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# The Mediating Role of Relational Aggression Between Neuroticism and Couple Attachment and Relationship Quality in Long-Term Committed Relationships

Sarah Annis Eliason  
*Brigham Young University*

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The Mediating Role of Relational Aggression Between Neuroticism and  
Couple Attachment and Relationship Quality in  
Long-Term Committed Relationships

Sarah Annis Eliason

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

Master of Science

Erin K. Holmes, Chair  
Sarah M. Coyne  
Jeremy B. Yorgason

School of Family Life  
Brigham Young University

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## ABSTRACT

### The Mediating Role of Relational Aggression Between Neuroticism and Couple Attachment and Relationship Quality in Long-Term Committed Relationships

Sarah Annis Eliason  
School of Family Life, BYU  
Master of Science

Much of the literature regarding relational aggression in romantic relationships has focused on the behaviors and outcomes of the actor and victim independently. Additionally, the relationships studied usually cover emerging adult samples, and rarely expand to long-term committed relationships, such as cohabiting or married couples. In this paper I sought to determine if relationally aggressive behaviors in long-term committed relationships over time resulted as a function of individual predictors (e.g. neuroticism), or as a process of couple interactions (e.g. couple attachment); and how these traits directly and indirectly (through relational aggression) influenced relationship quality. An Actor Partner Independence Model (APIM) was run using 1,558 individuals from the RELATE study. Anxious attachment was the strongest predictor of relational aggression. For both men and women, participating in relationally aggressive behaviors had a direct influence on their own relationship quality. Anxiously attached partners were more likely to be relationally aggressive and to have more relationally aggressive partners. Female, as well as male, relational aggression partially mediated the link between male and female anxious attachment, and female relationship quality. For men, only their own relational aggression mediated the link between male and female anxious attachment, and their own relationship quality.

Keywords: relational aggression, adult attachment, neuroticism

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To Alex and Erin, who always saw what I was not able to see, and refused to let me quit;  
and to Harriet – my Patron Saint of Education.

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The Mediating Role of Relational Aggression Between Neuroticism and  
Couple Attachment and Relationship Quality in Long-Term Committed Relationships

Since the introduction of relationship research, relationship quality has served to gauge the health of a relationship. It is intricately linked to the stability of a relationship (Amato, Booth, Johnson & Rogers, 2007), important individual factors, such as physical health and psychological well-being (Proulx, Helms & Buehler, 2007; Umberson, Williams, Power, Liu & Needham, 2006), and provides a foundation for processes within the family unit. Couples who report higher levels of relationship quality report less parenting stress (Halpern-Meeekin & Turney, 2016), and their children exhibit fewer internalizing and externalizing behavioral problems (Linville et al., 2010; Wolfinger, 2011). Because of this, relationship scholars continually seek to determine both individual and dyadic processes that can influence relationship quality. More recently, scholars have begun to explore the influence of relational aggression, previously only studied in childhood and adolescence, on romantic relationships.

Relational aggression is a form of aggression that involves the interference of third party relationships (Crick & Grotpeter, 1995), withdrawing group acceptance, and revoking feelings of security (Crick et al., 1998). Individuals who participate in relational aggression often display behaviors that allow them to get ahead in social situations by controlling and manipulating others. Within the context of romantic relationships, these behaviors include flirting with other people in front of partners, threatening to end a relationship (Ellis, Crooks & Wolfe, 2009), withholding physical intimacy, and being unfaithful (Goldstein & Tisak, 2004). Research on relational aggression in married couples has shown the presence of both direct and indirect forms of these behaviors, and their negative influence on relationship quality (Carroll et al., 2010, Coyne et al., 2017). In their sample, Carroll et al. (2010) estimated that as many as 52% of

husbands, and 64% of wives have used indirect forms of relational aggression, such as gossiping about or intentionally embarrassing their spouse, during times of conflict. In a follow up paper, Coyne et al. (2017) determined this to be the most destructive form of relational aggression in marital relationships. Because creating an environment of vulnerability and safety is paramount for the security of romantic relationships (Epstein, Pandit & Thacker, 2013), these behaviors can become especially destructive, leading to increased jealousy, decreased trust (Linder, Crick, & Collins, 2002), marital instability (Carroll et al., 2010), and victim risk for depression and anxiety (Compian, Gowan, & Hayward, 2004).

Though relationally aggressive behaviors have been shown to be harmful to romantic relationships, most of the literature regarding the topic, has examined relational aggression as a function of the individual, and its influence on relationship quality. Few studies have sought to determine the potential dyadic factors that may contribute to relationally aggressive behaviors, or how these behaviors function within the context of a couple relationship. Consequently, this limited knowledge decreases the ability to understand the driving factors behind romantic relational aggression, and what long-term impact relational aggression has with romantic relationships. In this study, I seek to expand the literature on the influence of the most destructive form of relational aggression (e.g. social sabotage) on the quality of long-term relationships. More specifically, I hope to determine how these behaviors in long-term committed relationships mediate the association between individual traits (e.g. neuroticism), and functions of the relationship environment (e.g. couple attachment), and relationship quality.

### **Understanding Relationship Quality: Individual Traits and Dyadic Contexts**

I will use the assumptions of Interdependence Theory in determining how analyzing certain individual traits and dyadic contexts can lead to a greater understanding of relationship

quality. Interdependence theory suggests that the thoughts, feelings, and behaviors of one partner, will inevitably influence those of the other partner (Rusbult & Arriaga, 1997). Two independent meta-analyses have shown that Big 5 personality traits have a significant influence on both self- (Heller, Watson & Iles, 2004) and partner-reports of relationship quality (Malouff, Thorsteinsson, Schutte, Bhullar & Rooke, 2009), with neuroticism as the largest contributor. These findings show that understanding the direct influence of individual personality traits, such as neuroticism, on an actor's relationship quality provides only a limited understanding of the quality of that relationship. It is only when we determine how the actor's reports of neuroticism influence the relationship quality of the other partner that we gain a full understanding of the influence of neuroticism on relationship quality.

Equally important to determining a complete picture of the quality of a relationship is understanding the context within which the relationship exists. As previously mentioned, the amount of security within a couple relationship has an impact on how relationships grow over time (Epstein, Pandit & Thackar, 2013). Measures such as couple attachment can help determine the level of perceived security within a relationship. In their study, Alexandrov, Cowan and Cowan (2005) found that individual measures of couple attachment significantly predicted relationship quality in married couples. However, when the measures of couple attachment for both partners were paired, it increased the variance explained for both self-reported and observed evaluations of relationship quality for both partners. This finding shows the importance of looking at the environment surrounding the relationship in determining its quality. In this study, I seek to push forward the understanding of relationship quality by both exploring individual and relational aspects of prior predictors (e.g. neuroticism and couple attachment) and exploring the influence of relational aggression as a dyadic mediator between these variables.

### **Relational Aggression as a Potential Mediator**

To date, most of the research regarding relational aggression and relationship quality has only addressed these behaviors as a function of the individual. In order to fully understand the mechanisms behind relational aggression, and its eventual influence on relationship quality, we must look at how all of these features interact in a dyadic context. Researchers have found that romantic partners with insecure attachments use control to establish a false sense of security. This is often expressed as they attempt to control their partner's behaviors through aggressive means (Chen & Chang, 2012; Hawley, Shorey, & Alderman 2009). If the nature of a relationship does not provide a regular sense of security for an insecure partner, they may attempt to regain control of their relationship by using relational aggression, providing them with a perceived sense of security. Though we know how insecure persons respond in these situations, we have less evidence of how the insecurity of one partner can influence the relational aggression of the other partner. In order to gain a broader picture of how these variables interact in the context of a romantic relationship I have elected to use an Actor-Partner Interdependence Model (APIM).

The APIM is a type of structural equation model designed to analyze dyadic data (Cook & Kenny, 2005). Using this model allows us to both simultaneously and independently estimate how the traits or behaviors of one participant influence their own individual outcomes, as well as the outcomes of their partner. I have elected this framework in which to estimate my model because it provides a clearer picture of how both individual traits and couple dynamics of one partner might influence the relational aggression of the other partner. Further, it will help us see how one partner's relational aggression may mediate the relationship between their own neuroticism or attachment and the relationship quality of both themselves, and the other partner. Additionally, the APIM allows us to understand how the relational aggression of one partner

interacts with that of the other, helping us to capture how the dynamics of the relationship are influencing the relational aggression and marital quality of both partners.

### **Individual Traits**

#### **Neuroticism**

The Big Five personality trait of neuroticism is often measured by including items related to anger, self-consciousness, reactivity, anxiety, worry, and frustration (Costa & McCrae, 1992; Ormel, 1983), displaying the multi-faceted nature of neuroticism. Neuroticism is defined as “the tendency to experience negative affect, especially when threatened, frustrated, or facing loss” (Ormel et al., 2013). Watson and Clark (1984) suggest that those with high neuroticism are often stable in their reports of distress and dissatisfaction, regardless of the situation. Additionally, this trait is often reported as an important predictor of many psychopathologies and mental disorders such as anxiety, depression and substance use (Kotov, Gamez, Schmidt, & Watson, 2010; Lahey, 2009). In marriage relationships, research has shown newlywed partners who are high in neuroticism may favor a hostile-attribution bias toward their partner’s behaviors, which may have long-term negative impacts on marital stability (Karney & Bradbury, 2000), and satisfaction (Collins, 2008).

#### **Neuroticism and Relational Aggression**

While little research has looked at the direct influence of neuroticism on relational aggression, it has been shown to be a strong predictor of other forms of aggression. In young adults, high levels of neuroticism were predictive of affective aggression, which takes place in response to feeling hurt or frustrated about a situation (Egan & Lewis, 2011). These findings become even more salient when participants have experienced prior negative life experiences (Sun, Xue, Bai, Zhang, Lin, & Cao, 2016). Scholars who have looked specifically at

neuroticism's influence on relational aggression have shown that individuals participating in higher levels of relational aggression are more likely to report high levels of neuroticism (Burton, Hafetz, & Henniger, 2007; Schmidt & Jankowski, 2014). In the current model, I will assume no gender differences. I hypothesize that both men and women with higher levels of neuroticism will participate in higher levels of relational aggression, which will negatively influence their own relationship quality and their partner's relationship quality.

### **Relationship Dynamics**

#### **Couple Attachment**

Based on Bowlby's (1973) theory of childhood attachment, measures of couple attachment assess a person's perceptions of security in their relationship based on their feelings of acceptance and belonging. When both partners feel a strong sense of security in their marriage there are greater expressions of love, decreased ambivalence, and easier transitions to parenthood (Kohn et al., 2012). Insecure attachment in marriage decreases trust (Givertz, Woszidlo, Segrin, & Knutson, 2013), sexual satisfaction (Milad, Ottenberger, & Artigas, 2014), forgiveness, and empathy (Chung, 2014), resulting in decreased marital quality (Chung, 2014; Givertz et al., 2013; Liang & Guo, 2014).

Researchers have discovered that though an individual's initial attachment, made in the early years of life, remains relatively stable through late adolescence (Fraley, 2002), this attachment gains some fluidity in the adult years (Fraley, Brumbaugh, & Roisman, 2011; Ruhl, Dolan, & Buhrmester, 2014) as romantic partners become one another's primary attachment figures (Hazan & Shaver, 1987). Bowlby's (1988) therapeutic model suggests that attachments can be changed in adulthood through positive and negative relationship interactions (Campbell, Simpson, Boldry & Kashy, 2005; Collins & Feeney, 2000). In the case of marital relationships, if

one spouse moves toward a more secure attachment, so does the other (Hudson et al., 2014). Taken together, this means that individuals have the ability to make shifts in their attachment security over time, and can be strongly influenced by relationship experiences.

### **Couple Attachment and Relational Aggression**

While all forms of aggression have the ability to be destructive to couple attachment, relational aggression may be particularly damaging as it directly threatens the security of a relationship (Oka, Sandberg, Bradford, & Brown, 2014). In couples where one partner is secure and the other is insecure, the secure partner has the ability to acknowledge their partner's distress and respond constructively to their negative feelings (Feeny & Noller, 1996, Simpson & Overall, 2014). As a result, though these pairings display higher levels of physical and relational aggression than secure-secure couples, they also show significantly decreased aggression when compared to couples with two insecurely attached partners (Wilson, Gardner, Brosi, Topham, & Busby, 2013). In relationships where both partners are insecurely attached (Wilson, 2011; Wilson et al., 2013), partners battle for a sense of security, resulting in higher levels of aggressive behaviors (Maysel, 1991). Consequentially, both partners continually feel a sense of insecurity with their partner, and their relationship (Greenberg, DeKlyen, Speltz, & Endriga, 1997).

Studies looking at the link between couple attachment and relational aggression draw the parallel between a child's response to unmet relational needs with parental figures, and an adult's unmet needs for security from romantic partners. When children's needs are unmet, they often respond with anger (Dutton, Saunders, Starzomski, & Bartholomew, 1994; Lafontaine & Lussier, 2005), to regain a sense of security and encourage closeness from attachment figures (Doumas, Pearson, Elgin, & McKinley, 2008). In adult romantic relationships, anxious partners often

signal unmet needs to their partner by blaming, criticizing and responding aggressively during conflict (Bowlby, 1988). Characterized by a constant fear of abandonment (Doumas et al., 2008), anxiously attached partners are more likely to participate in relationally aggressive behaviors (Goldstein, Chesir-Teran, & McFaul, 2008) in an effort to create a sense of security (Chen & Chang, 2012; Hawley et al., 2009). Avoidant partners, however, are less likely to exhibit overt displays of aggression to maintain security (Mayseless, 1991), but may instead use aggression to avoid intimacy (Doumas et al., 2008). Therefore, I posit that anxious attachment will predict actor effects on relationally aggressive behaviors and because of the nature of avoidant partners to detach in an effort to avoid intimacy, I believe that avoidant attachment will display partner effects on relational aggression. Based on previous literature, I also hypothesize that relational aggression will ultimately have a negative impact on relationship quality. Finally, findings regarding gender differences in attachment are mixed (Del Giudice, 2016; Nisenbaum & Lopez, 2015; Schmitt, 2008), therefore, I assume no gender differences between husbands and wives.

### **Hypotheses**

With little research on relational aggression in committed relationships, I hope to provide some understanding on how individual traits (e.g. neuroticism) and relationship dynamics (e.g. couple attachment) interact with relational aggression and ultimately contribute to couple relationship quality. Additionally, I hope to gain a better idea of how one partner's neuroticism or attachment security influences the relationally aggressive behaviors of the other. I hypothesize that (1) an actor's neuroticism will directly affect his or her own, and his or her partner's relationship quality; (2) an actor's attachment will influence his or her own, and his or her partner's relationship quality; (3) an actor's relational aggression will directly influence his or her own, and his or her partner's relationship quality; that (4) an actor's relational aggression will

mediate the association between both their own and their partner's neuroticism, and her or his own, and her or his partner's, relationship quality; (5) a partner's relational aggression will mediate the relationship between the other partner's avoidant attachment and his or her own and his or her partner's relationship quality; and (6) the relational aggression of an actor will mediate the association between his or her own anxious attachment and his or her own, as well as, the other partner's relationship quality.

## **Method**

### **Procedure and Sample**

I used a sample from the Relationship Evaluation (RELATE) questionnaire, which contains over 300 items about couple relationships and related factors (Holman et al. 1997). RELATE has been utilized as a thorough measurement tool for relationships since its inception. The questionnaire is completed individually online by both partners (<http://www.relate-institute.org>), and they pay \$40.00 to view their couple results — a 13 page self-interpretive, response-based, merged analyses of their relationship characteristics. This report can be used as an assessment of overall relationship quality. RELATE evaluates relationships in four main areas: individual, couple, family, and social. Participants provide self-reported answers to assessments of these four areas and also indicate their perceptions of their romantic partners in those four domains. Participants are frequently recruited from college courses or websites and are often referred to RELATE by clinicians, researchers, and family life educators.

This study used data from 1,558 heterosexual couples (3,116 individuals), including married (30.1%), cohabiting (60.5%), and remarried (9.4%) couples, , who were selected from the larger sampling frame to create a group that was more representative of the U.S. population in terms of religious affiliation. The selection process involved dividing the total sample into

religious subgroups and then randomly selecting samples proportional to the U.S. population. These data were collected between 2010 and 2014. The average age of men was 34.1 years ( $SD = 9.53$ ), and women, 32.2 years ( $SD = 8.91$ ). Of the 3,116 individuals, 77.77% of males, and 77.39% of females were White, 6.96% of males, and 5.46% of females were African American, with 11.02% of males, and 11.04% of females either from other ethnic groups or multiethnic. In the sample, 73.43% of females and 68.80% of males had a bachelor's degree or higher, with the median yearly income between \$40,000 - \$59,999 for both men and women. For men, the largest religious affiliation reported was "none," (33.83%), and Protestant for women (30.55%).

### Measures

**Neuroticism.** Participants' perceptions of their own level of neuroticism was measured using three items representing three subgroups of the Big 5 dimension of neuroticism as suggested by Draper and Holman (2005). Neurotic-depressed was created using the mean score of three items: "sad and blue," "feels hopeless," and "depressed" ( $\alpha = .84$  for men;  $\alpha = .85$  for women). Neurotic-hostile used the mean score of two items: "fights with others/loses temper," and "easily irritated" ( $\alpha = .77$  for men;  $\alpha = .78$  for women). Neurotic-anxious used the mean score of four items: "fearful," "tense," "nervous," and "worrier" ( $\alpha = .77$  for men;  $\alpha = .77$  for women). All subscales utilized a 5-point scale ranging from never (1) to very often (5) where individuals rated how often single words or phrases described them, with higher scores suggesting higher levels of neuroticism. These newly created scales were then used as the three items representing the latent variable of neuroticism. All factors loaded above .56 for women and .48 for men (see Table 1 for a report of all factor loadings), with Cronbach's alpha of .69 for women and .71 for men.

**Attachment.** I assessed individual levels of attachment using the Adult Attachment Scale (Collins & Read, 1990), with seven items for anxious attachment and six items for avoidant attachment. The measures were separated into two distinct latent variables for anxious and avoidant attachment. Respondents were asked to rate how much they agree on a seven-point Likert scale ranging from strongly disagree (1) to strongly agree (7). Samples of statements were, “I often worry that my partner(s) don’t really love me,” for anxious attachment and, “I find it difficult to trust others completely,” for avoidant attachment, with higher scores signifying higher levels of attachment anxiety or avoidance. The scale proves to be reliable with no factor loadings below .40 for women or men on Anxious Attachment, all factors above .56 for men and .58 for women on Avoidant Attachment. Anxious Attachment displays an alpha of .87 for women and .83 for men, and avoidant with a .83 for men, and .85 for women.

**Relational aggression.** Relational aggression was measured with a latent variable using the Social Sabotage items from the Couples Relational Aggression and Victimization Scale, developed by Nelson & Carroll in 2006. Participants responded to three items on a Likert-type scale ranging from never (1) to very often (5) with higher scores representing greater levels of relational aggression. Sample statements include, “My partner has gone ‘behind my back’ and shared private information about me with other people.” This measure was previously shown to be reliable in a 2010 paper on relational aggression in marriage (Carroll, Nelson, Yorgason, Harper, Ashton & Jensen, 2010). In my sample, this scale also showed to be reliable with factor loadings above .72 for women and men, and a Cronbach’s alpha of .74 for both men and women.

**Relationship quality.** Relationship quality was defined as the amount of satisfaction participants reported in their relationship. This measure will be assessed using a latent variable from the six-item Relationship Satisfaction scale on the RELATE questionnaire. The response

categories on this scale ranged from very dissatisfied (1) to very satisfied (5). Within my sample the reliability proved to be very reliable with factor loadings above .64 for women and .47 for men, and Cronbach's alpha of .92 for men and .90 for women. (Please see Table 1 for all factor loadings)

**Control variables.** The study also utilized a number of control variables, which have been found to relate to aggression in romantic relationships. Education was assessed by asking respondents to report on their highest completed grade/level in school on a nine-point Likert scale, with response options ranging from less than high school (1) to graduate or professional degree, completed (9). Income was reported on an 11-point scale with items ranging from none (0) to \$300,000 or above (11). Length of relationship in years, and categories of marital status, religion and race were also controlled for.

### **Analysis Plan**

My model tested the relationship between individual (neuroticism) and couple (anxious and avoidant attachment) predictor variables to outcome variables (relationship quality) as mediated by relational aggression for both males and females individually and across partnerships (see Figure 1). To test this, I used an Actor Partner Interdependence Model (APIM), a type of structural equation model (SEM) for analysis, using the statistical software package *Mplus* (Muthén & Muthén 2012). APIM allows the couple to be used as the unit of analysis (Kenny et al. 2006), which yields unique interpretation capabilities about the associations between actor effects (how individuals' personal variables impact their own outcomes) as well as partner effects (how partner variables impact each other's outcomes). To test for model fit, I used fit indices including the Comparative Fit Index (CFI), the Tucker-Lewis Index (TLI), the root mean square error of approximation (RMSEA), and Chi-square analysis with recommended cut-

off scores implying appropriate model fit. Common practice suggests that the CFI and TLI should each be above .95, with the RMSEA less than .05, and a non-significant Chi-square value (Hu & Bentler 1999; McDonald & Ho 2002). Mediation analyses will be tested using the method suggested by Preacher and Hayes (2008) employing bootstrapping techniques.

## **Results**

### **Descriptive Statistics and Correlations**

Frequencies were run prior to fitting the model in order to determine the level of these behaviors in my sample (See Table 1), as well as correlations to determine the relationships between the variables. Overall, there were relatively low levels of neuroticism, insecure attachment, and relationally aggressive behaviors reported in the data. (See also Table 2 for correlations).

### **Measurement Model**

Each of the constructs examined in this study were analyzed in a confirmatory factor analysis in *Mplus*. The inclusion of all of the individual items comprising male and female neuroticism, anxious attachment, avoidant attachment, relational aggression, and relationship quality, produced all factor loadings above .40. Additionally, the model fit the data well:  $\chi^2 = 4140.37$ ,  $df = 1803$ ,  $p < .001$ ; CFI = .94; RMSEA = .03 (lo = .028, hi = .030).

### **Direct Paths Model**

To test for direct effects, I elected to run an APIM with both actor and partner effects using only neuroticism and attachment as predictors of relational aggression and relationship quality along with relational aggression as predictors of relationship quality. In the model, certain gender differences appeared. In order to rule out potential structural variance in these

pathways, I used Wald's Test to constrain these pathways to be the same. The tests concluded that model fit did not become significantly worse ( $p = .12$ ), suggesting structural invariance.

Male neuroticism was a significant predictor of female relational aggression ( $\beta = .07$ ;  $p = .04$ ) and male relationship quality ( $\beta = -.10$ ;  $p < .001$ ), with female neuroticism only significantly predicting male ( $\beta = -.06$ ;  $p = .02$ ) and female relationship quality ( $\beta = -.10$ ;  $p < .001$ ). This suggests that women who participated in higher relational aggression were more likely to have male partners high in neuroticism. Further, while both men and women reporting high levels of neuroticism are likely to see a decrease in their own relationship quality, women are also more likely to experience a decrease in relationship quality when their partner is high in neuroticism.

Female anxious attachment was a significant predictor of female relational aggression ( $\beta = .32$ ;  $p < .001$ ), male relational aggression ( $\beta = .16$ ;  $p < .001$ ), female relationship quality ( $\beta = -.32$ ;  $p < .001$ ) and male relationship quality ( $\beta = -.17$ ;  $p < .001$ ). Women who were more likely to report anxious attachment in their relationships were also more likely to be relationally aggressive, and to have partners who were relationally aggressive. In turn, a woman's anxious attachment was associated with decreased relationship quality. Additionally, male anxious attachment was a significant predictor of female relational aggression ( $\beta = .34$ ;  $p < .001$ ), male relational aggression ( $\beta = .30$ ;  $p < .001$ ), female relationship quality ( $\beta = -.23$ ;  $p < .001$ ) and male relationship quality ( $\beta = -.43$ ;  $p < .001$ ). Similar to women, men reporting higher levels of anxious attachment were more likely to participate in relationally aggressive behaviors. These individuals were also more likely to have more relationally aggressive partners. Greater reports of male anxious attachment were also linked with decreased relationship quality. Neither male nor female avoidant attachment significantly predicted relational aggression or relationship quality for males or females.

As hypothesized, male relational aggression significantly predicted female relationship quality ( $\beta = -.17; p < .001$ ) and male relationship quality ( $\beta = -.19; p < .02$ ). However, female relational aggression was only a significant predictor for female relationship quality ( $\beta = -.17; p < .001$ ). These findings suggest that when men and women participate in relational aggression it significantly decreases their own relationship quality. Moreover, when a male partner is relationally aggressive, it also directly impacts his partner's relationship quality.

### **Indirect Paths Model**

Next, indirect effects were tested using 2,000 bootstraps (MacKinnon, 2005). The final model indicated good fit for the data and is shown in Figure 2:  $\chi^2 = 4140.372, df = 1803, p < .001$ , CFI = 0.94, TLI = 0.93, RMSEA = 0.03 (lo = .028, hi = .030), SRMR = 0.04. CFI and TLI values of above 0.95 (Byrne, 2001) and an RMSEA value of below 0.05 indicates adequate model fit. The overall variance explained in the model was  $R^2 = .64$  for females and  $R^2 = .66$  for males. See Table 3 for a full list of direct, indirect and total effects.

**Actor-Actor effects.** Actor-actor effects indicate that all variables included are for the same individual. In my entire model, two different actor-actor effects were found. Female relational aggression mediated the relationship between female anxious attachment and female relationship quality ( $\beta = -.06; p < .001$ ), and male relational aggression mediated the relationship between male anxious attachment and male relationship quality ( $\beta = -.06; p < .001$ ). For females and males, there was a positive relationship from anxious attachment to relational aggression, suggesting that higher reports of anxious attachment were associated with higher levels of relational aggression. However, the negative association between relational aggression and relationship quality, indicated that when individuals were more relationally aggressive, they were more likely to experience lower relationship quality.

**Actor–Partner effects.** Actor–partner effects refer to an actor predictor and mediating variable followed by a partner variable. Male relational aggression mediated the relationship between male anxious attachment and female relationship quality ( $\beta = -.04$ ;  $p = .004$ ). Men who report greater amounts of anxious attachment are more likely they are to act in relationally aggressive ways, which can have a negative impact on their partner’s relationship quality.

**Partner–Actor effects.** Partner-actor effects indicate a partner predictor variable followed by mediating and outcome actor variables. The association between male anxious attachment and female relationship quality was mediated by female relational aggression ( $\beta = -.02$ ;  $p = .02$ ), while male relational aggression mediated the link between female anxious attachment and male relationship quality ( $\beta = -.03$ ;  $p = .003$ ). These findings suggest that, regardless of gender, relationally aggressive individuals with anxiously attached partners are more likely to experience a negative influence on their own relationship quality.

**Blended effects.** Blended effects refer to an actor predictor followed by a partner mediator and an actor outcome. Only one blended effect was found within the model. The relationship between female anxious attachment and female relationship quality was mediated by male relational aggression ( $\beta = -.02$ ;  $p = .008$ ), indicating that anxious attachment within a female partner, is related to an increase in her male partner’s relational aggression, which is ultimately related to a decrease in her own relationship quality.

## Discussion

The purpose of this study was two-fold. I used an actor-partner structural equation model hypothesizing that there would be direct relationships between how neuroticism and attachment interact with relationship quality. Second, I tested the potential mediating effect of relational aggression on neuroticism and relationship quality and of relational aggression on attachment

and relationship quality. Based on the literature, I hypothesized that an individual's neuroticism would directly influence both their own, and their partner's relationship quality, and attachment would influence an individual's own relationship quality. Additionally, I surmised that all variables would have a negative influence on relationship quality, and that relational aggression would mediate the relationship between neuroticism and couple attachment, and relationship quality.

My results added to the current literature in three important ways. First, to date, little research has explored the influence of relationally aggressive behaviors in long-term committed relationships, and these findings offer insight as to how both individual traits, such as neuroticism, and couple processes (i.e. couple attachment), can contribute to relational aggression in these types of relationships. For both men and women, participating in relationally aggressive behaviors had a direct influence on their own relationship quality, which may suggest that indirect forms of relational aggression in these contexts serve as a form of co-rumination for individuals using them. Goldstein (2011) found that individuals who spent more time ruminating were more likely to participate in romantic relational aggression. Women were also more likely to have decreased relationship quality if their partner was relationally aggressive. This difference between men and women may suggest a greater importance of third party relationships to women. Prior research has shown that women are more likely to represent themselves in terms of their close relationships (Maddux & Brewer, 2005). In terms of this study, when a partner seeks to manipulate or harm their partner by interfering with their close relationships, female partners are more likely to experience decreased relationship satisfaction as a result.

Second, because most of the work surrounding relational aggression has focused on individual traits, few have looked to determine how the environment surrounding the couple

influences a person's relationally aggressive behaviors. Regarding individual traits, I found that women were more likely to participate in relationally aggressive behaviors if their partner reported greater levels of neuroticism. Several researchers have noted that though neuroticism and anxious attachment remain independent constructs, there is often a strong association found between the two (Crawford, Shaver & Goldsmith, 2007; Holmberg, McWilliams & Patterson, 2012; Shaver & Mikulincer, 2004). Therefore, based on the zero order correlations between the two constructs in my sample, it may be possible that female neuroticism is predicting female anxious attachment in this model.

Regardless of gender, anxious attachment proved to be a much stronger predictor of relational aggression than neuroticism. These findings support my hypotheses that the amount of security that a partner feels within their relationship has strong implications for how much relational aggression they exhibit. Partners that felt insecure in their relationships and responded through anxious attachment behaviors were more likely to participate in relational aggression, and to have partners who displayed relationally aggressive behaviors. This indicates that when a partner feels a lack of security in their relationship, they reach out through aggressive means in an effort to create a sense of security (Chen & Chang, 2012; Hawley et al., 2009). It also falls in line with Family Systems Theory, which suggests that the thoughts, feelings, and behaviors of one family member will inevitably influence the thoughts, feelings, and behaviors of the other family members in the same system (Bowen, 1966). Therefore, the security that one partner feels in their relationship can have a direct influence on their partner's aggressive behaviors.

Finally, most of the studies that have looked at romantic relational aggression have only looked at how these behaviors influence the relationship as a function of the individual, with little understanding as to how relational aggression influences the relationship as a whole. When

placed in the model together, only anxious attachment carried an indirect influence on relationship quality. As previously stated, the influence of neuroticism may not carry through to relationship quality because of its strong association with anxious attachment. Additionally, avoidant attachment not serving as a significant predictor in this model might provide some insight regarding the association between attachment and relational aggression. By nature, individuals with anxious and avoidant attachments utilize different strategies when regulating negative affect (Cassidy & Kobak, 1988). Where an anxious individual uses hyperactivating strategies, which make them constantly aware of threats and betrayals, partners reporting higher levels of avoidant behaviors commonly participate in deactivating strategies, which prevents them from becoming close to others. Hyperactivating behaviors align more closely with indirect forms of romantic relational aggression, which may be the reason why anxious attachment displayed significant effects while avoidant attachment did not.

Women were more likely to experience a decrease in relationship quality if either they or their partner were anxiously attached. This association was mediated by both male and female relational aggression. For men, only their own relational aggression mediated the link between male and female anxious attachment, and their own relationship quality, again, potentially pointing to the importance of relationships to female partners. Overall, these findings show that when looking at romantic relational aggression, it is important to approach the potential predictors and outcomes more holistically.

### **Limitations**

The data used within this study were exploratory in nature. Much is still to be discovered regarding relational aggression in long-term relationships. Though efforts were taken to filter the sample in a way that would create greater religious diversity, the resulting sample was still

largely White, and highly educated. Most samples looking at relational aggression in long-term or dyadic contexts come from similar samples. Though many of the findings were in the expected directions, it is important to look at more diverse samples to see how relationally aggressive behaviors function within a variety of demographics. This study is also cross-sectional in nature, which limits the generalizability of the findings. Though Coyne et al. (2017) found that the influence of men's indirect relational aggression on relationship quality held true for married men and women over five waves of data, there are still other features of this model to be explored longitudinally.

Further, though the measure of anxious attachment focused on the attachment within the couple relationship, the questions used for avoidant attachment had a more general focus. Because of this, it is possible my measure did not fully grasp the construct of avoidant behaviors within the couple relationship, which may account for the lack of findings for reports of avoidant attachment. Running the same model with more specific measures of attachment could help us understand how avoidant attachment interacts in romantic relational aggression.

### **Future Research**

With such strong effects from anxious attachment to relational aggression, it is important to determine how those associations look over time.

Some of the most notable differences in my model were found between men and women. Future research should look at why when a partner participates in indirect relational aggression it negatively influences the relationship quality of women, but not men. Additionally, the total effects of anxious attachment on relationship quality were greater for men than they were for women. This suggests that the security of the relationship has an overall strong influence for

men. Further studies might seek to determine how perceptions of relationship security influence men and women differently.

### **Conclusion**

The purpose of this paper was to explore how relational aggression influences the couple relationship, and to examine how individual traits and couple dynamics influence relationally aggressive behaviors in long-term committed relationships. As expected, I found that relational aggression had a significant influence on relationship quality. Additionally, the large number of partner effects in this model suggests that when a romantic partner exhibits relationally aggressive behaviors, the influences and the outcomes may extend beyond the individual, especially in the case of women. More importantly, this study introduced partner anxious attachment as a key predictor of relational aggression. Taken together, these findings show the value of using couple dynamics, including assessing both actor *and* partner effects, when studying relational aggression in long-term relationships.

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Table 1

*Means, standard deviations, and factor loadings for all measured variables*

Variables	Female			Male		
	%	<i>M (SD)</i>	Factor Loadings	%	<i>M (SD)</i>	Factor Loadings
<b>Latent Variables</b>						
Neuroticism						
Neurotic-depressed		2.29	.66		2.11	.68
Sad and blue		2.49	.82		2.28	.79
Feels hopeless		2.12	.71		1.95	.73
Depressed		2.26	.83		2.11	.71
Neurotic-hostile		2.56	.56		2.46	.48
Fights with others		2.35	.72		2.27	.72
Easily irritated		2.77	.72		2.66	.72
Neurotic-anxious		3 (.67)	.68		2.64	.70
Fearful		2.56	.63		2.25	.58
Tense		3.04	.62		2.83	.61
Nervous		2.88	.71		2.63	.74
Worrier		3.52	.66		2.86	.71
Anxious Attachment						
I worry about being abandoned by others		3.27	.68		2.88	.58
Others are often reluctant to get as close as I		2.74	.40		2.95	.40
I often worry that my partner(s) don't really love		2.68	.66		2.35	.68
I worry about my partner(s) leaving me		2.94	.75		2.70	.71
My partner(s) would hurt me by suddenly ending		3.36	.79		3.08	.69
The thought of being left by others enters my		3.34	.82		2.92	.76
I'm not confident my partner(s) love me as much		2.41	.65		2.21	.65
Avoidant Attachment						
I find it difficult to get close to others		2.72	.63		2.92	.56
I don't like people getting too close to me		2.51	.79		2.73	.78
I'm somewhat uncomfortable being close to		2.77	.80		2.92	.79
I find it difficult to trust others completely		3.59	.58		3.41	.58

I'm nervous whenever anyone gets too close to	2.53	.81	2.60	.78
Others want me to be more intimate than I'm	2.82	.59	3.08	.57
Relational Aggression				
My partner has shared private information	1.38	.53	1.46	.74
To be mean, my partner has spread rumors about	1.09	.51	1.13	.70
During conflict, my partner has recruited others	1.22	.45	1.36	.76
Relationship Quality				
The physical intimacy you experience	3.61	.64	3.59	.64
The love you experience	4.25	.82	4.26	.83
How conflicts are resolved	3.20	.76	3.36	.73
The amount of relationship quality you	4 (1.08)	.79	4.02	.79
The amount of time you have together	3.60	.53	3.65	.44
The quality of your communication	3.41	.82	3.57	.79
Your overall relationship with your partner	4.13	.89	4.22	.86
Control Variables				
Marital Status				
Cohabiting	61%		60.8%	
Married, first marriage	32%		31.2%	
Remarried	6.93		8%	
Ethnicity				
White	77.4		77.77%	
African American	5.51		6.96%	
Hispanic	4.32		5.80%	
Asian American	6.10		4.25%	
Other	6.72		5.22%	
Religion				
Catholic	17.70		20.54%	
Protestant	30.61		26.63%	
Other	22.74		19.14%	
None	29.12		33.81%	
Education Level				
Less than high school	<1%		<1%	
High school	2.31		6.52%	
Some college	17.74		19.11%	

College graduate	79.70	73.63%
Income		
Less than \$20,000	28.25	12.43%
At least \$20,000	18%	15.62%
At least \$40,000	18.32	16.80%
At least \$60,000	12.66	13.91%
At least \$80,000	8.69	10.83%
At least \$100,000	4.43	8.85%
\$120,000 or more	10%	21.78%
Relationship length		
At least a year	1.25	1.27%
At least two years	25.82	25.35%
At least four years	49.38	49.63%
At least six years	24.84	23.37%
Eight or more years	<1%	<1%

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Table 2

*Bivariate correlations for all measured variables*

Variables	1	2	3	4	5	6	7	8	9	10
1. Female Neuroticism	1									
2. Male Neuroticism	.10**	1								
3. Female Anxious Attachment	.37***	.10**	1							
4. Female Avoidant Attachment	.37***	.06*	.35***	1						
5. Male Anxious Attachment	.17***	.40***	.20***	.18***	1					
6. Male Avoidant Attachment	.05*	.29***	.13***	.03	.26***	1				
7. Female Relational Aggression	.17***	.13***	.28***	.16***	.21***	.06*	1			
8. Male Relational Aggression	.16***	.19***	.20***	.11***	.29***	.15***	.38***	1		
9. Female Relationship Quality	-.34***	-.23***	-.38***	-.26***	-.37***	-.18***	-.43***	-.40***	1	
10. Male Relationship Quality	-.26***	-.34***	-.28***	-.19***	-.48***	-.22***	-.31***	-.43***	.73**	1

Table 3

*Decomposition of effects on neuroticism, anxious and avoidant attachment, relational aggression, and relationship quality.*

Variables	Indirect	Direct	Total
Female neuroticism on female relational aggression	-	.027	.027
Male neuroticism on female relational aggression	-	<b>.074*</b>	.074*
Female anxious attachment on female relational aggression	-	<b>.320***</b>	<b>.320***</b>
Female avoidant attachment on female relational aggression	-	.001	.001
Male anxious attachment on female relational aggression	-	<b>.138***</b>	<b>.138***</b>
Male avoidant attachment on female relational aggression	-	-.060	-.060
Female neuroticism on male relational aggression	-	.058	.058
Male neuroticism on male relational aggression	-	.056	.056
Female anxious attachment on male relational aggression	-	<b>.158***</b>	<b>.158***</b>
Female avoidant attachment on male relational aggression	-	-.051	-.051
Male anxious attachment on male relational aggression	-	<b>.301***</b>	<b>.301***</b>
Male avoidant attachment on male relational aggression	-	.030	.030
Female neuroticism on female relationship quality	-.012	<b>-.096***</b>	<b>-.108***</b>
Male neuroticism on female relationship quality	-.020	-.026	-.045
Female anxious attachment on female relationship quality	<b>-.075***</b>	<b>-.326***</b>	<b>-.401***</b>
Female avoidant attachment on female relationship quality	.006	-.004	.003
Male anxious attachment on female relationship quality	<b>-.061***</b>	<b>-.230***</b>	<b>-.291***</b>
Male avoidant attachment on female relationship quality	.007	-.013	-.006
Female relational aggression on female relationship quality	-	<b>-.172***</b>	<b>-.172***</b>
Male relational aggression on female relationship quality	-	<b>-.125***</b>	<b>-.125***</b>
Female neuroticism on male relationship quality	-.012	<b>-.058*</b>	<b>-.070*</b>
Male neuroticism on male relationship quality	-.013	<b>-.103***</b>	<b>-.116***</b>
Female anxious attachment on male relationship quality	<b>-.040**</b>	<b>-.173***</b>	<b>-.213***</b>
Female avoidant attachment on male relationship quality	.010	.025	.035
Male anxious attachment on male relationship quality	<b>-.063***</b>	<b>-.436***</b>	<b>-.499***</b>
Male avoidant attachment on male relationship quality	-.004	-.010	-.014
Female relational aggression on female relationship quality	-	-.030	-.030
Male relational aggression on female relationship quality	-	<b>-.194***</b>	<b>-.194***</b>
Control Variables			
African American on female relationship quality	-.028**	-.036	<b>-.064**</b>

Cohabitation on female relationship quality	.024*	<b>.136***</b>	<b>.160***</b>
African American on male relationship quality	-.015	<b>-.062**</b>	<b>-.077**</b>
Cohabitation on male relationship quality	<b>.018**</b>	<b>.136***</b>	<b>.154***</b>
Other religious affiliation on male relationship quality	.005	<b>.065*</b>	<b>.069*</b>

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*Note.*  $N = 1,558$ . Indirect and direct effects may not sum to total due to rounding. All estimates are standardized and regressed on race, religion, marital status, income, relationship length and education. For parsimony only significant control variables are reported in this table.

Bootstrap bias-corrected p-values: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

Figure 1

*Hypothesized model of relational aggression as a mediator between neuroticism and attachment, and relationship quality*

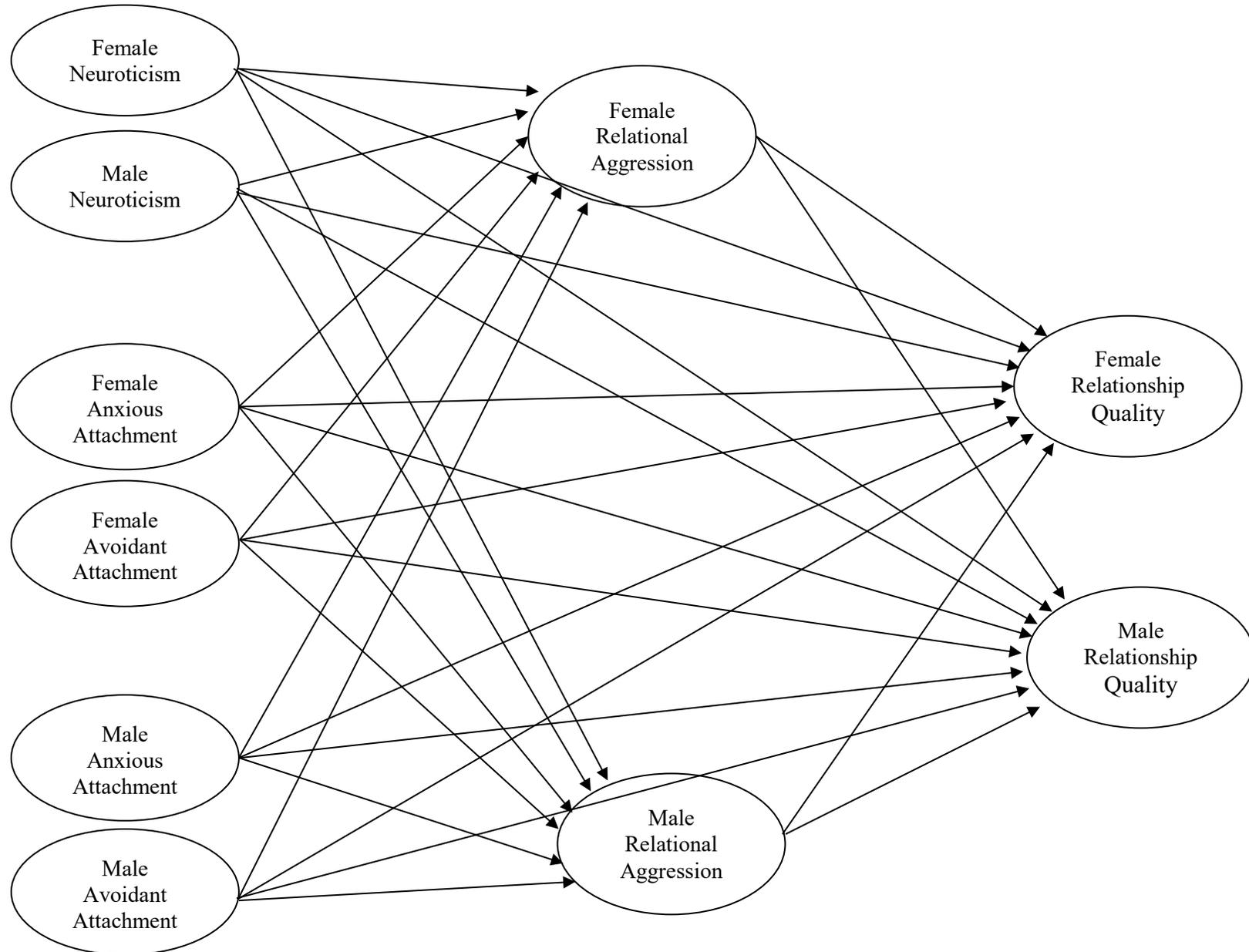
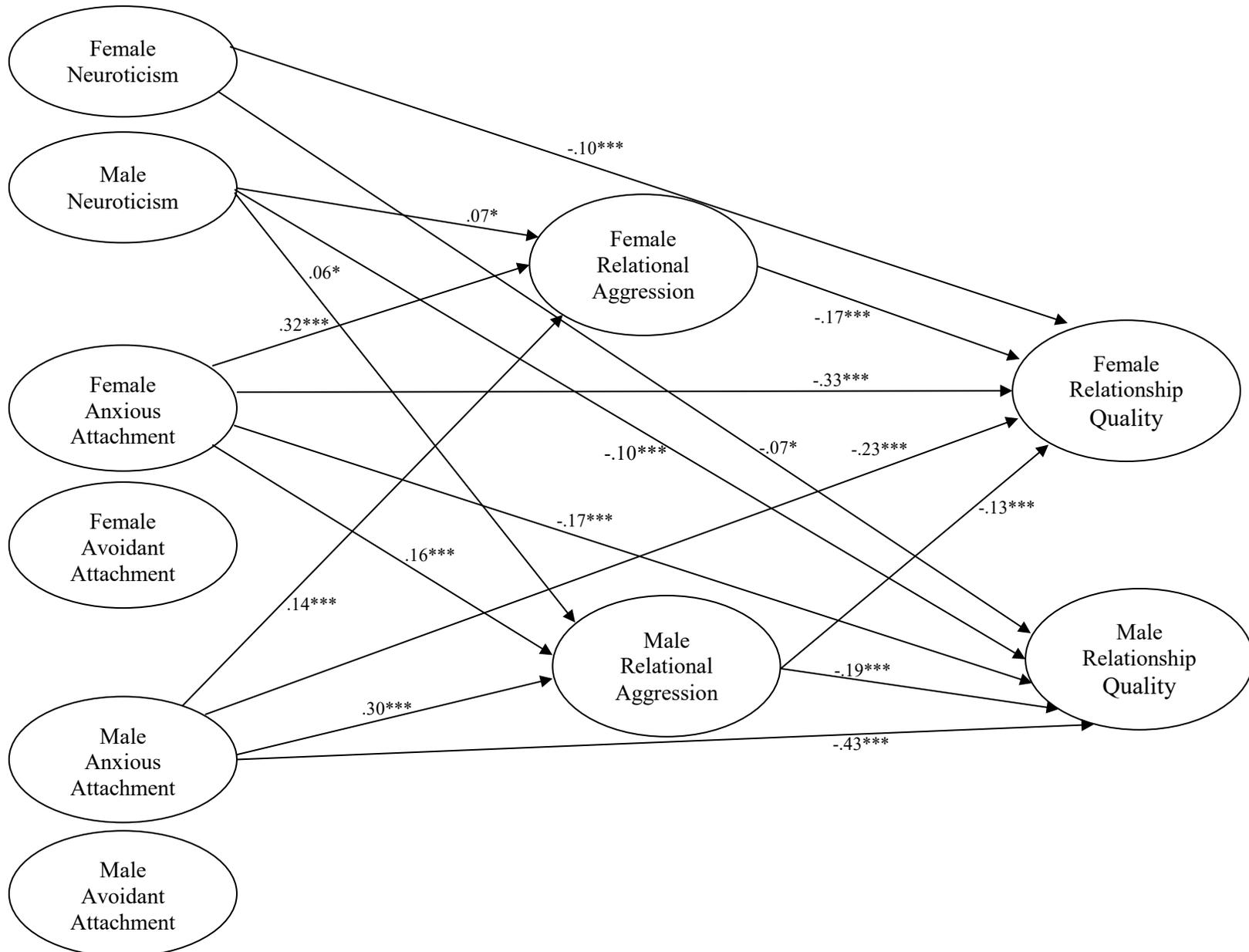


Figure 2  
*Actor-Partner interdependence structural equation model*



Note: Only significant pathways are shown for parsimony. \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .