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Personality and Relationship Satisfaction: Evaluating the Direct Associations

Between Neuroticism, Agreeableness, Extraversion, and

Satisfaction in Romantic Couple Relationships

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A thesis submitted to the faculty of Brigham Young University in partial fulfillment of the requirements for the degree of

Master of Science

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School of Family Life

Brigham Young University

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ABSTRACT

Personality and Relationship Satisfaction: Evaluating the Direct Associations Between Neuroticism, Agreeableness, Extraversion, and Satisfaction in Romantic Couple Relationships

> Sarah L. Tackett School of Family Life, BYU Master of Science

Specifically, using a sample of 2,848 couples from the RELATE dataset, a model was tested examining the direct associations between personality factors (neuroticism, agreeableness, and extraversion) and relationship satisfaction in romantic couple relationships. The results indicated that lower levels of neuroticism, higher levels of agreeableness, and lower levels of extraversion were associated with greater relationship satisfaction. In particular, ratings of agreeableness had the strongest associations with satisfaction for males and females, while neuroticism had the next strongest associations, followed by extraversion. Paths between male variables and female variables and satisfaction were not significantly different; however, slight gender differences were present among factor loadings of variables as well as coefficient values of all paths. Additionally, differences in actor and partner effects were evident. Actor effects were present for each of the personality factors, except for male extraversion; partner effects were present for all of the personality factors.

Keywords: personality, neuroticism, agreeableness, extraversion, relationship satisfaction, actor and partner effects

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Personality and Relationship Satisfaction: Evaluating the Direct Associations Between Neuroticism, Agreeableness, Extraversion, and Satisfaction in Romantic Couple Relationships

Introduction

Every couple relationship is made up of two personalities, wherein both partners' personality traits jointly and uniquely shape the quality of their relationship (Robins, Caspi, & Moffitt, 2000). There seems to be a "renewed interest in how partners influence each other and create their relationship together" (Gattis, Berns, Simpson, & Christensen, 2004, p. 564). Researchers suggest that the personality traits individuals bring to a relationship ought to be associated with satisfaction in those relationships (Dyrenforth, Kashy, Donnellan, & Lucas, 2010). In fact, many researchers have proposed that an individual's personality traits are linked with his or her own relationship satisfaction, as well as with the partner's satisfaction (Dyrenforth et al., 2010; Malouff et al., 2010). One particular focus of couple research has been on the specific personality characteristics that make it more likely that individuals will be satisfied with their relationships (Malouff, Thorsteinsson, Schutte, Bhullar, & Rooke, 2010). Perhaps one of the most intriguing and complex questions researchers have attempted to answer is which personality traits are most strongly associated with relationship satisfaction.

Numerous researchers have specifically focused on the Big-Five personality traits in couples (e.g., Botwin, Buss, & Shackelford, 1997; Gattis et al., 2004; Luo et al., 2008; Nemechek & Olson, 1999; Orzeck & Lung, 2005). However, until now, few studies have simultaneously examined personality factors in association with relationship satisfaction. The most commonly used personality factor model originated in 1982, and was later validated by

Costa and McCrae in 1987 (Orzeck & Lung 2005). This personality model includes openness (e.g., imaginative, cultured, curious, original, broad-minded, intelligent, and artistically sensitive), conscientiousness (e.g., dependability, being careful, thorough, responsible, organized, and planful), extraversion (e.g., sociable, gregarious, assertive, talkative, and active), agreeableness (e.g., courteous, flexible, trusting, good-natured, cooperative, forgiving, softhearted, and tolerant), and neuroticism (e.g., anxious, depressed, angry, embarrassed, emotional, worried, and insecure; Barrick & Mount, 1991; Costa & McCrae, 1987). According to McCrae and Costa (2008), these factors of personality are a generalization of personality traits and can closely account for the broad scales of personality descriptors.

Despite the extensive research in the area of personality, Barelds (2005) suggested that little is known about precisely which personality characteristics are most related to relationship satisfaction; hence, associations between specific personality characteristics and relationship satisfaction are not completely clear. Additionally, researchers have argued that some personality traits are more important than others when considering satisfaction in couple relationships (e.g., Botwin et al., 1997; Dyrenforth et al., 2010; Watson et al., 2004). Consequently, findings regarding personality in couple relationships have been inconsistent (Botwin et al., 1997) and "difficult to interpret" (Watson et al., 2004, p. 1035).

The purpose of this study was to examine the direct associations between personality factors and relationship satisfaction in males and females in romantic couple relationships, then evaluate gender differences, as well as actor and partner effects between these associations. This study differs from previous studies on predictions between personality indicators and relationship satisfaction (see Mead, 2005; Dyrenforth et al., 2010). First, this study specifically focuses on personality factors as they have been commonly defined instead of the less common

personality factors used in the RELATE instrument (Busby, Holman, & Taniguchi, 2001). In addition, the current study places multiple personality factors in the same model and evaluates these indicators simultaneously, which compares them more directly with one another and allows for a greater understanding of their relative importance in measuring satisfaction in couple relationships. Existing research will be reviewed to determine which specific personality factors are most likely to influence relationship satisfaction. Ultimately, the current study employed the procedures of structural equation modeling (SEM; Byrne, 2001) to answer the following research question: How do specific personality factors that are individually related to relationship satisfaction influence each other when their associations are simultaneously examined?

Review of Literature

Personality Research

Much of the focus of personality research has been on specific personality factors (e.g., Big-Five factor model; Costa & McCrae, 1987) such as neuroticism and extraversion. Neuroticism has typically been linked to greater dissatisfaction in relationships, while characteristics such as extraversion, openness, and agreeableness have been associated with greater satisfaction in relationships (e.g., Botwin et al., 1997; Nemechek & Olson, 1999; Shiota & Levenson, 2007). It has been argued that not all personality factors are equally associated with outcomes variables, such as relationship satisfaction. In fact, some researchers have proposed that only certain personality factors are strong indicators of relationship satisfaction in couples. For instance, Ickes (2009) and Barelds (2005) suggested that extraversion and agreeableness were the strongest and most significant personality indicators for relationship satisfaction in couples. Furthermore, Malouff and colleagues (2010) conducted a meta-analysis of the fivefactor model of personality traits and relationship satisfaction and suggested that only four of the five-factors were correlated with relationship satisfaction. While neuroticism had the strongest correlation with relationship satisfaction – followed by agreeableness, extraversion, and conscientiousness – openness was virtually uncorrelated with relationship satisfaction (see Malouff et al., 2010).

The associations between neuroticism, agreeableness, and extraversion in relationships are well documented in the literature. In particular, neuroticism has received the greatest attention (Watson, Hubbard, & Wiese, 2000). Multiple researchers evaluating longitudinal data have reported neuroticism to be linked with individual outcomes (i.e., relationship satisfaction) as well as partner outcomes (see Botwin et al., 1997; Karney & Bradbury, 1995; Watson et al., 2000). The most consistent finding from these studies has been that individuals with high levels of neuroticism report greater relationship dissatisfaction (e.g., Malouff et al., 2010; Nemechek & Olson, 1999; Watson et al., 2000; Watson et al., 2004). Specifically, Larson and colleagues (2010) proposed that relationship satisfaction was influenced by characteristics of neuroticism, including negativity, in either spouse. In other words, one partner's neuroticism may potentially affect each partner's levels of satisfaction.

On the other hand, agreeableness is one personality factor that has been consistently and positively linked with relational outcomes. Concerning characteristics of agreeableness, Botwin and colleagues (1997) posited that individuals were happy and satisfied in their relationships when their partners were agreeable. In addition, when evaluating longitudinal research on couple relationships, Karney and Bradbury (1995) found that agreeableness was positively associated with results for couples. More recently, Orzeck and Lung (2005) proposed that couples with high ratings of agreeableness were more committed in their romantic relationships. Consequently,

when couples were more committed in their relationship, they were more highly satisfied with the relationship (Orzeck & Lung, 2005). It may be that couples that are more agreeable feel more stable in their relationships with one another, leading to greater commitment, and ultimately, greater relationship satisfaction.

In regard to the personality factor of extraversion, Shiota and Levenson (2007) found that individuals that were perceived by their partners as more extraverted reported greater satisfaction in their relationship (Shiota & Levenson, 2007). Evidently, the more sociable individuals are perceived to be by their partners, the more likely they are to be happier and satisfied in their romantic relationships. On the other hand, some researchers have argued alternative findings, suggesting that extraversion is linked with lower relationship satisfaction. For example, in specifically evaluating personality differences between individuals in romantic relationships, Orzeck and Lung (2005) reported that individuals who were less committed to their partners were more likely to be considered highly extraverted by themselves as well as by their partners. According to Orzeck and Lung (2005), extraversion might "facilitate less investment in the relationship…thereby decreasing commitment" and leading to decreased satisfaction (p. 280).

The few researchers that have directly examined conscientiousness and openness to satisfaction in couple relationships (e.g., Botwin et al., 1997; Gattis et al., 2004; Shiota & Levenson, 2007) have generally concluded that these personality traits are beneficial in evaluating relationship satisfaction. Nevertheless, some researchers have shown that although conscientiousness and openness have been strongly linked with other outcome variables (e.g., job satisfaction and creativity, respectively), they have not been as strongly related in regard to relationship satisfaction in couples (Malouff et al., 2010). Conscientiousness has been correlated with satisfaction for an individual alone (Dyrenforth et al., 2010); however, it does not have a

strong association with satisfaction when considering the inclusion of partner-ratings and effects. Furthermore, openness has been described as the weakest among the personality factors (Dyrenforth et al., 2010; Watson et al., 2000) and, along with conscientiousness, does not have strong influences on relationship satisfaction as a dependent variable.

Partner Personality Effects

Evidently, there is evidence from which researchers suggest that certain personality characteristics exert a strong influence on relationship satisfaction (Watson et al., 2000). However, this causal language only represents one perspective regarding associations between personality and relationship satisfaction. It has also been suggested that it is not only a person's own personality that contributes to the quality of the relationship – what is often called an actor effect – but there exists a partner effect as well (Barelds, 2005; Dyrenforth et al., 2010; Robins et al., 2000). Partner effects refer to the ways that couple members influence one another. In other words, a person's personality traits may bring out beliefs and behaviors in his or her partner that contribute to the overall relationship satisfaction (Barelds, 2005; Dyrenforth et al., 2010; Robins et al., 2000). A number of scholars have examined the association between an individual's personality characteristics and his or her intimate partner's level of relationship satisfaction (Malouff et al., 2010). For instance, Dyrenforth and colleagues (2010) suggested that a person's own personality was associated with his or her relationship satisfaction, and that a person's partner's personality was also related with the person's satisfaction. Moreover, the presence of partner effects is impressive simply because "the effects of one person's personality are seen on another person's relational outcomes" (Dyrenforth et al., 2010, p. 11). This implies the importance of evaluating both actor and partner effects when examining relationship satisfaction. In summary, there is evidence documenting the specific associations between neuroticism, agreeableness, extraversion, and relationship satisfaction from both actor and partner effects. However, few if any studies have examined the three variables simultaneously. Given the strong evidence from conceptual links between relationship satisfaction and neuroticism, agreeableness, and extraversion, the first purpose of this study was to specifically evaluate these personality factors with relationship satisfaction in couples. Moreover, reflecting on the strong associations proposed between personality and relationship satisfaction from existing literature, it would be interesting to consider gender differences between males and females when evaluating these variables.

Gender Differences

Segal and colleagues (2009) suggested that personality has different patterns for men and women. Neither men nor women prefer all members of the opposite sex equally (Buss & Barnes, 1986). In regard to personality factors and relationship satisfaction, there has been the general suggestion that female relationship satisfaction may depend more on their male partners' personality traits than male satisfaction may depend on their female partners' personality traits (Larson et al., 2010; Robins et al., 2000). For instance, Watson and colleagues (2000) found that partners' extraversion and agreeableness were strongly linked with female relationship satisfactions, but not as strongly with male satisfactions. Likewise, Dyrenforth et al. (2010) reported that females with more agreeable partners were especially satisfied in their relationships, whereas the female's agreeableness was less associated with their male partner's satisfaction. Additionally, Nemechek and Olson (1999) found that females were more open to personality traits of agreeableness (e.g., emotional feelings, and expression) and were more satisfied when these personality aspects were present; however, that was not necessarily true for

males. Some have also argued that relationship variables (i.e., relationship satisfaction) are more correlated with females that are extraverted and males that are introverted (Buss & Barnes, 1986; Nemechek & Olson, 1999), while others have argued the opposite (Orzeck & Lung, 2005). Mainly, findings concerning gender differences in extraversion in couple relationships have been somewhat contradictive.

These findings bring about the question of whether or not personality factors have significantly different influences on relationship satisfaction for males and females. According to some researchers (Karney & Bradbury, 1995), gender differences may be demonstrated by a single variable that influences males and females differently, or males' and females' variables can influence the relationship differently. For example, males can be influenced by their own personality traits differently than females are influenced by their own personality traits, or males' personalities can influence both partners differently than females' personalities influence both partners. This study is an attempt to replicate previous findings of gender differences in the associations between personality traits and relationship satisfaction.

Although gender differences are robust across samples, perhaps a more, yet somewhat unanswerable question is why they exist (Buss & Barnes, 1986). It may be due to the values placed on certain personality characteristics by men and women. For instance, men often place a higher value than women on physical characteristics, such as good looks, as well as other traits, including good cooking/housekeeping, and frugality (Amador, Charles, Tait & Helm, 2005; Buss & Barnes, 1986). Conversely, women often place a higher value on more agreeable personality traits, including honesty, kindness, and understanding, as well as other traits such as careeroriented, similar educational background, good financial prospect, and being tall (Amador et al., 2005; Buss & Barnes, 1986). Even so, men and women value different personality characteristics in a partner (Amador et al., 2005). Therefore, an additional purpose of this study is to address the presence of such gender differences and consider Buss and Barnes' (1986) question of why they exist.

Self- and Partner-ratings

According to Malouff and colleagues (2010), and in line with the research on partner effects, both an individual's self-rated characteristics and his or her perception of the partner's characteristics are associated with relationship satisfaction. However, less is known about partner-rated personality traits in regard to relationship satisfaction, due to the fact that past research mostly examined associations between self-ratings and relationship satisfaction (Luo et al., 2008; Watson et al., 2000). Moreover, the literature examining partner-ratings has been less extensive and often fails to replicate across studies, creating inconsistencies with research findings regarding self- and partner-ratings (Dyrenforth et al., 2010). According to some researchers (e.g., Kelly & Conley, 1987; Watson et al., 2000), including only self-report measures is not the ideal form of measurement for personality characteristics. Only evaluating self-ratings of individuals may lead to a self-report bias. For example, individuals that hope to present themselves in a socially desirable way might "describe their personalities in an overly positive manner, and rate their relationships as extremely happy and satisfying" (Watson et al., 2000, p. 420).

The addition of partner-ratings strengthens an evaluation (Busby & Gardner, 2008) and enables researchers to analyze a new aspect of the relationship by measuring the variables from more than a self-perspective. Partner-ratings enhance the ability to obtain "multiple perspectives of the same" variable (Busby & Gardner, 2008, p. 231). Furthermore, including partner-ratings allows for a more accurate rating of couple satisfaction based on data from both the self and the partner in the dyad (Luo et al., 2008). In other words, one partner in the couple relationship provides the satisfaction data, while the other provides the personality data (Watson et al., 2000). Therefore, it is expected that with both self- and partner-ratings, male and female variables would be more correlated with relationship satisfaction, than would be the case with self- and partner-ratings alone (Busby & Gardner, 2008). For this study, the RELATE dataset is utilized, which includes individual evaluations of personality characteristics as well as partner perspectives of the same variable, thereby enhancing the measurement of variables used in the analyses.

Present Paper and Research Questions

The present paper was aimed to extend previous research and address the requests for more research that includes ratings of personality traits (Busby & Gardner, 2008; Luo et al., 2008; Segal et al., 2009; Watson et al., 2000) simultaneously (Mead, 2005), and particularly "encompassing an array of personality factors, such as that captured by the five-factor model" (Botwin et al., 1997, p. 108). Specifically drawing from research and theoretical perspectives on personality, male and female personality characteristics (i.e., neuroticism, agreeableness, and extraversion) and relationship satisfactions were examined.

Central to the purposes of this paper is the idea that relationship satisfaction is associated with certain personality characteristics in couples. First, this study will evaluate how personality factors that are individually related to relationship satisfaction influence each other when their associations are simultaneously examined. Secondly, this study will explore significant differences between male and female personality factors as well as actor and partner effects and their associations with individual and partner satisfactions.

Personality Theory

While there are theories on relationships in general, and many that are often applied to marriage relationships (e.g., social exchange theory, behavioral theory, attachment theory, and crisis theory; Karney & Bradbury, 1995), there is not necessarily an overarching theory of personality. Even so, for the purposes of this study, a few general theoretical perspectives will be reviewed as consideration for why personality characteristics ought to be associated with individual and partner satisfactions in couple relationships.

Perhaps most central to personality is the intrapersonal theory approach. The intrapersonal approach addresses the notion that personality attributes of individuals in close relationships help shape the qualities of those relationships (Kelly & Conley, 1987). A common perspective to understanding this theory and the individual characteristics and factors that are associated with quality in relationships is that personality traits are predictors of relational outcomes (Dyrenforth et al., 2010; Karney & Bradbury, 1995; Kelly & Conley, 1987; Robins et al., 2000). In particular, these factors influence relationship quality, stability, and even satisfaction (Dyrenforth et al., 2010; Karney & Bradbury, 1995). Comparable to the intrapersonal approach is the interpersonal approach, which explains how personality factors are related to satisfaction, quality, and stability in relationships via interactions, events and behaviors in those relationships (Kelly & Conley, 1987; Karney & Bradbury, 1995). Here, personality traits are thought to serve as enduring vulnerabilities - stable characteristics that individuals bring to relationships – for relational events and outcomes (Barelds, 2005; Karney & Bradbury, 1995). Specifically, each partner's behavior, in and out of the couple relationship, will be strongly influenced by enduring personal traits and characteristics (Watson et al., 2000).

Taken together, these theoretical perspectives can be influential in understanding the associations between personality characteristics and relationship satisfactions of individuals in

romantic couple relationships. Naturally, there are various speculations and reasons that researchers propose why personality may be important in relationship satisfaction in couples; however, these have not all been coherently put together into theories. For the purposes of this study, a combination of these approaches is applied, using intrapersonal theory for focusing on direct associations between personality and satisfaction variables, and using an interpersonal focus to explain the possible indirect associations between variables.

Model Development

Figure 1 is an illustration of the conceptual model created for the current study based on intrapersonal and interpersonal theoretical perspectives of previous research concerning personality traits and relationship satisfaction. Based on the literature review, only the three strongest personality indicators of relationship satisfaction are included. According to the model, personality traits of neuroticism, agreeableness, and extraversion are associated with individual and partner relationship satisfaction. Specifically, each of these personality factors directly contributes to male and female relationship satisfaction in couples. All paths are included in order for an accurate evaluation of the tested model. Although perspectives that other researchers have proposed do not suggest all possible connections between the variables in Figure 1, it is a representation of speculation based on previously found associations between relationship satisfaction and the influences of personality variables. Figure 2 is an illustration of the same model including correlated errors.

Method

Sample

Participants for this study were drawn from a sample of nearly 3,000 couples. Each individual had completed the RELATionship Evaluation Questionnaire (RELATE; Busby, Holman, & Taniguchi, 2001) after being introduced to it through a variety of settings (e.g., as part of a class, as part of a workshop for couples, after finding it on the internet, or as part of the assessment package given by a professional therapist or clergy member).

Specifically, the areas of interest from the RELATE instrument were the self- and partner-ratings of personality measures and relationship satisfaction ratings. In order to accurately examine sex-differences between males and females in romantic couple relationships, only participants in heterosexual relationships were evaluated in this study. In addition, any participant with missing values on any of the variables used in this study was removed in order to more appropriately evaluate the model without resorting to any type of substitution process for missing values. These eliminations resulted in a final sample size in this study of 2,848 heterosexual couples (or 5,696 individuals).

The sample was evenly split between men and women. The mean age of the female respondents was 30 years (SD = 9.29), and the mean age of the male respondents was 32 years (SD = 10.17). Of the female participants, 85.1% of the sample was White (including Latino), 4.4% African American, 6.5% Asian, 2.3% mixed/biracial, .3% Native American, and 1.4% "other." Of the male participants, 85.3% of the sample was White (including Latino), 4.7% African American, 5.1% Asian, 2.8% mixed/biracial, .5% Native American, and 1.6% "other." In terms of relationship status, 28.3% of the participants were in a serious or steady relationship, 49.3% were engaged or committed to marry, and 22.7% were married. The measure of relationship length indicated that 15.1% of the couples had been in their relationship for 6 months or less, 5.6% between 6 and 12 months, 15.6% for 1-2 years, 16.9% for 3-5 years, 11.7%

for 6-10 years, and 35.1% for more than 10 years. The dominant religious affiliation in the sample was Protestant, with 37.6% of the men and 39.5% of the women. The second largest religious group included those selecting Catholic as their religious affiliation, with 22.4% of the men and 21.2% of the women.

Measures

The RELATE is a 300+ item questionnaire designed to evaluate the relationship between romantically linked partners (dating, engaged, or married). The questions examine several different contexts – individual, cultural, family (of origin), and couple – in order to provide comprehensive comparison and evaluation of challenges and differences in areas that may prove helpful for couples (Busby & Gardner, 2008). Previous research has documented the RELATE's reliability and validity, including test-retest and internal consistent reliability, and content, construct, and concurrent validity (Busby et al., 2001). Specifically, refer to the discussion of Busby et al. (2001) of the RELATE for detailed information regarding the theory underlying the instrument and its psychometric properties.

Personality. The RELATE measures of personality consist of seven personality features (kindness, extraversion, calmness, organized, flexibility, maturity, and happiness) with sub categories of specific traits. It has been shown that the personality scales of the RELATE instrument "can be interpreted in a way consistent with the big-five personality measure" (Draper & Holman, 2005, p. 884), and are therefore used for the measurements of personality factors in this study. For the purposes of this study, RELATE personality indicators matched with neuroticism, agreeableness, and extraversion were used. These matches were taken from Draper and Holman's (2005) factor analyses of data evaluating the similarities between RELATE and the Big-Five Factor Model. According to the factor loadings of each item,

extraversion (also referred to as surgency), agreeableness, and neuroticism, can be assessed as part of the RELATE instrument (Draper & Holman, 2005). The RELATE measures of personality consist of questions evaluating traits of participants and their partners. For each of these items, individuals were asked to indicate how much these words described them and their partners, respectively, on a 5-point Likert response scale ranging from (1) *never* to (5) *very often*. These items were then combined into scale variables for self- and partner- ratings of corresponding latent variables for each of the personality factors (neuroticism, agreeableness, and extraversion) for both males and females. For example, self-ratings of male agreeableness were made into one scale variable, partner-ratings of male agreeableness were made into another, and both were indicators of the latent variable of male agreeableness.

Internal consistency estimates of reliability were computed for each of the personality factors and separate estimates of reliability were computed for self- and partner-ratings of each personality variable. The Cronbach's alpha was .84 for self-ratings of male neuroticism, .86 for partner-ratings of male neuroticism, .83 for self-ratings of female neuroticism, and .88 for partner-ratings of female neuroticism. The Cronbach's alpha for self-ratings of male agreeableness was .79, .87 for partner-ratings of male agreeableness, .78 for self-ratings of female agreeableness, and .86 for partner-ratings of female agreeableness. The Cronbach's alpha was .83 for self-ratings of male extraversion, .83 for partner-ratings of male extraversion, .82 for self-ratings of male extraversion, .82 for self-ratings of female extraversion, .83 for partner-ratings of female extraversion, .82 for self-ratings of female extraversion, .83 for partner-ratings of female extraversion, .82 for self-ratings of female extraversion, .83 for partner-ratings of female extraversion, .82 for self-ratings of female extraversion, .83 for partner-ratings of female extraversion, .82 for self-ratings of female extraversion, .83 for partner-ratings of female extraversion, .82 for self-ratings of female extraversion, .83 for partner-ratings of female extraversion, .82 for self-ratings of female extraversion, .83 for partner-ratings of female extraversion, .82 for self-ratings of female extraversion, .83 for partner-ratings of female extraversion, .82 for self-ratings of female extraversion, .83 for partner-ratings of female extraversion, .83 for partner-ratings of female extraversion, .82 for self-ratings of female extraversion, .83 for partner-ratings of female extrave

Relationship Satisfaction. Relationship satisfaction was defined as the amount of satisfaction individuals reported in their relationship. Relationship satisfaction was assessed using the relationship satisfaction scale from RELATE. Individuals were asked to indicate how satisfied they were on a 5-point Likert response scale ranging from (1) *very satisfied* to (5) *very*

dissatisfied. The items for this scale were, "The physical intimacy you experience," "The love you experience," "How conflicts are resolved," "The amount of relationship equality you experience," "The quality of your communication," and "Your overall relationship with your partner." For the analyses, one item was omitted from the scale. The item, "The amount of time you have together," was removed due to confusion in implication. Satisfaction with the amount of time you have together may be associated with a lower level of satisfaction in the relationship, assuming partners desire to have more time together (Carroll, Badger, & Yang, 2006). Relationship satisfaction was modeled with separate latent variables for males and females. Internal consistency estimates of reliability were computed separately for male and female relationship satisfaction. The Cronbach's alpha was .89 for male satisfaction and .89 for female satisfaction.

Analysis Strategy

Structural equation modeling software (AMOS version 18.0; Arbuckle, 2005) was used to evaluate how multiple models fit the data sample. Structural regression analysis was done to track the associations of couple personalities on relationship satisfaction. In statistics, structural equation modeling (SEM) is used to describe the directed associations among a set of latent variables (Kline, 2011). Structural regression analysis can be viewed as a special case of SEM – one in which latent variables are employed for each of the variables of interest in the model (Kline, 2011). The personality and satisfaction variables within the model are latent variables and therefore, a structural regression analysis is most appropriate for this study.

The complexity of the conceptual model in Figure 1 required a multi-tiered analysis strategy to uncover important patterns in the data. The initial evaluation was to explore an overall model that included all the paths between the variables in an attempt to remove non-significant paths. Due to the large sample size, it was possible that there would be an over inflation of significant pathways that were statistically significant, but not practically significant. Therefore, throughout the remainder of this study, particular emphasis is placed on variables and pathways that are statistically significant as well as practically significant.

Oftentimes correlated errors are included in structural equation models. The use of correlated error has been argued as a positive aspect of modeling, yielding better model fit statistics. However, correlated error has also been described as a negative aspect of modeling as well, not clearly depicting all measurements of the model based on theoretical evidence. According to Gerbing and Anderson (1984), in some situations, "the use of correlated measurement errors can be meaningful and specified a priori (e.g., longitudinal research)" (p. 574). Perhaps one of the greatest advantages of using correlated errors in modeling is that it leads to a more acceptable model fit (Gerbing & Anderson, 1984). In addition, correlated errors can also be used instead of testing alternate structures or models. Correlating error terms can adjust residual differences within models, creating a better fit to the model, without neglecting the conceptual model (Gerbing & Anderson, 1984). For this study, correlated error was used as a positive additional aspect in this study rather than a negative one. The conceptual model required multiple correlation errors in order for statistical results that were a good fit to the data.

Moreover, this study specifically focuses on the associations between personality factors and relationship satisfaction. Nevertheless, there is more to relationship satisfaction and couple relationships than these personality factors. Therefore, correlated errors were included in the analysis of the model (see Figure 2). For each correlated error included in the model for this study, there are other logical variables that may be affecting the relationship between the variables. For instance, if personality indicators of friendly and easy going were correlated, there may be an outside variable between these two indicators (e.g., social skills) that might explain the association between the two. However, those other variables were not measured in this study, and so, correlated errors are included.

In particular, correlated errors were expected between the self-ratings of the partners in the couples. Indicators measuring self-ratings from an individual and ratings of his or her partner were also correlated based on these ratings coming from the same person's perspective. Furthermore, it was anticipated that male and female personality and satisfaction variables would be correlated due to similarity in questions and the cross-sectional nature of the study. Any additional correlated errors between variables were taken from suggestions from modification indices provided in the SEM program AMOS 18.0, accounting for other potential variables that may justify the correlations between several variables. As previously mentioned, other (possibly mediating) variables might help explain the relative association and context of the variables included in this study. For instance, the correlation between conflict resolution and communication of the satisfaction scale may be mediated by the variable of compromise or negotiation (Carroll et al., 2006). Evaluating the importance and necessity of each correlated error included in the analysis would require researching potential associations between the specified variables and examining additional variables that were not measured in this study. Figure 1 provides a simple display of the model and results of this study while highlighting path coefficients and factor loadings without any correlated errors shown. Figure 2 represents the same model and results, displays correlated errors, and highlights these error terms and correlations between variables.

Results

Model Analyses

Several fit measures are reported to assist in the evaluation of how well the hypothesized model replicated the sample data. Following the recommendations of Hoyle and Panter (1995) absolute fit indexes and incremental fit indexes are reported. Hoyle and Panter (1995) also recommended using the χ^2 statistics as a general index that researchers should report two types of incremental fit indexes. Therefore, the Tucker and Lewis index, (TLI; Hoyle & Panter) and the comparative fit index (CFI; Hoyle & Panter) are reported. Both the TLI and CFI yield values ranging from 0 to 1.00 with values close to or above .95 considered to be indicative of good fit (Byrne, 2001). Last, the root mean square error of approximation (RMSEA) is reported, which is now seen as one of the most informative criteria in SEM (Byrne, 2001). A RMSEA value at or below .05 indicates a good fit (Arbuckle, 2005).

To control for the possibility of multicollinearity, correlation for all variables relevant to this study were estimated and reported in Table 1. All correlation coefficients were less than the recommended cutoff of .85 (Kline, 2011). The initial analyses of the model indicated that the model was a good fit to the data. The sample size for the SEM analyses for the model used for this study was 2,848 couples (5,696 individuals). The χ^2 with 202 degrees of freedom was 1701.744 and was significant (p = .000). The TLI was .940, the CFI was .956, and the RMSEA was .05. The results in Figure 1 also demonstrated that the model was effective in predicting male's and female's relationship satisfactions ($R^2 = .63$).

Personality and Satisfaction Variables

The statistical results for the model from AMOS are presented in Figures 1 and 2 with the standardized coefficients. Upon close inspection of each of the path coefficients in the model, all,

but one of the paths were significant at p < .05 for both male and female variables. The path between ratings of extraversion to individual relationship satisfaction was not significant for males (p = .131). More simply, ratings of male extraversion were not significantly correlated with male relationship satisfaction, but were significantly correlated with female relationship satisfaction.

From the path coefficient values in Figure 1, agreeableness was the strongest personality indicator of relationship satisfaction for females and males when simultaneously examined with neuroticism and extraversion. The largest coefficient values in the model were the paths between self- and partner-ratings of agreeableness and partner satisfaction (.60 for males, .54 for females), indicating that the more agreeable individuals were according to self- and partnerratings, the greater satisfaction their partners reported in the relationship (see Figure 1). These findings are consistent with previous researchers (e.g., Barelds, 2005; Karney & Bradbury, 1995), implying that individuals that were rated highly on agreeable characteristics (e.g., kind, loving, considerate, and easy going), consequently had positive influences on their partners' relationship satisfaction. These associations support the existence of actor and partner effects for the personality factor of agreeableness. Specifically, when an individual's partner had high levels of agreeableness, the individual was directly influenced by the presence of these traits in the relationship. The findings regarding agreeableness are particularly interesting due to the fact that agreeableness was so strongly linked with satisfaction variables even in the context of other factors, such as neuroticism. After accounting for the variance taken up by neuroticism, extraversion, satisfaction variables, and any and all correlated error, agreeableness remained to be the strongest indicator of satisfaction for males and females. Although neuroticism and

extraversion associations were significant in this study, agreeableness was the most powerful of the three evaluated personality factors in regard to relationship satisfaction.

The associations in the model also revealed that neuroticism had a significant negative influence on individual and partner relationship satisfactions. The second largest path coefficient values were between self- and partner-ratings of neuroticism and individual relationship satisfaction for both males and females (-.14 for males, -.17 for females). For example, when females were rated as higher on neurotic characteristics, not only did male satisfaction with the relationship diminish, but females' individual satisfaction decreased even more so. Although neuroticism was linked with greater dissatisfaction for both partners in relationships, individual satisfactions were more strongly correlated with higher ratings of neuroticism, providing strong evidence of an actor effect. These findings of neuroticism are interesting given that when multiple personality factors were examined simultaneously and after accounting for correlations among several other variables in the model, neuroticism still had a significant influence on satisfaction for males and females. While the associations were not as strong as those of agreeableness, there was still a correlation between neuroticism and satisfaction, suggesting neuroticism is an influential factor even after these other aspects of the model (i.e., additional variables and correlations) are taken into account.

Concerning the associations between self- and partner-ratings of extraversion and relationship satisfaction, extraversion was less correlated with satisfaction for both genders than was the case for neuroticism and agreeableness. In particular, a female's extraversion was associated with individual and partner satisfactions (-.10 for self, -.04 for partner). Male's extraversion was associated with partner satisfaction (-.06), however was not significantly associated with individual satisfaction, implying that male extraversion characteristics influences

females more than males. This again indicates the presence of a partner effect, one particularly being somewhat stronger than an actor effect. All of the associations between extraversion levels and relationship satisfaction were negative. In other words, when males and females were rated by themselves and their partners as more extraverted, individual and partner satisfactions decreased. This differs from some findings from previous researchers (e.g., Barelds, 2005; Karney & Bradbury, 1995; Shiota & Levenson, 2007) suggesting that extraversion is positively associated with satisfaction in couples.

Generally, low associations (e.g., below .20) are somewhat suspect in SEM (Kline, 2011), and in this study, the extraversion coefficient values are all below .20. Still, due to the large sample size in this study, the results regarding extraversion variables were significant even at very low path coefficient values (i.e., .04, .06, and .10), which may not be the case if evaluated individually or with other samples. Although these path coefficients were significant, it is important to highlight the differences in association values between the personality factors. For example, the comparison between the actor effect of female extraversion (-.04) and the partner effect of male agreeableness (.60) is incredibly different, and therefore, ought to be interpreted under the condition that multiple personality factors were taken into account simultaneously.

Sex Differences

In order to evaluate whether or not the paths in Figure 1 were significantly different between males and females, a separate model was used to constrain variables within the model. All of the paths between the male personality variables (neuroticism, agreeableness, and extraversion) and male and female relationship satisfactions were constrained to be equal to the female versions of the same variables. This model was then compared to a model that allowed all variables to be freely estimated. The differences in χ^2 values with 6 degrees of freedom was 9.786 and was not significant (p = .134), which means the associations between male personality variables of neuroticism, agreeableness, extraversion and male and female relationship satisfactions are not statistically different from the associations between those same variables for females.

Evidently, neuroticism, agreeableness, and extraversion are associated with relationship satisfaction regardless of gender. Although the paths were not significantly different from one another, all of the path coefficient values for males and females differed. For example, the greatest difference in path coefficients between males and females was for the path between agreeableness and individual satisfaction (.28 for males, .21 for females). Though the coefficient differences were small, the paths were still not equal. When considering differences of actor and partner effects between males and females, females' levels of extraversion were negatively associated with their male partners' relationship satisfaction, implying that females' extraversion levels were significantly related to satisfaction when considering both actor and partner effects, but males' extraversion levels only had significant partner effects. In other words, females were more influenced by individual extraversion variables than males. It is also important to point out the differences in factor loadings for male and female variables, particularly those of the selfand partner-ratings of personality indicators (see Figure 1). The amount of self- and partnerratings that contributed to the personality variables implies the importance of gender issues. While personality variables may influence individuals in general, the amount of value males and females place on these personality characteristics when rating their partners as well as considering individual and partner satisfaction levels may differ.

Self- and Partner-ratings

In this study, the addition of partner-ratings for both males and females allowed for multiple perspectives of the same variable. The factor loadings for self- and partner-ratings for each personality variable indicated the importance of including both measures particularly with couple data (see Figure 1). For each of the personality factors in this study, both self- and partner-ratings contributed to the latent variables. In particular, partner-ratings contributed more than self-ratings for the personality factor of agreeableness. Partner-ratings of male agreeableness, for example, contributed about twice as much as self-ratings did of the same variable (.97 for partner, .40 for self). The same was true with female agreeableness as well (.87 for partner, .37 for self). This suggests that the perceptions of individuals' partners carry more weight in the measurement of the variable than self-perceptions do in the case of agreeableness. The strong partner effects of agreeableness may also be explained by this large contribution of partner-ratings for agreeableness. Since partner-ratings contributed more than self-ratings to an individual's level of agreeableness, the satisfaction level of the individual's partner would be more influenced than the level of individual satisfaction. On the other hand, self-ratings were stronger indicators of extraversion variables and slightly more for neuroticism, perhaps leading to the stronger actor effects for the associations between these variables and relationship satisfactions. Ultimately, evaluating both perspectives of the same variable allowed for a more accurate understanding of the value of partner-ratings as well as actor and partner effects between these variables.

Actor and Partner Effects

Actor effects were present for each of the personality factors, except for male extraversion – which was not significant. Partner effects were present for all of the personality factors of neuroticism, agreeableness, and extraversion. Evidently, personality characteristics that individuals bring to couple relationships may not only influence the individual's relationship satisfaction, but may also have an impact on his or her partner's satisfaction. Implications for these findings of actor and partner effects as well as those of gender differences will be discussed further in the Discussion.

Discussion

The purpose of this study was to simultaneously evaluate the influences of self- and partner-ratings of personality (in particular, neuroticism, agreeableness, and extraversion) on self-ratings of relationship satisfaction in couples. Based on the relevant literature and theoretical perspectives of intrapersonal and interpersonal approaches to personality, a conceptual model was created and tested in which these three personality factors were proposed to be directly associated with relationship satisfaction. The results from the present study add to the growing body of research that levels of neuroticism, agreeableness, and extraversion directly contribute to relationship satisfaction when evaluated simultaneously. These findings and subsequent implications will now be discussed in detail.

Personality and Satisfaction Variables

The first objective of this study was to determine how multiple personality factors individually related to relationship satisfaction influence each other when their associations are simultaneously examined. In particular, the evaluation of the model provided a more in depth look at paths from the personality variables of neuroticism, agreeableness, and extraversion leading to relationship satisfaction in couples using both self- and partner-ratings (see Figure 1). In general, these results support previous hypotheses of strong associations between personality traits and relationship measures, especially those of neuroticism, agreeableness, and extraversion (see Malouff et al., 2010; Robins et al., 2000; Watson et al., 2004). Although these results are similar to previous studies, there are noteworthy findings that emerge from this particular study. For instance, by simultaneously evaluating these three personality factors, it was evident that although neuroticism was strongly associated with relationship satisfaction in couples, agreeableness was even more associated when considering these relational outcomes. When included in the same model, personality variables can be compared more directly with one another while evaluating their relative importance in measuring relational outcomes.

From the current analyses, the findings could be oversimplified by saying that self- and partner-ratings of neuroticism have negative impacts on relationship satisfaction for males and females, ratings of agreeableness have positive impacts on relationship satisfaction, and ratings of extraversion have negative impacts on relationship satisfaction, under the condition of other variables and correlations being present that account for much of the variance. What is more is that the personality factor of agreeableness is significantly important in the context of neuroticism and several correlations among all the variables included in the study. Even among a strong indicator such as neuroticism, agreeableness remains to have significant associations with satisfaction for romantic couples. While it is not surprising that neuroticism is negatively linked with satisfaction in couples and agreeableness is positively linked with satisfaction, these findings raise questions pertaining to why personality traits, such as neuroticism, are so harmful to a relationship for both partners.

Indeed, the stronger associations between the personality traits of neuroticism and agreeableness with relationship satisfaction in this study may be due to the nature of the personality factors and general understanding of the characteristics of each. For instance, neuroticism has been consistently associated with negative outcomes in relationships. It is more generally accepted as a negative measurement of personality, with descriptive terms such as anxious, depressed, angry, embarrassed, and emotional (Barrick & Mount, 1991). On the other hand, agreeableness is described in positive terms, including courteous, trusting, good-natured, cooperative, and forgiving (Barrick & Mount, 1991). Individuals that refer to these descriptions of the personality traits might rate presence of these traits in relationships differently. Moreover, certain personality traits may be viewed as more socially desirable in couple relationships (e.g., agreeableness), while others are seen as less desirable (e.g., neuroticism). This may explain the negative associations with relationship satisfaction for neuroticism and positive associations for agreeableness. In addition, the positive correlations between agreeableness and relationship satisfaction in couples may simply mean that more socially desirable partners (i.e., having agreeable traits) tend to have happier relationships (Barrick & Mount, 1991).

The strong associations between neuroticism and relationship satisfactions for individuals suggest that the more neurotic individuals feel they are in their relationships, the greater influences it will have on their relationship satisfactions for them as well as their partners. According to Shiota and Levenson (2007), the specific results concerning neuroticism are more easily explained than others. The negative association between neuroticism and relationship satisfaction may be due to neurotic partners' high negative affect impairing both their and their partner's ability to enjoy and benefit from the relationship (Shiota & Levenson, 2007). It seems reasonable that an individual's neurotic traits ought to influence his or her intimate partner's satisfaction with the relationship, implying a partner effect. One explanation for these partner effects may be that neuroticism might negatively influence romantic relationships by predisposing "partners to distort relationship events and/or to overreact" to negative relationship events or interactions, consequently hindering partner's satisfactions with the relationship

(Barelds, 2005, p. 502). Additionally, neurotic individuals tend to express more criticism, contempt, and defensiveness, potentially damaging the partner relationship and influencing both partners' satisfactions (Malouff et al., 2010). Individuals with high levels of neuroticism might also evoke negative behaviors from their partners that in turn contribute to both partners' satisfactions with the relationship (Robins et al., 2000).

According to this study, neuroticism had an even stronger actor effect, suggesting that neuroticism had a greater impact on individual's satisfaction than on partner's satisfaction. One explanation for this finding is that individuals may be more sensitive to their own neurotic traits (being nervous, tense, depressed, and easily irritated). Feeling tense or easily irritated may create negative emotions or behaviors related to the partner relationship, thereby influencing the satisfaction the individual reports with the relationship. Moreover, these negative feelings of tension or anxiety directly influence the individual, creating a strong actor effect. In addition, neurotic individuals may negatively react to and interpret their partners' behaviors and potentially magnify difficulties in the relationship (Robins et al., 2000), thus impacting their individual satisfaction.

Lastly, the associations between neuroticism and satisfaction may be further explained by considering additional theoretical perspectives. The attribution theory, for instance, emphasizes how individuals arrive at answers, assumptions, and understanding based on attributing outcomes to certain circumstances (see Weiner, 2010). In the context of personality and findings from the present study, individuals may attribute satisfaction in their relationships to specific conditions within that relationship. More specifically, an individual with a neurotic partner may attribute his or her partner's neurosis to a moment in time (e.g., stressful situation) rather than a character trait or flaw. Furthermore, an individual in a romantic relationship might likely view a

partners' neurosis over time rather than at a specific point in time and see it as progress from an earlier time when the partner may have been more neurotic. Therefore, the individual would attribute his or her satisfaction in the relationship, based on levels of neuroticism, to the lower – although still present – neurotic levels, rather than seeing it as a higher level of neuroticism.

While neuroticism had the strongest negative influence on relationship satisfactions in couples, agreeableness was the personality indicator with the strongest positive association with relationship satisfaction for both males and females. Agreeableness having a stronger link to satisfaction than neuroticism is interesting considering previous research. According to several researchers (e.g., Karney & Bradbury, 1995; Malouff et al., 2010; Watson et al., 2000), neuroticism has generally received the greatest attention in the literature, has been argued as the strongest personality indicator when considering relationship satisfaction, and had greater influences on relational outcomes than other personality indicators, including agreeableness. Nevertheless, according to this study, agreeableness was more strongly associated with relationship satisfaction when evaluated among neuroticism. Not surprisingly, individuals that are highly cooperative and responsible tend to have more satisfying relationships (Dyrenforth et al., 2010).

Perhaps the most interesting finding from this study is the strong association and partner effect between male's agreeableness and female's relationship satisfaction, under the condition of the personality variables neuroticism and extraversion being present. In fact, ratings of agreeableness for both males and females were more correlated with partner satisfactions than individual satisfactions. Still, the more agreeable a male is in his relationship, according to selfand partner-ratings, the greater impact it will have not only on his relationship satisfaction, but even more so on his female partner's satisfaction. One possibility for this strong partner effect is that females are particularly likely to be satisfied when their male partners are loving, kind, and considerate in their romantic relationships (Dyrenforth et al., 2010). Furthermore, this influence on the relationship may be due to interpersonal effects. For instance, males with positive personality traits, such as those of agreeableness, may be better able to eliminate negativity in the relationship through the use of humor or other behaviors that defuse conflict, thereby increasing the satisfaction their female partners feel (Robins et al., 2000). According to Dyrenforth and colleagues (2010), partner effects are important and unique to previous research because of their interpersonal nature. What is more is that partner effects strengthen the claim that personality traits are important for relationship functioning and satisfaction (Dyrenforth et al., 2010). The partner effects present in this study with the factor of agreeableness display the strong influences an individual's agreeable characteristics potentially have on his or her partner's satisfactions.

According to the results from this study, ratings of extraversion had negative impacts on relationship satisfactions for males and females. For males, ratings of extraversion characteristics were significantly and negatively associated with their female counterparts' relationship satisfaction, but not their individual satisfaction. For females on the other hand, extraversion was significantly and negatively associated with their male counterparts' relationships satisfactions as well as with their individual satisfaction. Extraversion is usually considered a desirable trait with positive associations with relational outcomes (Barrick & Mount, 1991; Shiota & Levenson, 2007; Watson et al., 2000), which raises the question of why this study found negative associations between extraversion and relationship satisfaction variables. It seems that more desirable traits would impact romantic relationships positively rather than negatively.

One possible explanation for this finding may be the previously mentioned definition of the characteristics of extraversion. Some may perceive extraversion as a positive quality (being gregarious, warm, assertive, and adventurous), while others might think of it as a negative quality (being impulsive, unreliable, and aggressive) in relationships (see Watson et al., 2000). Depending on individual perceptions of extraversion (positive or negative), presence of extraversion traits in partner relationships would influence satisfaction accordingly. Another explanation may be due to partner effects. Perhaps individuals that are highly extraverted bring about negative behaviors and beliefs in their partners that potentially hinder the partners' satisfactions. For instance, partners of extraverted individuals may hold back, allowing only their partner to be in the spotlight, or develop negative attitudes about outgoing individuals, thereby decreasing their satisfaction with the relationship. Moreover, personality differences in couples might begin to affect the relationship via other factors not evaluated in this study, such as social skills, emotional availability, etc. Hence, it may be that such differences associated with extraversion (e.g., social skills or communication) in relationships, pose challenges for the satisfaction individuals experience with one another (Shiota & Levenson, 2007). Moreover, associations between satisfaction and extraversion variables may simply be due to individual preference. For instance, some individuals may enjoy partners that are shy and quiet rather than talkative and outgoing, while others prefer the alternative.

In addition, extraversion might be related to the coupling process and the idea of assortative mating (Ickes, 2009). Assortative mating is described as the notion that individuals couple with others who are similar on one or more traits (Ickes, 2009). Often times, highly extraverted individuals are likely to develop relationships with alternative partners, which in turn may pose a threat to the relationship with the partner (Shiota & Levenson, 2007). An extraverted female for example, may have a more introverted male partner, possibly influencing the introverted male's satisfaction with the relationship in a negative way. Ickes (2009) found that couples with two highly extraverted individuals reported greater satisfaction in the relationship than couples of one extravert and one introvert. Individuals may potentially feel threatened by a partner with differing social skills and characteristics of extraversion. In regard to this idea of assortative mating, it is important to note the low correlations of extraversion in this study (see Table 1), considering the weak associations of extraversion and relationship satisfaction for males and females. This implies that assortative mating based on extraversion may not be as important as some researchers (i.e., Ickes, 2009) have suggested. In addition, the present study is stronger than previous studies on extraversion (e.g., Barelds, 2005; Ickes, 2009; Nemechek & Olson, 1999) due to the use of self- and partner-ratings as well as the emphases on actor and partner effects. The strengths of these inclusions suggest that previous findings on extraversion and the importance of matching according to extraverted levels may be artificial due to only using self-ratings and not focusing as closely on actor and partner effects.

According to some researchers (e.g., Russell & Wells, 1994), the fact that all of the coefficients for agreeableness and neuroticism reached significance, while some coefficients for extraversion did not is typical. It may be that when these three personality variables are examined simultaneously, they account for much of the variance in the model than would be the case if each personality variable were evaluated separately. Ultimately, the specified personality variables had direct impacts on relationship satisfaction when evaluated simultaneously (see Figure 1). Apparently, neuroticism, agreeableness, and extraversion are significantly linked with relationship satisfaction in couples when their relative associations and importance are considered. Nevertheless, these relative associations are not equivalent. Associations between

agreeableness and satisfaction variables were much larger than those of extraversion and neuroticism. Although each of these three personality factors were significantly linked with satisfaction, the associations are each different and may not be practically significant due to the large sample size. Overall, while neuroticism had the greatest negative influence on satisfaction for males and females, followed by extraversion, agreeableness was more strongly correlated with satisfaction when in the context of multiple personality factors. Thus, the presence of agreeable personality traits (e.g., kind, loving, considerate, courteous, and trusting individuals) is most influential on relationship satisfaction levels of males and females in romantic relationships even after other significant personality factors are taken into account.

Sex Differences

The second objective of this study was to evaluate differences between male and female personalities and their associations with individual and partner relationship satisfactions. Although the paths between male variables and those between female variables were not significantly different, the varying path coefficients between certain personality traits and satisfaction found in the model imply the existence of sex differences among what personality traits are most important for males and females when considering satisfaction in couple relationships.

Furthermore, due to the use of self- and partner-ratings in this study, the gender differences seem to be more evident in the factor loadings of variables (see Figure 1). The contribution of self- and partner-ratings for males and females implies that the focus on gender differences seems to be particularly in that part of the model and indicates that gender is an important issue. One possibility for these sex differences is that females and males respond differently to certain personality characteristics and even interpret behaviors and traits differently (Amador et al., 2005). Therefore, it is important to note that each latent variable of personality is a combination of the gender differences and issues.

Another explanation of these gender differences may be similar to Busby and Gardner's (2008) interpretation of sex differences, which suggests that "the male's views carry more weight in the relationship and the female is more attuned to his views and therefore influenced by them" (Busby & Gardner, 2008, p. 239). It may also be that females are often considered more relational than men (Amador et al., 2005) and thus, females are more strongly affected by relational variables and personality than males. Therefore, the traits a male brings to the relationship might influence his female partner's ratings and relationship satisfaction more than it would influence his. Ultimately, the sex differences between male and female variables to satisfactions from this study were not significant. Apparently, personality influences individuals regardless of gender. Nevertheless, self- and partner-ratings may influence the associations between variables, and males and females may still interpret personality factors differently and rely more on one or another when considering satisfaction in their relationships, creating differences in exactly how personality factors influence individuals depending on gender.

Self- and Partner-ratings

Lastly, it is important to recognize the inclusion of self- and partner-ratings for evaluating personality variables. Using partner-ratings allowed for an important measurement of individual characteristics. Instead of solely focusing on one person's perspective of the presence of a specific personality variable, the use of partner-ratings presented an additional perspective of the same variable for males and females. Busby and Gardner (2008) specifically suggested that people are the least accurate when rating themselves because they often times overestimate their qualities. In addition, some have indicated that one variable that changes overtime for couples in

romantic relationships is that of partner perceptions (Busby & Gardner, 2008) and is an important addition to measuring relational variables. Ultimately, including both self- and partner-ratings enhanced the measurements of personality variables in this study and allowed for the greater focus on actor and partner effects.

Actor and Partner Effects

Although partner and actor effects were present among the variables of neuroticism, agreeableness, and extraversion for males and females, when considering male extraversion, only an actor effect was evident. According to this finding and similar with suggestions from previous researchers (e.g., Barelds, 2005; Robins et al., 2000), relationship satisfaction may be more in accordance with a person's own personality than with their partner's personality. One possibility for this may be that individuals feel more in control of their personality traits than their partners and understand that in some cases their individual behaviors and characteristics influence their attitudes and satisfaction more strongly than their partners'.

Still, there was evidence of partner effects in addition to actor effects for the all other personality factors evaluated in this study. The strength of path coefficients and significance of pathways leading to partner satisfactions, especially those of agreeableness, indicated the presence of partner effects, suggesting that individuals strongly influence each other in couple relationships. Concerning an interpersonal approach, an individual's personality traits may impact satisfaction via other variables (e.g., behaviors and interactions with his or her partner) that contribute to the couple's relationship. Evaluating actor and partner effects helps explain the associations between individuals in romantic relationships and their interactions with one another that may potentially influence their satisfactions. The effects from both partners in the relationships on individual and partner satisfactions confirm the importance of partner-ratings and partner effects when examining romantic couple relationships.

Limitations

This study has a few noteworthy limitations. For example, the sample included couples that were mostly homogeneous. Samples with larger representations of ethnicity, age, and education would yield more generalizeable results. Researchers have suggested that personality and satisfaction in couple relationships may be culturally dependent (Allik & Realo, 2009; Malouff et al., 2010). The personality characteristic of extraversion, for instance, may have different meanings and effects in different cultures (Malouff et al., 2010). Therefore, it is important to examine whether cultural factors may encourage the development of personality traits (Allik & Realo, 2009) and whether associations among culturally dependent constructs, such as personality indicators, operate differently in populations representing different cultural characteristics.

In addition, this study was cross-sectional, which implied the similar measurements of partner-ratings. A longitudinal design would be more effective in measuring influences of males and females throughout their romantic relationships and would provide insight on influential factors of relationship satisfaction over time, rather than simply at a given point of time in the relationship. Especially in the case of personality, longitudinal studies would be efficient in evaluating how personality characteristics of couples may change over time as relationships progress or digress. Certain personality characteristics, such as agreeableness, may have stronger influences at the beginning stages of relationships, while other characteristics, such as neurotic traits, may be more associated with later stages (Watson et al., 2000). Surely, there are

differences in relationships of couples who are married or dating (see Mead, 2005; Watson et al., 2000), perhaps due to other variables including age, maturity levels, commitment, etc.

Furthermore, it could be argued that the direction of causation is questionable from the cross-sectional nature of this study. Previous researchers (e.g., Russell & Wells, 1994) have proposed that the association found between less satisfied couples in relationships and neuroticism was partly due to the neurosis resulting from the poor relationship. One reason for this concept is that "neuroticism is a longitudinally stable personality trait, not a measure of currently experienced stress" (Russell & Wells, 1994, p. 318). Consequently, the causal direction of the association between personality and relationship satisfaction cannot be determined from variables measured at one point in time. On the other hand, it is possible that the causal influence is reciprocal. Positive personality characteristics, such as agreeableness in the case of this study, may lead to greater satisfaction in relationships, and increased satisfaction may bring about positive personality characteristics. Longitudinal studies may be employed in future research to determine the causal direction of these associations. Also, the specific associations among personality factors from this study, although directly and significantly associated with outcome variables, are somewhat uncertain, considering the multiple correlated errors included in the analyses and the implication that other potential variables may be influencing these associations.

Despite these limitations, this study makes several contributions. Specifically, the large sample size of this study allowed for the examination of specific indicators of personality on relationship satisfaction. In addition, this study expanded the field by examining personality traits simultaneously rather than separately. Although the present study was unable to determine causal effects and directions between personality factors and relationship satisfaction, it did confirm that the direct associations between each of the personality factors (neuroticism,

agreeableness, and extraversion) with satisfaction exist for males and females in couple relationships when evaluated together. Furthermore, this study employed a beneficial measurement of personality variables and may potentially act as a stepping stone for future researchers to utilize. The matched RELATE dataset allowed for an accurate measurement of couple data, rather than only individual. Using self and partner measures of the specified personality factors provided an in depth evaluation of the specific personality factors and further implies the importance of evaluating partner effects as well as actor effects.

Future Research and Conclusions

This study confirms the impact of personality on individual and partner satisfactions in romantic couple relationships. Ultimately, personality is influential in romantic couple relationships. What seems most important for greater relationship satisfaction is not only the lack of negative personality attributes, such as those characterized by neuroticism, but the presence of the positive, such as characteristics of agreeableness. Applications of these findings are also noteworthy. For instance, an individual that has a neurotic partner may have a chance of experiencing a positive relationship and greater satisfaction with the relationship if he or she can maintain the presence of positive characteristics whenever possible. In other words, the presence of the positive attributes (agreeable) may be making up for the negative (neurotic) in romantic couple relationships, thereby influencing satisfaction in a positive way.

Regardless of the tentative state of the results of this study due to correlated error, the findings raise a number of questions about the links among these variables. Concerning the aforementioned cross-sectional nature of this study, it is unknown whether personality predicts satisfaction or if satisfaction predicts personality. Therefore, longitudinal research is needed in

order to determine the causal direction. Furthermore, evaluating relational variables at one point in time would have different outcomes than evaluating them over time. Taking into account the conditions of this study, there are also implications to examine personality and relational outcomes in romantic relationships concerning various theoretical approaches. Echoing the suggestion from Karney and Bradbury (1995), there remains a strong need for theory to guide this research. Applying specific theoretical approaches may help to further explain the links between couple variables and satisfaction.

In addition, there may be some methodological implications from the current study. For example, future researchers can focus on the definitions and measurements of personality factors and make distinctions between definitions and personality terms. Most personality factors (e.g., those of the Big-Five factor model) typically have distinct definitions. Nevertheless, some personality factors (e.g., extraversion) may be less distinctive in their definitions and measurements, and may not be consistent across samples. Evaluating how to get a distinctive understanding of personality as a whole would be efficient. Furthermore, in regard to particular aspects of personality, future studies based on assortative mating and longitudinal designs would be effective in verifying whether or not previous research on personality traits (i.e., neuroticism, agreeableness, and extraversion) are subjective due to the lack of partner-ratings and focus on actor and partner effects.

Suggestions from previous researchers are also noted. For instance, Malouff et al. (2010) recommended future research examine same-sex romantic relationships and test the ability of personality dimensions to predict future changes in intimate relationships, including changes in satisfaction scores and changes in relationship status, such as break-ups and divorce. Given that numerous studies have found socioeconomic and ethnic/racial differences in relationship patterns

(see Malouff et al., 2010), additional investigation of differences in these areas is warranted as well.

Future research is recommended including self- and partner-ratings in order to capture multiple perspectives of the same variables. Focusing on self and partner perspectives encourages individual change "as each person can change their own perceptions much easier than they can change their partner's perceptions" (Busby & Gardner, 2008, p. 240) and ultimately, increase relationship satisfaction. Individuals may be able to improve their couple relationships by changing behaviors related to negative personality characteristics, such as neuroticism. Consequently, it is also important to consider actor and partner effects when evaluating relational outcomes (i.e., satisfaction) in romantic couple relationships.

Moreover, other outside variables may potentially influence individual personality traits and relationship satisfaction. Future researchers may benefit from examining specific personality factors simultaneously while in the context of other relational variables that have been suggested to be associated with relationship satisfaction. For instance, communication has been a commonly studied variable in terms of relationships and relational outcomes (Carroll et al., 2006) and may act as a mediating variable between personality and relationship satisfaction for males and females in romantic couple relationships. In particular, individuals' personality characteristics (e.g., levels of neuroticism, agreeableness, and extraversion) may influence their communication styles, possibly impacting satisfaction levels in couple relationships as well. Additionally, some researchers have suggested that contextual factors potentially acting as mediators or moderators (e.g., commitment, attachment styles, interactions, and behaviors) influence relationship satisfaction (Karney & Bradbury, 1995). The current study illustrates a beneficial way to evaluate personality with common relational outcomes, such as satisfaction, with the use of partner-ratings and simultaneous evaluation of the variables. In addition to these techniques, it would be important to examine personality factors among other relational variables and account for the use of correlated error. Surely, there is more to relationship satisfaction in romantic couples than personality.

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Table 1

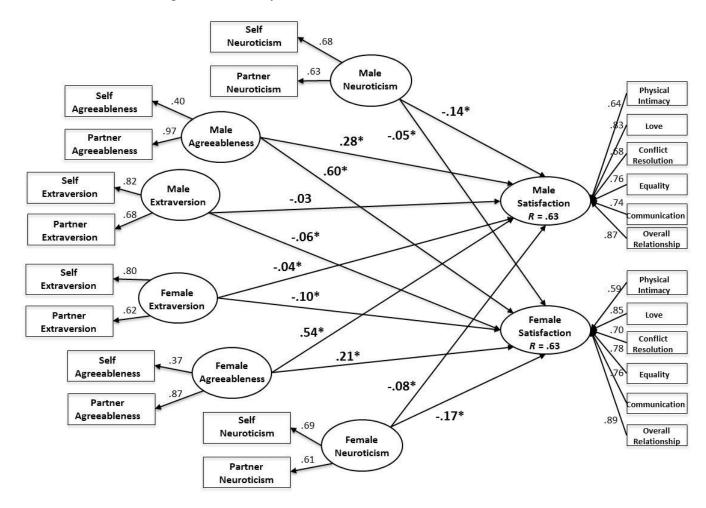
Descriptive Statistics and Correlations among Study Variables

	M(SD)	1	2	3	4	5	6	7	8
1. Male's Neuroticism	2.29(.52)		.15*	38*	25*	36*	08*	38*	33*
2. Female's Neuroticism	2.64(.53)		_	29*	46*	13*	3 1 [*]	42*	 41 [*]
3. Male's Agreeableness	4.08(.42)				.43*	.19*	$.10^{*}$	$.58^{*}$.74 [*]
4. Female's Agreeableness	4.03(.41)					$.18^{*}$	$.18^{*}$.72*	.53*
5. Male's Extraversion	3.49(.66)						08*	.19*	.14*
6. Female's Extraversion	3.58(.60)							.13*	.06*
7. Male's Satisfaction	4.00(.76)								$.78^{*}$
8. Female's Satisfaction	4.02(.80)								

Notes: N = 2,848*Correlation is significant at p < .01

Figure 1

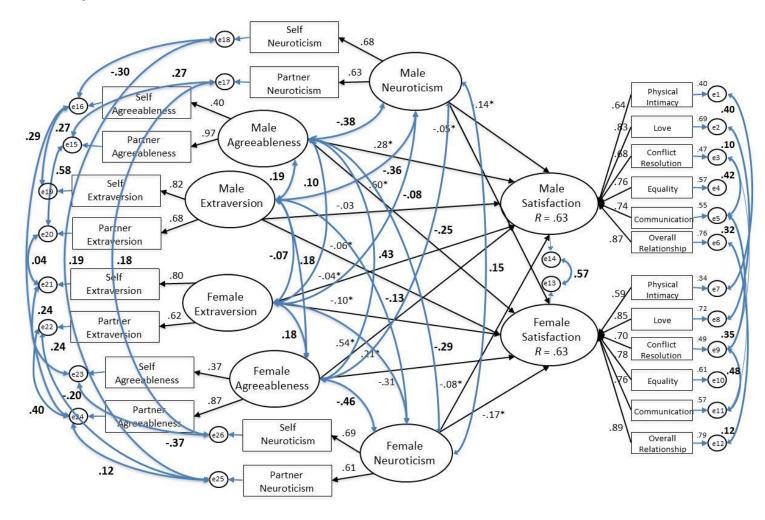
Self- and Partner-Ratings of Personality and Satisfaction Variables



Notes: Numbers of the paths represent standardized coefficients; correlated errors not shown; * = sig at p < .05

Figure 2

Personality and Satisfaction Variables - Correlated Errors Shown



Notes: Numbers of the paths represent standardized coefficients; correlated errors shown; * = sig at p < .05