Sex and Big-5 Personality Factors as predictors of subjective distress to violations-of-trust

Barbara Manning-Ryan
SEX AND BIG-5 PERSONALITY FACTORS AS PREDICTORS
OF SUBJECTIVE DISTRESS TO VIOLATIONS-OF-TRUST

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
Barbara Manning-Ryan
September 1999
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ABSTRACT

Sex and the Big-5 Personality Factors were used as predictors of subjective distress to violations-of-trust. Male and female participants responded to a questionnaire designed to explore levels of subjective distress to nine paired violations of trust, which reflect different male and female relationship interests (e.g., sexual, emotional, financial, attractiveness). Males and females followed expected sex-linked strategy patterns by reporting greater subjective distress to biologically relevant violations of trust. Predictive links were established between personality factors and subjective distress in a close relationship related to the violations-of-trust pairs.
ACKNOWLEDGMENTS

It has been said that a woman is like a tea bag. You never know her strength until you drop her in hot water. I would sincerely like to express my appreciation to the faculty and staff of the Department of Psychology for providing me with all of the hot water I could stand during my years of instruction at California State University, San Bernardino. I am especially grateful for and indebted to Professor Robert Cramer for his inspiration, expert guidance, and support. Dedication and professionalism, such as his, are rare in my experience. He has a true gift for teaching. Thanks also to Dr. Eugene Wong and Dr. Michael Lewin, who served on my thesis committee. The members of the Social Learning Evolution Research Group have been of enormous help in the completion of this thesis and I would like to extend a special appreciation to Lesley Johnson in this regard. Most heartfelt thanks are offered to my family, who have been there for me through thick and thin. Their unquestioned loyalty and support has been invaluable in the achievement of my goals. Finally, I would like to acknowledge the financial assistance, in the form of a research grant, from ASI.
To my boys.
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INTRODUCTION

Humans are a product of evolutionary success. Evolutionary theorists believe that complex psychological adaptations occurred in response to sex-specific problems humans encountered early in the evolutionary process (Buss, 1989; 1991; 1994). Men and women utilize cognitive, motivational, emotional and behavioral strategies to accomplish particular goals. Individual differences and behaviors stem from these physiological mechanisms and behavioral strategies, and allow men and women to facilitate solutions to adaptive problems.

The primary individual difference is sex. Despite physical differences, men’s and women’s behavioral and psychological functioning is similar, except in those instances where they have encountered different adaptive problems. Men and women have been presented with different biological imperatives, and therefore, men and women approach the tasks of gaining access to mates and to parental involvement with child rearing differently. These biological differences have necessitated the development of certain strategic behaviors. The evolutionary approach to mate selection posits that men and women seek mates with certain predictive qualities which signal future reproductive success. In addition, once a mate has been selected, men and women trust that their mate will endeavor to maintain these qualities throughout the length of the relationship and, in an effort to preserve the relationship, they will engage in sex-linked mate retention strategies.

Although sex is the primary difference, other individual differences may bear upon the ability of men and women to facilitate solutions to adaptive problems, as well.
Human beings tend to act and react in idiosyncratic and relatively stable patterns which are commonly referred to as personality. A decided advantage in goal attainment, for example, is gained by individuals who possess the ability to predict individual differences in others (e.g., Buss, 1991; 1992). Understanding an individual’s personality affords others an indicator of the possible range of behaviors which are characteristic of that person. Humans need to predict the behavior of others. The ability to predict another’s future behavior is goal oriented and adaptive.

Many researchers have explored personality patterns and have concluded that five factors can summarize personality: emotional stability, extraversion, agreeableness, conscientiousness and openness (Eysenck, 1981; Goldberg, 1981; Goldberg, 1983; Saucier, 1994). Personality, as a predictor of behavior, affords a more precise focus on individual differences than does the focus on sex alone. Therefore, this research investigated gender differences and the predictive aspects of the five personality factors on subjective distress to sex-linked violations-of-trust.

An Evolutionary Approach to Mate Selection

The study of sex differences in human mate selection has benefited from the application of evolutionary principles. Based on Darwin’s (1871) concept of sexual selection, evolutionary theorists posit that complex psychological adaptations occurred in response to sex specific problems encountered by humans early in the evolutionary process. Mate selection strategy is a primary example of a sex specific problem on which men and women differ (Buss, 1994; Buss & Schmitt, 1993). Because women invest heavily in gestation, child bearing, child rearing, and protection of their young, for
example, 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 herself and her child. Hence, women, compared to men, are expected to prefer mates with social status and/or resource potential, because these potential mates possess means to garner material resources that they may be willing to share. Men, on the other hand, can, in theory, increase their reproductive success by attending to specific personal traits that signal a potential partner’s fertility. Because fertility is closely linked to a woman’s age and general health, men will prefer physically attractive mates because attractiveness is a proximal cue to a woman’s age and general health (Buss, 1994; Buss & Schmitt, 1993; Kenrick & Keefe, 1992; Symons, 1979). Hence, men compared to women are expected to prefer mates with reproductive value. Consistent with these expectations, women prefer mates who are socially dominant (e.g., possesses maturity, high social status, and material resources). Males, on the other hand, prefer young, healthy and physically attractive mates because those particular traits are linked to fertility. A wealth of research supports these general expectations (e.g., Buss, 1989; Buss & Barnes, 1986; Cramer, Schaefer & Reid, 1996; Kenrick, Groth, Trost, & Sadalla, 1993; Kenrick & Keefe, 1992; Kenrick, Sadalla, Groth, & Trost, 1990; Sadalla, Kenrick, & Vershure, 1987; Sprecher, 1989; Townsend, 1989; Wiederman, 1993; Wiederman & Allgeier, 1992).

**Emotional and Sexual Infidelity**

Like all good theories, the evolutionary perspective accommodates a variety of situations. It may be in the interest of males to control female sexual exclusivity, as
theory predicts, but females of many species, including allegedly monogamous ones, cheat. Thus males, with the best of intentions, often get duped out of reproductive success.

Such is evolution. This is not a failure of evolutionary theory, but a legitimate adjustment of it. Females have their interests, too. Kin selection predicts that if males take over a group in which females are caring for infants, they might benefit from doing away with the infants that do not carry his DNA and reimpregnating the females with his own genes. This has been seen in lions, monkeys, and many other species. In the animal world, females will mate with a number of males in order to confuse paternity and, therefore, increase the likelihood of the survival of their offspring.

Over the past 15 years systematic research on child abuse and pedicide by Daley & Wilson (1988), research specifically motivated by evolutionary theory, has shown that a child is between 10 and 100 times more likely to be assaulted or killed if he or she lives in a household that includes an unrelated male. Careful studies show that controlling factors such as, socioeconomic status, ethnicity, religion, and educational level, fails to abolish this very large effect. Nor does the finding respect national borders; it appears reliably in at least four countries. Although several of these countries, Canada, the United States, and Britain are culturally very similar, comparable effects are seen among the Yanomamo Indians of Venezuela. Because the phenomenon persists when cultural and sociological variables are controlled, it is difficult to interpret these findings without reference to evolutionary theory. This, it should be emphasized, does not explain the mechanism in individual households.
The investigation of sexual strategies and mating criteria has logically led many psychologists to examine sex differences in response to emotional and sexual infidelity (e.g., Buss, 1994; Buss, Larsen, Westen & Semmelroth, 1992; Buss & Schmitt, 1993; Manning-Ryan, Nieri, Johnson, & Cramer, 1996; Cramer, Manning Ryan, Johnson, & Barbo, in press). Theoretically, women are distressed by threats to the level of resources and to the commitment their partners devote to them and to their children. Men, in contrast, are distressed by threats to their paternity, to their likelihood of future matings, and by their mate diverting her sexual favors to another man.

Buss, et al., (1992) investigated participant responses to imagined sexual and emotional infidelity and found that sex differences in subjective distress to these violations of trust followed the predicted patterns. For example, participants were asked to imagine that the person with whom they were romantically involved became either sexually or emotionally involved with someone else. They were then asked to specify which infidelity distressed them more. Consistent with evolutionary predictions, men were more distressed than women by the threat to sexual exclusivity, which may have signaled the loss of paternal certainty. Women, in contrast, were more distressed then men by the threat to economic security, which may have been perceived as a threat to the willingness of her partner to continue to share needed resources.

Buss et al., (1992) also recorded physiological reactions to these imagined sex-linked infidelities. In general, the physiological data supported evolutionary predictions. Electrodermal activity (EDA), pulse rate, and electromyographic muscle activity were measured. These physiological responses were used as indicators of subjective distress
while participants were asked to imagine each of two scenarios in which their partner became emotionally or sexually involved with someone else. Men showed significantly greater EDA in response to the imagined sexual activity than to the emotional activity. Women showed significantly greater EDA in response to the imagined emotional activity than to the sexual activity.

Cross-cultural studies conducted in the United States, Germany, and the Netherlands (Buunk, Angleitner, Oubaid & Buss, 1996) asked participants to respond to paired relationship dilemmas. In the familiar forced-choice format, participants were asked to choose which scenario would upset them more, an imagined scenario involving sexual infidelity or an imagined scenario involving emotional infidelity. Results supported Buss et al., 1992, and revealed that sex differences in sexual jealousy were robust across cultures. The predicted sex differences have also been observed within the United States among African-American and white men and women (Cramer, Abraham, Fernandez, & Mahler, 1999).

A Critique of the Evolutionary Perspective

Critics of the evolutionary perspective have advanced an alternative analysis of the sex differences in response to emotional and sexual infidelity. The alternative analysis is based, in part, on assuming that the infidelities are logically related (e.g., DeSteno & Salovey, 1996; Harris & Christenfeld, 1996). For example, Harris and Christenfeld's “logical beliefs hypothesis” argued that when subjects select the infidelity that most distresses them in a forced-choice format, they logically choose the one which implies that their partner has engaged in the other infidelity as well. They argued that the
previously reported sex differences are based on what men and women have learned about the 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) Hence, the sex differences reflect variation in the way men and women logically relate the infidelities, rather than evolved mate selection strategies.

Upon learning that her partner is unfaithful, for example, a woman is more distressed by emotional infidelity because she assumes that, if her partner is emotionally unfaithful, he is sexually unfaithful as well. Sexual infidelity is less distressing because she recognizes that “men often have sex without being in love” (p. 364). Men are predicted to relate the infidelities very differently. Sexual infidelity is more distressing for men because they recognize that women who are sexually unfaithful are just as likely to be in love. Emotional infidelity is less distressing for men because “women can be in love without having sex” (p. 364).

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, as predicted, were more likely to report that emotional infidelity implies sexual infidelity than to report that sexual infidelity implies the loss of emotional attachment. Males, however, did not report a stronger inferential link from sexual infidelity to emotional infidelity than that which they inferred from emotional infidelity to sexual infidelity (see also DeSteno & Salovey, 1996). In summary, the alternative perspective hypothesizes that the sex differences in
subjective distress attributed to imagined sexual and emotional infidelities are a product of learning and culture and not linked to evolved mate selection strategies.

The alternative analysis appears to have some validity. Upon further examination, however, it is arguably not the most parsimonious explanation of the reported sex differences, nor does it readily extend to violations-of-trust other than sexual and emotional infidelity. In addition, it is clear that both men and women experience physiological as well as psychological distress to sexual and emotional jealousy (Buss, et al., 1992).

Extending the Evolutionary Perspective to Other Violations-of Trust

In view of their serious consequences, it is not hard to understand why research has focused primarily emotional and sexual infidelity. The distress accompanying sexual and emotional infidelity often can be a motivating factor for serious harm to women, including interpersonal conflict, revenge, violence, homicide and suicide. In response to sexual infidelity, for example, men often end the relationship with violence or divorce. Even if the infidelity was as a result of forcible rape, without the woman's consent, men will often terminate the relationship (e.g., Daley & Wilson, 1988; Daley, Wilson, & Weghorst, 1982; White & Mullen, 1989).

Focusing exclusively on sexual and emotional infidelity as the only violations-of-trust in an ongoing relationship, however, arbitrarily excludes other sex-linked ways in which trust can be breached and distress evoked. Recent research has extended the heuristic value of the evolutionary perspective by testing sex-linked differences in response to specific violations-of-trust in a relationship (Cramer, Abraham, Fernandez,
& Mahler, 1999; Cramer, Manning-Ryan, Johnson, & Barbo, in press; Manning-Ryan et al., 1996). For example, sexual strategies theory (Buss & Schmitt, 1993) recognizes the predictive value of proximal cues to reproductive success and postulates that men and women have an increased likelihood of entering into a relationship when the potential partner satisfactorily meets specific mate selection criteria (i.e., resource potential and reproductive value). It is, therefore, reasonable to assume that men and women trust that their partners will endeavor to maintain these criterion during the relationship. A woman, for example, trusts that her partner will strive to possess resource potential and will continue to provide economic security for her and her children. A man, on the other hand, trusts that his partner will make an effort to maintain her health, attractiveness, and sexual accessibility.

Any violation of these trusts should be distressing to both men and women. However, the evolutionary perspective predicts gender differences in response to any violations-of-trust which threaten relationship factors such as economic security, social status, health, attractiveness, and sexual accessibility. Hence, in addition to finding sex differences in distress to emotional and sexual infidelity, sex differences were found in distress to threats to economic security and to physical attractiveness. For example, a male who chooses a mate, based in part on her attractiveness, reasonably trusts that she will endeavor to maintain her attractiveness. Thus, a weight gain of 100 pounds and its resultant loss of physical appeal is a biologically relevant, sex-linked, violation-of-trust. A biologically relevant female-linked violation-of-trust would include a situation in which her mate no longer wants to work, thereby, violating the trust that resources will
be available to support the family unit (Cramer, Abraham, Fernandez, & Mahler, 1999; Cramer, Manning-Ryan, Johnson, & Barbo, in press; Manning-Ryan et al, 1996).

**Mate Retention Tactics**

Males and females not only have divergent sex-linked mate selection strategies but have different mate retention strategies, as well. For example, Buunk (1982) found that women with low self esteem used avoidance as a coping style, preferring not to confront their husbands with their infidelity. Buss and Shackelford (1997) found that women are more likely than men to engage in mate retention tactics such as monopolization of their mates time, derogate a rival, enhance their appearance, or punish their mate’s infidelity threats. Men, in contrast, are more likely than women to engage in tactics such as commitment manipulation, display of resources, sexual inducements, or submission and debasement. de Weerth and Kalma (1993) found that females reported, more than males, that they would cry, make themselves more attractive or pretend not to care. Males reported, more than females, that they would display verbal and physical aggression or that they would get drunk.

Men and women seek extradyadic affairs in response to violations-of-trust for different reasons. Men primarily seek extramarital sexual relations as a response to a lack of communication, understanding and sexual incompatibility. However, relationship dissatisfaction is the primary reason women look for friendship or emotional support in an extramarital sexual relationship (Sheppard, Nelson, & Andreoli-Mathie, 1995).

Paul and Galloway (1994) developed a self-report questionnaire to assess specific actions and motivations in response to sexual infidelity. They found, contrary to
findings by Daley and Wilson (1988), that women reported more anger, and were more likely to engage in aggressive actions toward both their partner and their rival, than men. In addition, men were more likely to leave the relationship than were the women participants. Paul and Galloway (1994) reasoned that, consistent with sexual strategies theory, the men experienced less anger than the women because, as a consequence of sexual infidelity, the female partner lost reproductive value and was no longer worth fighting for.

**Individual Differences**

Many researchers have successfully used sex of participant to predict behavior. Indeed, participant sex is the primary individual difference in an evolutionary analysis of mate selection, sexual jealousy and mate retention. However, it is clear that not all women or men follow a predicted pattern of action. Although men and women react differently to violations-of-trust, for example, all men and women do not react in the same way. Hence, variation among men and women suggest another important dimension for investigation: personality traits. Personality, as a predictor of behavior, affords a more precise focus on individual differences than does the focus on gender alone.

According to Buss (1991, 1992), the ability of humans to predict the behavior of others is essential to survival. Knowing who to turn to for help and advice, knowing with whom to share and from whom to expect resources, and knowing who is an ally and who is an enemy, increases human survival. People possess relatively stable inherited characteristics or traits which are collectively referred to as **personality**. Understanding
an individual’s personality affords others an indicator of the possible range of behaviors which are characteristic of that person. Humans need to predict the behavior of others. Hence, the ability to predict is goal oriented and adaptive. If one can predict, one can better attain desired goals.

Arguably, the multifaceted human personality can be condensed into five major factors, sometimes referred to as the Big-5 (Eysenck, 1981; Goldberg, 1981; Goldberg, 1983). Adjectives, commonly used to describe individuals, were factor analyzed and the five factor personality model was formulated. For example, adjectives such as appreciative, forgiving, generous, kind, sympathetic, and trusting are all components of one of the Big-5 factors, agreeableness. Personality researchers generally agree that the five factors are agreeableness, extraversion, conscientiousness, emotional stability and openness/intellect. The five factors can be described as follows (Saucier, 1994): 1) Agreeableness is a tendency to be compassionate toward others and not antagonistic. It implies a concern for the welfare of others. Components of agreeableness include cold, cooperative, kind, jealous, harsh, rude, sympathetic, unsympathetic and warm: 2) Extraversion is a tendency to seek new experiences and to enjoy the company of other people. Components of extraversion include boldness, efficiency, energy, organization, talkativeness, practicalness, being practical and systematic: 3) Conscientiousness is a tendency to show self discipline, to be dutiful and to strive for achievement and competence. People high on conscientiousness are likely to complete whatever task they say they will perform. Components of conscientiousness include carelessness, disorganization, efficiency, inefficiency, organization, practicality, quietness, sloppiness
and being systematic: 4) Emotional stability is a tendency to experience emotions in a calm way. Components of emotional stability are fretfulness, moodiness, relaxation, temperamentality, touchiness and enviousness: 5) Openness to experience is the hardest of the five factors to describe. Generally, it is a tendency to enjoy new cultural experiences. Components of openness include complexity, creativeness, deepness, imagination, intellectuality, philosophy, uncreativeness and being unintellectual.

Sneed, McCrae and Funder (1998) gave participants a list of adjectives and found that lay people grasp well the concept of personality factors and can easily recognize their own personality descriptions. More specifically, participants were asked to categorize 300 items, from Gough and Heilbrun (1983) Adjective Check List, and to place them into one of the Big 5 categories. Results indicated that participants clearly understood, in 29 out of 30 cases, which adjectives belonged in each of the five factors. In addition, support was found for the diagnosticity of behavior based upon these traits. An individual’s self-assessment was compared to an acquaintance-rating, and overt behaviors of the individual were found to be indicators of the individual’s Big-5 personality factors.

Many researchers have found support for the idea that personality characteristics can predict individual responses to given situations. For example, Buss (1991) examined the Big-5 personality model and it’s value for predicting actions that anger spouses, and elicit anger provoking actions from spouses. A high correlation was found between certain personality traits and conflict in marital relationships. Using self-reports, observer-spouse reports and interviewer-based reports, Buss found that males and
females show decidedly different patterns of personality-upset links. “Male personality characteristics showed stronger links with upsetting actions performed, whereas female personality characteristics are more strongly implicated in evoking actions by their husbands that in turn upset them” (p. 678). For example, men who are married to women who are low on agreeableness report that their wives are condescending, possessive-dependent-jealous, unfaithful and self-centered. Husbands, who are low in emotional stability, tend to be described by their wives as possessive, dependent and jealous.

Buss (1992) found that participants who were identified as possessing specific Big-5 factors were more likely to engage in related manipulation tactics in order to achieve their desired goals. For example, an individual who scores high on a measure of extroversion is more likely, than someone who scores low on extroversion, to engage in coercion to accomplish a goal. Coercion could take the form of demanding that the partner do something, criticizing the partner for not doing it or yelling at the partner so he/she will do it. People low in extroversion, on the other hand, tend to engage in tactics such as debasement, or in hardball tactics such as threats, lies or violence.

STATEMENT OF THE PROBLEM

According to an evolutionary perspective, men and women have an increased likelihood of entering into a relationship when the potential partner satisfactorily meets specific mate selection criteria. It is, therefore, reasonable to assume that men and women trust that their partners will endeavor to maintain these criteria during the relationship. A woman, for example, trusts that her partner will endeavor to possess resource holdings and potential, and to provide economic security for her and her
children. A man, on the other hand, trusts that his partner will endeavor to be healthy, attractive, and sexually accessible. Any violation of these trusts should be distressing to both men and women. An evolutionary perspective, however, can be used to predict sex differences in response to violations-of-trust such as emotional and sexual infidelity and threats to economic security, commitment, social status, health, attractiveness, and sexual accessibility.

In addition to the primary individual difference, sex, people possess a set of relatively stable inherited characteristics or traits which are collectively referred to as personality. An individual’s personality affords others an indicator by which they can predict a range of behaviors that are characteristic of that individual. Based on the predictive value of both sex and personality, the goal of the present study was two-fold. The primary focus was on the investigation of sex differences in subjective distress to sex-linked violations-of-trust.

Male and female participants completed a Relationship Dilemmas Questionnaire (RDQ) designed to explore subjective distress to paired violations-of-trust. Each violations-of-trust pairing reflected a male and female relationship interest (e.g., sexual, emotional, financial security, physical attractiveness). It was expected that male and female subjective distress would follow previously found sexual strategies patterns. Specifically, men would report distress to violations-of-trust which reflect male relationship interests, such as, threats to attractiveness and sexual exclusivity. Women, on the other hand, would be more distressed than men by violations-of-trust which
reflect female relationship interests, such as, threats to emotional attachment and financial security.

Secondly, we tested the hypothesis that the Big-5 personality factors are not static but would be predictive of distress in close relationships. Predictive links were tested between the Big-5 and subjective distress to sexual and emotional infidelity, and to other sex-linked violations-of-trust. In addition, the research explored the possibility that as males and females vary on the Big-5 factors, those individuals who characterize themselves using predominately male adjectives will report being more distressed at the prospect of their mate engaging in male-linked violations-of-trust. Additionally, participants who characterize themselves using predominately female adjectives will report more distress at the prospect of a partner engaging in a female-linked violation.

METHOD

Participants

Undergraduate volunteers (100 men, 100 women) 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% (n = 89), Hispanic, 29% (n = 58), African American, 9% (n = 18), Pacific Islander, 2%, other, 2.5% (n = 5). 41.5% of the participants were “single and not in a committed relationship” (n = 83), 33.5% were “single and in a committed relationship” (n = 67), 18.5% were “married” (n = 37), 4.5% were divorced (n = 9), and 2% reported “other” (n = 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 the ethical principles as outlined by the American Psychological Association (1992).

Materials and Procedure

Materials included a demographics questionnaire, The Relationship Dilemmas Questionnaire (RDQ) with paired, sex-linked violations-of-trust, and the 40 item Big-5 Mini Marker Set (Saucier, 1994),

After agreeing to participate and signing the informed consent, participants were asked to complete a series of questionnaires. A demographics questionnaire (see Appendix A) asked participants to indicate their gender, age, race/ethnicity, sexual orientation, relationship status, and educational level. The 40 Item Mini-Marker Set (see Appendix B) 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 were about oneself. A 9-point Likert-type scale anchored with the phrases, 1 = Extremely Inaccurate and 9 = Extremely Accurate were used to measure each trait. The RDQ was designed to determine which of 2 sex-linked violations-of-trust was the 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 printed next to the sex-linked violations (see Appendix C).
The materials were administered as part of a battery, with the time of completion being approximately 30 minutes. Following completion of the battery participants were debriefed (see Appendix D).

RESULTS

Subjective Distress to Violations-of-Trust

Percentages of men and women reporting more distress to the RDQ items are reported in Table 1. In general, the results were consistent with an evolutionary perspective. That is, men were more distressed than women by the male-linked violations-of-trust and women were more distressed than men by the female-linked violations. Chi square analysis of RDQ Item 1 reveals that more men than women were distressed by the prospect of a partner’s sexual infidelity and more women than men reported being distressed by the prospect of a partner’s emotional infidelity, $\chi^2(1, N = 200) = 18.91$, $p < .001$, $\phi^2 = 0.09$. The effect size ($\phi^2$) means that 9% of the variance in the choice of violation-of-trust as the most distressing is explained by the participant’s sex. More men than women reported being distressed by the prospect of a partner’s poor grooming and more women than men reported being distressed by the prospect of the prenuptial agreement, $\chi^2(1, N = 200) = 19.38$, $p < .001$, $\phi^2 = 0.10$. More women than men reported being distressed at the prospect of a partner’s loss of career and more men than women reported being distressed by the prospect of a partner’s looking older, $\chi^2(1, N = 200) = 11.64$, $p < .001$, $\phi^2 = .06$. The results remained significant after being corrected for continuity, $\chi^2(1, N = 200) = 9.62$, $p < .002$, $\phi^2 = 0.05$. More men than women reported being distressed by a partner’s poor grooming and more women than
men reported being distressed by the prospect of a partner's loss of a career, $\chi^2(1, N = 200) = 39.89$, $p < .001$, $\phi^2 = 0.20$. More women than men reported being distressed by the prospect of a partner's emotional infidelity and more men than women reported being distressed by a partner's lack of grooming, $\chi^2(1, N = 200) = 4.42$, $p < .05$, $\phi^2 = 0.02$. More men than women reported being distressed by the prospect of a partner looking older and more women than men reported being distressed by the prospect of a prenuptial agreement, $\chi^2(1, N = 200) = 13.53$, $p < .001$, $\phi^2 = 0.07$. The remaining Items, 4, 8 and 9 yielded no significant sex differences in subjective distress to the violations-of-trust.

**Big-5 Factors and Distress to Violations-of-Trust**

The Big-5 factors were constructed by summing 8 specific trait descriptors for each factor. See Appendix B for the traits constituting each factor. The negative items were reversed scored. Hence, high scores on a factor indicated possessing more of that factor. In order to examine the relationship between the 5 personality factors and which violations-of-trust were most distressing, a point bi-serial correlation was calculated. For each RDQ item, the female-linked violation was assigned the value 1 and the male-linked violation was assigned the value of 2. Hence, a negative correlation indicated that a person who scored high on a specific personality factor selected, as most distressing, the female-linked violation of trust. In contrast, positive correlations indicated that high scores on a factor were associated with selecting the male-linked violation-of-trust. See Table 2 for the correlation between each factor and the violation-of-trust selected as
Table 1

Percentage of Men and Women Selecting a Violation-of-Trust as the Most Distressing

<table>
<thead>
<tr>
<th>Violation-of-Trust Pairs</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Men</td>
</tr>
<tr>
<td>Sexual Infidelity</td>
<td>76</td>
</tr>
<tr>
<td>Emotional Infidelity</td>
<td>24</td>
</tr>
<tr>
<td>Lack of Grooming</td>
<td>70</td>
</tr>
<tr>
<td>Prenuptial Agreement</td>
<td>30</td>
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<tr>
<td>Premature Gray</td>
<td>11</td>
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<td>Loss of Career</td>
<td>89</td>
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<tr>
<td>Emotional Infidelity</td>
<td>8</td>
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<td></td>
<td>92</td>
</tr>
<tr>
<td>Lack of Grooming</td>
<td>54</td>
</tr>
<tr>
<td>Loss of Career</td>
<td>46</td>
</tr>
<tr>
<td>Lack of Grooming</td>
<td>18</td>
</tr>
<tr>
<td>Emotional Infidelity</td>
<td>82</td>
</tr>
<tr>
<td>Premature Gray</td>
<td>31</td>
</tr>
<tr>
<td>Prenuptial Agreement</td>
<td>69</td>
</tr>
<tr>
<td>Sexual Infidelity</td>
<td>97</td>
</tr>
<tr>
<td>Prenuptial Agreement</td>
<td>3</td>
</tr>
<tr>
<td>Sexual Infidelity</td>
<td>93</td>
</tr>
<tr>
<td>Loss of Career</td>
<td>7</td>
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</tbody>
</table>

Note: Male-linked item listed first.
Table 2

Correlations Between Big 5 Factors and Violations-of-Trust Selected as the Most Distressing

<table>
<thead>
<tr>
<th>Violations of Trust Pairs</th>
<th>Big-5 Factors</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Emotional Stability</td>
</tr>
<tr>
<td>Emotional Infidelity</td>
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</tr>
<tr>
<td>Sexual Infidelity</td>
<td>-.078</td>
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<tr>
<td>Lack of Grooming</td>
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<tr>
<td>Prenuptial Agreement</td>
<td>.05</td>
</tr>
<tr>
<td>Loss of Career</td>
<td></td>
</tr>
<tr>
<td>Premature Gray</td>
<td>-.001</td>
</tr>
<tr>
<td>Premature Gray</td>
<td></td>
</tr>
<tr>
<td>Emotional Infidelity</td>
<td>-.008</td>
</tr>
<tr>
<td>Loss of Career</td>
<td></td>
</tr>
<tr>
<td>Lack of Grooming</td>
<td>.062</td>
</tr>
<tr>
<td>Lack of Grooming</td>
<td></td>
</tr>
<tr>
<td>Emotional Infidelity</td>
<td>.097</td>
</tr>
<tr>
<td>Premature Gray</td>
<td></td>
</tr>
<tr>
<td>Prenuptial Agreement</td>
<td>.054</td>
</tr>
<tr>
<td>Prenuptial Agreement</td>
<td></td>
</tr>
<tr>
<td>Sexual Infidelity</td>
<td>-.141 (^b)</td>
</tr>
<tr>
<td>Sexual Infidelity</td>
<td></td>
</tr>
<tr>
<td>Loss of Career</td>
<td>-.087</td>
</tr>
</tbody>
</table>

Note: N = 200. \(^a\) = p < .10; \(^b\) = p < .05; \(^c\) = p < .01
most distressing. The analysis was collapsed across participant sex. The results indicated several Big 5 factors were linked to the selection of a violation-of-trust as most distressing.

Participants who scored high on emotional stability were more distressed by the prospect of a prenuptial agreement than by a partner’s sexual infidelity, $r = -.14, p < .05$. Agreeableness was associated with three female-linked violations-of-trust. Agreeable participants reported being more distressed by the loss of a partner’s career than by a partner’s premature gray hair, $r = -.15, p < .05$. In addition, they reported being more distressed by emotional infidelity than by a partner’s premature gray hair, $r = -.16, p < .05$ and they reported being more distressed by a loss of a partner’s career than by a partner’s lack of grooming, $r = -.18, p < .10$ and finally they reported being more distressed by a prenuptial agreement than by a partner’s premature gray hair, $r = -.22, p < .10$. High scores on Extraversion were not correlated with any sex-linked violations-of-trust. Participants scoring high on Intellect reported being more distressed by sexual infidelity than by emotional infidelity, $r = .16, p < .05$ and they reported being more distressed by a loss of a partner’s career than by a partner’s premature gray hair, $r = -.12, p < .10$. Conscientiousness was associated with four female-linked violations-of-trust. Participants scoring high on Conscientiousness reported being more distressed by a prenuptial agreement than by a partner’s lack of grooming, $r = -.16, p < .05$ and they reported being more distressed by emotional infidelity than by a partner’s premature gray hair, $r = -.19, p < .10$. Participants with high scores on Conscientiousness reported greater distress to emotional infidelity than by a partner’s lack of grooming, $r = -.14, p < .10$. Participants who scored high on emotional stability were more distressed by the
.10 and they reported being more distressed by a prenuptial agreement than by a partner’s sexual infidelity, \( r = -0.14, p < .05 \).

**Exploratory Analysis**

To pinpoint which personality factors were descriptive of males and which were descriptive of females, the mean scores of the Big-5 traits were compared among men and women using the \( t \) distribution. Where males scored significantly higher than females, those traits were defined as “male traits” and those traits on which females scored significantly higher than males were defined as “female traits.” An inspection of Table 3 reveals that there were six male traits: Cold, Complex, Creative, Harsh, Philosophical and Quiet and six female traits: Moody, Sympathetic, Talkative, Touchy, Uncreative and Warm. Because the analysis is exploratory in nature and the possibility exists for excluding promising avenues of future research, an unconventional alpha level (.10) was used to identify the male and female traits.

Table 4 presents the point bi-serial correlations between the violation-of-trust selected as most distressing and the twelve traits. In general, participants who scored high on the female traits, regardless of their biological sex, were more distressed by the female-linked violations-of-trust, and participants who scored high on the male traits were more distressed by the male-linked violations. For example, Sympathetic participants were more distressed by a prenuptial agreement than by a lack of a partner’s grooming, \( r = -0.13, p < .10 \); by the loss of a partner’s career than by a partner’s prematurely graying hair, \( r = -0.15, p < .05 \); by emotional infidelity than by a partner’s
Table 3

Means and Standard Deviations of Big-5 Traits for Men and Women

<table>
<thead>
<tr>
<th>Traits</th>
<th>Men</th>
<th>Women</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>Bashful</td>
<td>4.57</td>
<td>2.01</td>
<td>2.01</td>
</tr>
<tr>
<td>Bold</td>
<td>5.53</td>
<td>2.03</td>
<td>5.53</td>
</tr>
<tr>
<td>Careless</td>
<td>3.43</td>
<td>1.95</td>
<td>3.17</td>
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<tr>
<td>Cold</td>
<td>3.53</td>
<td>2.10</td>
<td>3.00</td>
</tr>
<tr>
<td>Complex</td>
<td>5.88</td>
<td>2.10</td>
<td>5.35</td>
</tr>
<tr>
<td>Cooperative</td>
<td>7.00</td>
<td>1.63</td>
<td>7.15</td>
</tr>
<tr>
<td>Creative</td>
<td>6.81</td>
<td>1.69</td>
<td>6.06</td>
</tr>
<tr>
<td>Deep</td>
<td>6.30</td>
<td>1.86</td>
<td>6.23</td>
</tr>
<tr>
<td>Disorganized</td>
<td>4.12</td>
<td>2.22</td>
<td>3.67</td>
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<tr>
<td>Efficient</td>
<td>6.68</td>
<td>1.79</td>
<td>6.50</td>
</tr>
<tr>
<td>Energetic</td>
<td>6.63</td>
<td>1.69</td>
<td>6.45</td>
</tr>
<tr>
<td>Envious</td>
<td>4.07</td>
<td>1.97</td>
<td>4.32</td>
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<tr>
<td>Extraverted</td>
<td>4.99</td>
<td>1.97</td>
<td>5.16</td>
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<tr>
<td>Fretful</td>
<td>4.21</td>
<td>1.75</td>
<td>4.54</td>
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<tr>
<td>Harsh</td>
<td>3.99</td>
<td>2.00</td>
<td>3.53</td>
</tr>
<tr>
<td>Imaginative</td>
<td>6.64</td>
<td>1.86</td>
<td>6.34</td>
</tr>
</tbody>
</table>
Table 3 Cont.

<table>
<thead>
<tr>
<th>Traits</th>
<th>Men</th>
<th>Women</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>Inefficient</td>
<td>3.24</td>
<td>1.89</td>
<td>2.93</td>
</tr>
<tr>
<td>Intellectual</td>
<td>6.76</td>
<td>1.65</td>
<td>6.71</td>
</tr>
<tr>
<td>Jealous</td>
<td>4.10</td>
<td>2.21</td>
<td>4.49</td>
</tr>
<tr>
<td>Kind</td>
<td>7.11</td>
<td>1.76</td>
<td>7.35</td>
</tr>
<tr>
<td>Moody</td>
<td>5.11</td>
<td>2.05</td>
<td>5.68</td>
</tr>
<tr>
<td>Organized</td>
<td>6.27</td>
<td>1.88</td>
<td>6.65</td>
</tr>
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<td>Philosophical</td>
<td>6.02</td>
<td>1.959</td>
<td>5.54</td>
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<tr>
<td>Practical</td>
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<td>1.77</td>
<td>6.72</td>
</tr>
<tr>
<td>Quiet</td>
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<td>Relaxed</td>
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<td>5.76</td>
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<td>Rude</td>
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<td>3.13</td>
</tr>
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<td>Shy</td>
<td>4.91</td>
<td>2.25</td>
<td>4.93</td>
</tr>
<tr>
<td>Sloppy</td>
<td>3.59</td>
<td>1.89</td>
<td>3.46</td>
</tr>
<tr>
<td>Sympathetic</td>
<td>6.35</td>
<td>1.89</td>
<td>7.34</td>
</tr>
<tr>
<td>Systematic</td>
<td>5.98</td>
<td>1.89</td>
<td>6.11</td>
</tr>
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<td>Talkative</td>
<td>5.53</td>
<td>1.99</td>
<td>6.76</td>
</tr>
<tr>
<td>Temperamental</td>
<td>4.89</td>
<td>1.98</td>
<td>5.30</td>
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</table>
Table 3 Cont.

<table>
<thead>
<tr>
<th>Traits</th>
<th>Men Mean</th>
<th>Men SD</th>
<th>Women Mean</th>
<th>Women SD</th>
<th>t</th>
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<tbody>
<tr>
<td>Touchy</td>
<td>4.76</td>
<td>2.23</td>
<td>5.34</td>
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<td>Uncreative</td>
<td>2.58</td>
<td>1.42</td>
<td>3.46</td>
<td>1.99</td>
<td>-3.60</td>
</tr>
<tr>
<td>Unenvious</td>
<td>4.54</td>
<td>2.28</td>
<td>4.97</td>
<td>2.19</td>
<td>-1.36</td>
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<tr>
<td>Unintellectual</td>
<td>2.59</td>
<td>1.55</td>
<td>2.69</td>
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<td>Unsympathetic</td>
<td>2.86</td>
<td>1.77</td>
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<td>Warm</td>
<td>6.48</td>
<td>1.86</td>
<td>7.36</td>
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<tr>
<td>Withdrawn</td>
<td>4.08</td>
<td>1.98</td>
<td>3.74</td>
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</table>

Note: \(^a = p < .10; ^b = p < .05; ^c = p < .01.\)
Table 4

Correlations Between Sex-Linked Traits and the Violations-of-Trust Selected as Most Distressing

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<th>5</th>
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<tr>
<td>Moody</td>
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<td>.034</td>
<td>-.070</td>
<td>-.017</td>
<td>.046</td>
<td>.030</td>
<td>-.046</td>
<td>-.063</td>
<td>-.026</td>
</tr>
<tr>
<td>Sympathetic</td>
<td>-.097</td>
<td>-.134&lt;sup&gt;a&lt;/sup&gt;</td>
<td>-.150&lt;sup&gt;b&lt;/sup&gt;</td>
<td>-.162&lt;sup&gt;c&lt;/sup&gt;</td>
<td>-.205&lt;sup&gt;c&lt;/sup&gt;</td>
<td>-.090</td>
<td>-.128&lt;sup&gt;c&lt;/sup&gt;</td>
<td>-.032</td>
<td>-.017</td>
</tr>
<tr>
<td>Talkative</td>
<td>-.121&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.150&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.178&lt;sup&gt;b&lt;/sup&gt;</td>
<td>-.109</td>
<td>-.202&lt;sup&gt;b&lt;/sup&gt;</td>
<td>-.006</td>
<td>-.141&lt;sup&gt;b&lt;/sup&gt;</td>
<td>-.064</td>
<td>-.067</td>
</tr>
<tr>
<td>Touchy</td>
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<td>-.047</td>
<td>.081</td>
<td>.134&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.074</td>
<td>.176&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.067</td>
<td>-.055</td>
<td>.043</td>
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<tr>
<td>Uncreative</td>
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<td>.029</td>
<td>-.022</td>
<td>-.022</td>
<td>.092</td>
<td>.029</td>
<td>.027</td>
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<td>.056</td>
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<td>-.145&lt;sup&gt;b&lt;/sup&gt;</td>
<td>-.097</td>
<td>-.137&lt;sup&gt;a&lt;/sup&gt;</td>
<td>-.156&lt;sup&gt;b&lt;/sup&gt;</td>
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<td>-.243&lt;sup&gt;c&lt;/sup&gt;</td>
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<tr>
<td>Cold</td>
<td>-.107</td>
<td>-.107</td>
<td>-.089</td>
<td>-.078</td>
<td>-.088</td>
<td>-.083</td>
<td>-.232&lt;sup&gt;c&lt;/sup&gt;</td>
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<tr>
<td>Complex</td>
<td>.098</td>
<td>.092</td>
<td>-.068</td>
<td>-.028</td>
<td>.109</td>
<td>.007</td>
<td>-.013</td>
<td>-.024</td>
<td>.033</td>
</tr>
<tr>
<td>Creative</td>
<td>.165&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.031</td>
<td>-.058</td>
<td>-.046</td>
<td>.073</td>
<td>.072</td>
<td>-.068</td>
<td>-.007</td>
<td>-.040</td>
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<tr>
<td>Harsh</td>
<td>-.121&lt;sup&gt;a&lt;/sup&gt;</td>
<td>-.062</td>
<td>.026</td>
<td>-.018</td>
<td>-.058</td>
<td>-.047</td>
<td>-.074</td>
<td>.012</td>
<td>.074</td>
</tr>
<tr>
<td>Philosophical</td>
<td>.115</td>
<td>.080</td>
<td>-.095</td>
<td>.005</td>
<td>.025</td>
<td>.141&lt;sup&gt;b&lt;/sup&gt;</td>
<td>-.008</td>
<td>-.036</td>
<td>-.044</td>
</tr>
<tr>
<td>Quiet</td>
<td>.044</td>
<td>.003</td>
<td>-.067</td>
<td>.088</td>
<td>-.025</td>
<td>.082</td>
<td>.069</td>
<td>.033</td>
<td>.030</td>
</tr>
</tbody>
</table>

Note:  <sup>a</sup> = p < .10; <sup>b</sup> = p < .05; <sup>c</sup> = p < .01. VOT1 = sexual infidelity and emotional infidelity, VOT2 = lack of grooming and prenuptial agreement, VOT3 = loss of career and premature gray, VOT4 = premature gray and emotional infidelity, VOT5 = loss of career and lack of grooming, VOT6 = lack of grooming and emotional infidelity, VOT7 = premature gray and prenuptial agreement, VOT8 = prenuptial agreement and sexual infidelity, VOT9 = sexual infidelity.
prematurely graying hair, $r = -.16, p < .05$; by the loss of a partner’s career than by a partner’s lack of grooming, $r = -.21, p < .01$; and by a prenuptial agreement then by a partner’s prematurely graying hair, $r = -.13, p < .10$. There was no relationship between Sympathetic and the male-linked violations. Men and women who scored high on Talkative, a female-linked trait, were more distressed by emotional infidelity than by sexual infidelity, $r = -.12, p < .10$; by the loss of a partner’s career than by a partner’s lack of grooming, $r = -.20, p < .05$; and by a prenuptial agreement then by a partner’s prematurely graying hair, $r = -.14, p < .05$. Talkative was also predictive of distress to two of nine male-linked violations. Participants who scored high on talkative were more distressed by a partner’s lack of grooming than by a prenuptial agreement, $r = .15, p < .05$; and by a partner’s prematurely graying hair than by the loss of a partner’s career, $r = .18, p < .05$. Touchy, a female trait, was not associated with any female-linked violations. It was, however, associated with two male-linked violations. Participants scoring high on Touchy were more distressed by a partner’s prematurely graying hair than by a partner’s emotional infidelity, $r = .134, p < .10$, and by a partner’s lack of grooming than by a partner’s emotional infidelity, $r = .18, p < .05$. Uncreative men and women were more likely to be distressed by sexual infidelity, a male-linked violation, than by emotional infidelity, a female-linked violation, $r = .19, p < .01$. Men and women who scored high on Warm were more distressed by a prenuptial agreement than by a lack of a partner’s grooming, $r = -.15, p < .05$; by emotional infidelity than by a partner’s prematurely graying hair, $r = -.14, p < .05$; by the loss of a partner’s career than by a partner’s lack of grooming, $r = -.16, p < .05$; and by a prenuptial agreement then by a
partner's prematurely graying hair, $r = -.24, p < .01$. There was no relationship between high scores on Warm and the male-linked violations. Cold, which is a male trait, was correlated with only one violation-of-trust. Men and women who scored high on Cold were more distressed by a partner's premature gray hair than by a prenuptial agreement, $r = -.23, p < .01$. There was no relationship between Complex, a male trait, and any of the violations-of-trust. Creative men and women were more distressed by a partner's sexual infidelity than by a partner's emotional infidelity, $r = .17, p < .05$. Harsh men and women were more distressed by a partner's emotional infidelity than by a partner's sexual infidelity, $r = -.12, p < .10$. Philosophical men and women were more distressed by a partner's lack of grooming than by a partner's emotional infidelity, $r = .14, p < .05$. Quiet was not predictive of any violations-of-trust as the most distressing.

DISCUSSION

In general, the results of this study were consistent with an evolutionary perspective. Percentages reported in Table 1 indicate that participant sex was predictive of the violation-of-trust evoking the most distress. More men than women were distressed by imagining a partner's sexual infidelity, and more women than men were distressed by imagining a partner's emotional infidelity.

Although an evolutionary perspective predicts sex differences in response to sexual and emotional infidelity, Hupka and Bank (1996) referred to these specific predictions as "weak" hypotheses. In contrast, they argued that "stronger" versions of these hypotheses would find support in men choosing sexual infidelity as more distressing than emotional infidelity, and in women choosing emotional infidelity as
more distressing than sexual infidelity. The percentages in Table 1 provide support for these stronger versions of the evolutionary hypotheses. That is, more men were distressed by the prospect of sexual infidelity than of emotional infidelity and more women were distressed by the prospect of emotional infidelity than of sexual infidelity.

Sex differences in subjective distress also were observed for other violation-of-trust pairs. Men consistently reported greater distress, than women, to threats to a partner’s physical attractiveness, choosing lack of a partner’s grooming over a prenuptial agreement; a partner’s premature gray over a loss of a partner’s career; lack of a partner’s grooming over a loss of a partner’s career; lack of partner’s grooming over a partner’s emotional infidelity; and premature gray over a prenuptial agreement. Women consistently reported greater distress, than men, to emotional infidelity and threats to economic security, choosing a prenuptial agreement over a partner’s lack of grooming; loss of a partner’s career over a partner’s prematurely gray hair; loss of a partner’s career over a partner’s lack of grooming; emotional infidelity over a partner’s lack of grooming; and a prenuptial agreement over a partner’s gray hair. It is important to recognize that the results also reveal that not all of the violations tested were equal in terms of evoking distress. Three violation-of-trust pairs were not significant. In each of these three pairings a primary violation-of-trust (sexual infidelity or emotional infidelity) was matched with an extended violation-of-trust (threats to economic security or threats to a partner’s physical attractiveness). Arguably, the capacity of the extended violations to evoke a clearer sex-linked pattern of distress may have been obscured by pairing them
with the more salient primary violations-of-trust (Cramer, Manning-Ryan, Johnson, & Barbo, in press).

These data were consistent with an evolutionary perspective regarding sex differences in subjective distress to emotional and sexual infidelity. The results also support the extension of an evolutionary perspective to the prediction and explanation of sex differences to extended sex-linked violations-of-trust. That is, emotional infidelity and threats to economic security were more distressing to women than to men. Sexual infidelity and threats to a partner's physical attractiveness, on the other hand, were more distressing to men than to women.

The alternative analysis argues that sex differences reflect variation in the logical inferences that men and women make regarding emotional and sexual infidelity rather than sexual asymmetries in evolved mate selection strategies. The sex differences in response to extended violations-of-trust, found in this study and in Cramer, Manning-Ryan, Johnson, & Barbo (in press), are outside the explanatory boundaries of the alternative analysis. An explanation of the sex differences in subjective distress that focused on the within-sex learned relatedness of sexual and emotional infidelity, proposed by DeSteno & Salovey (1996) and Harris & Christenfeld (1996), and the extended sex-linked violations-of-trust, was neither reliable nor an inclusive alternative to an evolutionary perspective.

Further extensions of an evolutionary perspective regarding sex differences in subjective distress to violations-of-trust requires additional research to address limitations of the present inquiry. For example, additional research employing a multi-
method regimen would strengthen the validity of the sex differences found using a forced-choice, prospective self-report procedure (e.g., Buss et al., 1992; Buunk et al., 1996; Wiederman & Allgeier, 1993). Buss et al., (1992) provided physiological validation of the self-reported distress data (pulse rate, electrodermal response, and electromyographic activity) and this is one step in the right direction. No doubt, the popularity of testing specific hypotheses using self-reported distress to imagined violations-of-trust is related to the availability of undergraduate men and women. However, strengthening the validity of the sex differences observed here and elsewhere, as well as extending the heuristic value of an evolutionary perspective requires additional multi-method testing of “nontraditional” participants responding to violations of their trust.

Sex differences in subjective distress are not expected to be limited solely to the violations-of-trust compared in this study. Rather, sex differences are predicted for any violations involving substantive threats to economic security, to a partner’s attractiveness, and to sexual exclusivity. Future research could focus on expanding our knowledge regarding these violations that could, in theory, threaten the stability of an intimate relationship. While reactions that can be evoked by sexual and/or emotional infidelity are recognized by psychologists all to well (e.g., Daley & Wilson, 1988; Daley, Wilson, & Weghorst, 1982; Paul & Galloway, 1994), we also profit from recognizing that other biologically relevant violations-of-trust can reliably evoke different levels of distress, and possibly other responses, in men and women.
One way that men and women can minimize levels of distress is to choose a partner who possesses desirable, stable, predictable characteristics. Choosing a mate with a certain personality type utilizes an individual difference, in addition to sex, that is predictive of future behavior (Buss, 1992). The evidence, in this study, supports individual variation among men and among women, in the form of personality traits, as predictors of subjective distress to both primary and extended violations-of-trust.

Although men react differently than women to specific violations-of-trust, individual men do not necessarily have the same reaction as the majority of men. And individual women do not necessarily react in ways similar to the majority of women. Therefore, all participants, both men and women, self-identified specific trait descriptors which summed to the Big-5 factors. Several of these factors were linked to the selection of a violations-of-trust selected as most distressing (See Table 2). Agreeableness and conscientiousness were the most predictive. Each augur subjective distress for the female-linked violations-of-trust four out of nine times. For example, agreeable participants were more distressed at the prospect of a partner’s career loss, a female-linked violation-of-trust, than at the prospect of a partner’s hair turning prematurely gray, a male-linked violation-of-trust. And, conscientiousness participants were more distressed at the prospect of a prenuptial agreement, a female-linked violation-of-trust, than of a partner’s lack of grooming, a male-linked violation-of-trust.

An additional exploratory analysis was conducted. As males and females varied on the Big-5 factors, those individuals who characterized themselves using predominately female adjectives reported more distress at the prospect of emotional
infidelity than of sexual infidelity. Male and female adjectives were ascertained by using a t distribution comparing individual’s responses from the Big-5 Mini Marker Scale (See Table 3). Regardless of gender, those who scored high on female-linked personality traits were more likely to report distress in response to female oriented violations-of-trust (See Table 4). For example, those participants who described themselves as Sympathetic, a female linked adjective, reported more distress at the prospect of the female violations-of-trust, five out of nine times, however, Sympathetic was not correlated with distress to any male-linked violations-of-trust. Participants who described themselves as Warm, another female adjective, were more likely to report distress in response to imagining the female-linked violations-of-trust four out of nine times, however, Warm was not predictive of distress to any male-linked violations-of-trust. Female-linked traits, in this population sample, were more predictive than male traits. Warm and Sympathetic, both of which factor to agreeableness, were the female traits that were the most predictive of distress to the female-linked violations-of-trust. Creative and Philosophical, both of which factor to intellect, were the most predictive of distress to the male-linked violations-of-trust.

In summary, general support was found for the evolutionary perspective. Both gender and personality were found to have predictive links to subjective distress in response to imagined violations-of-trust in a close relationship. Although it may be difficult to do, future research may want to focus upon actual clients in therapy who have experienced sexual and/or emotional infidelity and other extended violations-of-trust. Focusing on this proposed population would eliminate any speculation caused by
imagining the violation-of-trust scenario. Taking Buss' (1994) idea one step further, physiological reactions might be recorded, such as pulse rate, electrodermal activity and electromyographic muscle activity in reaction to actual reactions instead of imagined ones. The results of the present inquiry contribute to a growing body of evidence that suggests that the evolutionary perspective is far reaching and can not be logically ignored when investigating intimate human relationships.
APPENDIX A: DEMOGRAPHIC 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 relationship ____
   - Single, in a serious relationship ____
   - Married ____
   - Divorced ____
   - Other ____

5. Educational Level: (Please Check One)
   - Some High School ____
   - High School Graduate ____
   - Some College ____
   - College Graduate ____

6. Please indicate the race/ethnicity you most identify with:

   Caucasian ____  African American ____  
   Hispanic:
   - Mexican American ____
   - American/Chicano ____
   - Puerto Rican ____
   - Cuban ____
   - Other ____
   - Pacific Islander:
   - Hawaiian ____
   - Samoan ____
   - Guamanian ____
   - Other ____
   - Other Non-White: ____
   - Asian:
   - Japanese ____
   - Chinese ____
   - Korean ____
   - Vietnamese ____
   - Asian Indian ____
   - Cambodian ____
   - Laotian ____
   - Filipino ____
   - Other ____
   - American Indian:
   - Aleut ____
   - Eskimo ____
APPENDIX B: THE 40 ITEM MINI-MARKER SET

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:

<table>
<thead>
<tr>
<th>INACCURATE</th>
<th>?</th>
<th>ACCURATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extremely</td>
<td>Very</td>
<td>Moderately</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Bashful(^c)</td>
<td>Energetic(^e)</td>
<td>Moody(^a)</td>
</tr>
<tr>
<td>Bold(^c)</td>
<td>Envious(^a)</td>
<td>Organized(^e)</td>
</tr>
<tr>
<td>Careless(^e)</td>
<td>Extraverted(^c)</td>
<td>Philosophical(^d)</td>
</tr>
<tr>
<td>Cold(^b)</td>
<td>Fretful(^a)</td>
<td>Practical(^e)</td>
</tr>
<tr>
<td>Complex(^d)</td>
<td>Harsh(^b)</td>
<td>Quiet(^c)</td>
</tr>
<tr>
<td>Cooperative(^b)</td>
<td>Imaginative(^d)</td>
<td>Relaxed(^d)</td>
</tr>
<tr>
<td>Creative(^d)</td>
<td>Inefficient(^c)</td>
<td>Rude(^b)</td>
</tr>
<tr>
<td>Deep(^d)</td>
<td>Intellectual(^d)</td>
<td>Shy(^c)</td>
</tr>
<tr>
<td>Disorganized(^e)</td>
<td>Jealous(^b)</td>
<td>Sloppy(^e)</td>
</tr>
<tr>
<td>Efficient(^e)</td>
<td>Kind(^b)</td>
<td>Sympathetic(^b)</td>
</tr>
</tbody>
</table>

a= emotional stability, b= agreeableness, c= extraversion, d= intellect, e= conscientiousness
APPENDIX C: DISTRESS RATINGS

1. (A) Your partner forming a deep emotional attachment to another person.
   (B) Your partner enjoying passionate sexual intercourse with another person.

2. (A) Your partner no longer making an effort, including basic grooming, to look physically attractive.
   (B) Your partner insists you sign a prenuptial agreement before s/he is willing to commit to marriage.

3. (A) Your partner giving up on her/his career and no longer desires to work.
   (B) Your partner looking five years older because his/her hair begins to gray prematurely.

4. (A) Your partner looking five years older because his/her hair begins to gray prematurely.
   (B) Your partner forming a deep emotional attachment to another person.

5. (A) Your partner giving up on her/his career and no longer desiring to work.
   (B) Your partner no longer making an effort, including basic grooming, to look physically attractive.

6. (A) Your partner no longer making an effort, including basic grooming, to look physically attractive.
   (B) Your partner forming a deep emotional attachment to another person.
Appendix C continued

7. (A) Your partner looks five years older because his/her hair begins to gray prematurely.

(B) Your partner insists you sign a prenuptial agreement before s/he is willing to commit to marriage.

8. (A) Your partner insisting you sign a prenuptial agreement before s/he is willing to commit to marriage.

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

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

(B) Your partner giving up on her/his career and no longer desiring to work.
APPENDIX D: DEBRIEFING STATEMENT

Thank you for your participation in this project. The project was designed to test males and females responses to violations of trust in romantic relationships. We were also interested in investigating how personality and perceived mating success influenced responses 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 results of this study can also be obtained by contacting Dr. Robert Cramer. 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.
REFERENCES


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appraisal, and involvement level on mate selection criteria. Journal of Personality and Social Psychology, 64, 951-969.


