relationship with one partner.
- 5. I enter a long-term relationship because it offers me a greater guarantee of sexual relations.
- 6. I enter a long-term relationship because it offers me a greater guarantee of emotional commitment.
- 7. If I could maintain a long-term relationship with one partner while having sexual relations outside of my relationship, I would do so.
- 8. Western society values monogamy between sexual partners.

Appendix H:

Informed Consent

This study is being conducted by Lesley Johnson and Barbara Manning-Ryan under the supervision of Professor Robert Cramer. The study is designed to investigate "violations-of-trust" in romantic male/female relationships. Specifically, we are looking at adult relationships. This study has been approved by the Psychology Department's Human Participants Review Board. The department and the university require that you give your consent before participating.

In this study, you will be asked to respond to several "violation-of-trust," questionnaires regarding relationships and a questionnaire regarding self-perceptions. Completing the survey should take approximately one hour.

Any information you provide will be held in strict confidence by the researchers. At no time will your name be reported with your responses. All data will be reported in group form only. No identifying information other than your age, gender, sexual orientation, relationship status and ethnicity will be collected in this study. At the study's conclusion you may receive a report of the results.

There are no foreseeable risks to you as a participant in this study. At your instructor's discretion you may receive extra credit for your participation.

If you have any questions regarding the study or if you would like a report of the results, please contact Professor Robert Cramer at (909) 880-5576.

Your participation in this research is voluntary. You are free to withdraw, without penalty, or remove any data you have provided, at ant time during this study.

By placing a mark in the space below, I acknowledge that I have been informed and understand the nature and purpose of this study and freely consent to participate. By this mark, I further acknowledge that I an at least 18 years of age.

Give your consent to participate by marking a check or "X" here:_____ Today's date is: _____

Appendix I: Debriefing Form

Thank you for your participation in this project. The project is designed to test how males and females respond to violations-of-trust in romantic relationships. We were also interested in investigating how personality and perceived mating success influenced responses to the violations of trust. Your participation is appreciated because the results allow for a better understanding of the factors involved in mate selection and relationship stability. Clearly there are no right or wrong answers in this type of research. The research was reviewed and approved by the Psychology Department's Human Participants Review Board. Any questions regarding this study can be answered by contacting Dr. Robert Cramer at (909) 880-5576. The group-level results of this study can also be obtained by contacting Dr. Robert Cramer. If this survey has brought about any feelings or concerns you might have, please contact the CSUSB Counseling Center at (909) 880-5040. In order that the results not be influenced by participants being aware of the projects purpose, we request that participants not reveal the nature of the study to other potential participants.

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