

Running Head: ADOLESCENT ROMANTIC RELATIONSHIPS

Romantic Relationship Quality and Psychosocial Adjustment in Mid-Adolescence

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Abstract

Committed romantic relationships are central to the well-being of adults. The onset of these romantic relationships occurs during adolescence, but much remains unknown about the manner in which adolescent relationships mimic or differ from those present in adulthood. Survey data were collected to investigate whether adolescents demonstrate the same gender differences in “withdrawal-and-aggression” vs. “tend-and-befriend” patterns of behavior in low-quality romantic relationships as those observed in adulthood. We hypothesized that (a) relationship quality would be associated with interpersonal measures of psychological adjustment (bullying and excessive reassurance-seeking); (b) boys would be distressed by the absence of positive relationship qualities and the presence of negative relationship qualities whereas girls would be distressed by the presence of negative qualities, and (c) boys would demonstrate bullying behavior as a measure of maladaptive function whereas girls would demonstrate excessive reassurance-seeking behavior. Hierarchical regression results indicated that the absence of positive qualities in a romantic relationship is associated with higher levels of self-reported excessive reassurance seeking for girls only, and the presence of negative qualities in a romantic relationship is associated with higher levels of peer-reported bullying for boys and girls. Results are discussed and related to findings from the adolescent and adult romantic relationship literature. Implications, limitations, and future directions are presented.

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Introduction

Interpersonal processes are strongly associated with individual psychological well-being throughout the lifespan, with the romantic relationship demonstrating the highest level of salience. Healthy committed relationships can serve as a protective factor against the development of psychological disorders (Walen & Lachman, 2000), and these relationships can either contribute to better treatment outcomes or stifle progress towards recovery when one partner experiences debilitating psychopathology (Baucom, Whisman, & Paprocki, 2012). Evidence from the longest longitudinal study to date demonstrates that the qualities of close relationships, especially marriages, predict medical and psychological outcomes in octogenarians more strongly than any other variable (Vaillant, 2012).

While the committed romantic relationship is clearly the most salient interpersonal arena among adults, adolescence is a developmental period during which peer relationships begin to achieve extremely high levels of importance (Smetana, Campione-Barr, & Metzger, 2006), and the concept of romance begins to take root (Furman, Brown & Feiring, 1999). Although this critical arena develops in adolescence, remarkably little is known about the content of the romantic relationships that emerge during this time period. The value of scholarly inquiry into this arena of adolescents' personal lives has sometimes been questioned (Collins, 2003, for review), but research continues to demonstrate salient associations between romantic relationship factors and psychological function among adolescents (*e.g.* Collibee & Furman, 2015).

Distress in a committed romantic relationship poses significant risks for broad psychological functioning in adulthood. For example, there is evidence that individuals in low-quality marriages are significantly more likely to develop depression later on (Whisman & Bruce, 1999). In adolescence, the same association between relationship quality and

psychosocial adjustment has been discovered, albeit with smaller effect sizes. A longitudinal study has demonstrated that the association between relationship quality and internalizing symptoms, small but significant in adolescence, continues to grow stronger throughout early-adulthood (Roisman, Masten, Coatsworth, & Tellegen, 2004). Given that romantic relationship quality in adolescence predicts the quality of later romantic relationships (Madsen & Collins, 2011), this understanding of the developmental progression of romantic relationship salience indicates that adolescents who are able to maintain healthy romantic relationships may experience somewhat better adjustment concurrently and later on.

Interpersonal “Fight-or-Flight”: Withdraw-and-Aggress or Tend-and-Befriend

Extended periods of participation in a highly dysfunctional romantic relationship can elicit patterns of maladaptive behavior that are associated with long-term life stress. The natural physiological response cycle to the onset of a stressor is generally referred to as “fight-or-flight.” Activation of this system launches involuntary changes including increased heart rate, rapid respiration, and pupil dilation; the body prepares itself for action (Low, 1993). When this system is activated during a dyadic interaction, an individual’s behavior can be heavily influenced. Heightened autonomic arousal can lead an individual to make impulsive remarks or stonewall her or his partner (Robles, & Kiecolt-Glaser, 2003). These behaviors would often be elicited by interactions that characterize low-quality relationships, and they would also further degrade relationship quality. Three years after observing couples engaging in conflictual interactions, Levenson and Gottman (1985) discovered that those who had demonstrated the most physiological arousal in those interactions were the most likely to be experiencing decline in relationship satisfaction at follow-up. Reflecting on this finding, Gottman (1990) proposed that, when the interpersonal corollary to fight-or-flight, “aggression-and-withdrawal,” is over-

expressed in a relationship, intimacy and satisfaction can be stifled. Thus, individuals' and their partners' behavior while they are stressed can have serious implications for the nature and quality of their romantic relationship.

Although the physiological arousal system that is activated during stressful experiences is universal, gender differences have been discovered in behavioral tendencies associated with extended periods marked by repeated experiences of elevated autonomic arousal. In general, men are more likely to engage in substance use or abuse, while women tend to seek out emotional support (Lee & Mason, 2014; Hovanitz & Koroza, 1989) during these times. The "affiliative" behaviors observed in females have been found with such consistency that researchers have named a possible alternative to withdrawal-and-aggression, "tend-and-befriend." Taylor and colleagues (2000) posit an evolutionary basis for tend-and-befriend behavior, emphasizing the adaptability of using social networks when caregivers or their offspring are threatened.

The tend-and-befriend mechanism is primarily expressed through drawing towards affiliates for reassurance in the face of a perceived threat, yet it can be problematic in a romantic relationship. Paprocki and Baucom's (2017) study of relationship-based anxiety operationalized this idea by investigating common affiliative behaviors in committed relationships. Excessive reassurance-seeking, accommodation, and self-silencing were found to be common responses to worries about the status of participants' romantic relationships. These behaviors were enacted by the anxious partners in order to alleviate the distress they experienced, but they ultimately had the effect of frustrating the other partner and eroding relationship quality. Thus, an individual's inability to inhibit excessive affiliative responses to a perceived (and perhaps nonexistent) threat to a romantic relationship can generate a substantial threat to the stability of the relationship. Thus, the over-expression of both withdrawal-and-aggression and tend-and-befriend behaviors

within a relationship are risk factors for relationship satisfaction and could be associated with broader psychological outcomes for individuals.

Domains of Romantic Relationship Quality

In studying associations between relationship psychological functioning, it is valuable to consider the type of relational difficulty the couple is experiencing. A relationship that is high in conflict, for example, while maintaining high levels of warmth and compassion, is qualitatively different from a relationship demonstrating extremely low levels of both intimacy and criticism. Notably, both adult (Fincham & Rogge, 2010) and adolescent (Furman, 1996) measures of relationship quality account for the positive and negative domains of quality separately. It is helpful to ask how the differences in these domains of relationship quality relate to overall ratings of satisfaction in the relationship, and whether gender differences exist in those perceptions. In adults, a clear pattern exists between negative relationship behaviors (*e.g.* criticism) and the negative domain of relationship function (Gottman, 1998). There is scant research available on this topic for adolescents, indicating an important domain for further research. One prior study does suggest that in late adolescence, girls' reports of global relationship function are predicted by their ratings of positive and negative interaction styles, while boys' reports are predicted by their ratings of positive interaction styles (Galliher, Welsh, Rostosky & Kawaguchi, 2004). This would indicate that girls are distressed by both the presence of negative relationship qualities and the absence of positives, whereas boys are distressed by the absence of positives.

Present Study: Gender Differences in Behavioral Correlates of Relationship Distress

The current study seeks to extend the literature on adolescent romantic relationship function by examining the maladaptive interpersonal behaviors of adolescents participating in

low-quality romantic relationships. Associations between relationship quality and psychological functioning have been demonstrated in adolescents, but never for the purpose of considering how girls and boys may understand and respond to such distress differently. Peer-reported bullying behavior will serve as a metric of “aggression” behaviors in the peer context, and excessive reassurance-seeking will measure maladaptive affiliative behavior.

Three hypotheses were proposed. First, it was hypothesized that participating in a relationship of poor quality would be associated with symptoms of psychological distress, as measured by internalizing and externalizing symptoms. This finding would mirror those of previous studies. Second, we tentatively hypothesize gender differences in the perception of relationship quality, similar to those described by Galliher et al. (2004) such that both the positive and negative domains of relationship quality will be salient for girls, whereas the absence of positive relationship qualities will be salient for boys. Finally, we hypothesize interpersonal behaviors associated with this distress will vary by gender, such that in the context of a romantic relationship marked in some way by poor quality, girls will exhibit excessive reassurance seeking and boys will exhibit bullying behavior outside their romantic relationships.

Methods

Participants

The sample for this study was composed of 115 adolescents in tenth grade. The ethnic distribution within the sample was 48.8% Caucasian, 26.8% African-American, 18.9% Latinx American, and 5.5% other/mixed-ethnicity. The school was in a city where 67% of students were eligible for free or reduced-price lunch.

Procedures

The present sample was derived from a cohort already participating in a longitudinal study with a total of 868 participants. Parental consent was obtained through letters that were distributed to the students at the school. Of the 868 students who had participated in the first wave, 779 participated in the second wave, during which the current study was conducted. Factors responsible for attrition were moving away ($n=14$), attending a new school ($n=20$), withdrawal from the school ($n=18$), withdrawal from the study ($n=20$), and absence on the day of the study ($n=17$). Attrition analysis indicated that no significant differences between the students who remained in the study and those who did not. Of the 779 students participating in the survey, 129 reported on the quality of a current romantic relationship. Analyses revealed that students who reported on the quality of a current relationship were not significantly different than those who did not on any study constructs. Of the students who reported on the quality of a current romantic relationship, 14 were excluded due to incomplete data. Participants with incomplete data were not significantly different than those who were included on any study constructs.

Participants completed measures in their schools using computer-assisted personal interview technology. To ensure participants' privacy and allow for confidentiality, they were required to sit several rows apart from one another for the duration of the survey, and privacy screens were erected between each computer.

Measures

Relationship Quality. Romantic relationship quality was assessed through the Network of Relationships Inventory (NRI), which assesses relationship quality in adolescents (Furman, 1996). A composite measure for positive relationship quality was computed from the scores on subscales measuring admiration, affection, instrumental aid, companionship, intimacy, nurturance, reliable alliance, and support ($\alpha = 0.86$). A composite for negative romantic

relationship quality was computed from subscales measuring antagonism, conflict, criticism, dominance, and power ($\alpha = 0.61$).

Bullying Behavior. Sociometric nomination procedures measured peer-reported bullying. Participants were provided with the following definition of bullying: “A person or group regularly saying or doing mean things to others, where the situation obviously does not involve people of equal strength playing or teasing one another for fun.” On an alphabetized roster of their grade, the participants were asked to circle the names of the students who bullied others. The order of the roster was reversed for a random half of the participants in order to control for order effects. The raw number of nominations each student received was standardized among the grade, where high scores reflected more peer-reported bullying behavior. Sociometric nomination has strong psychometric support as a measure of social behavior among adolescents (French, Waas & Tarver-Behring, 1986).

Excessive Reassurance Seeking. Participants completed a 4-item version of the Reassurance-Seeking Scale (RSS; Joiner & Metalsky, 1995, 2001) adapted for use with children and adolescents (Joiner, Matlsky, Katz & Beach, 1999). One item on this scale is, “I often ask people if other people like me.” Endorsement of the items is measured on a 3-point Likert scale, ranging from *not at all true* to *extremely true*, where higher scores reflect more self-reported reassurance seeking ($\alpha = 0.72$).

Results

Preliminary Analyses

Means and standard deviations of positive and negative relationship quality by gender are presented in Table 1. Independent samples *t*-tests were conducted to determine whether the mean differences were significant, and differences were not discovered for girls’ and boys’ reports of

negative relationship quality ($t(127)=.046, p=.063$) or positive relationship quality ($t(127)=-.174, p=.862$). Independent samples t -tests were used to evaluate differences in the means of excessive reassurance-seeking and bullying by gender. Girls and boys were not significantly different from each other on excessive reassurance-seeking ($t(115)=-1.443, p=.152$) or bullying ($t(113)=-.141, p=.868$).

Pearson correlations were calculated to test for associations between study variables (see Table 1). The absence of a correlation between excessive reassurance-seeking and bullying behavior demonstrates that the criterion variables do not covary.

Hierarchical Regression Investigating Psychosocial Adjustment

Multiple regression analyses were conducted to evaluate associations between the domains of romantic relationship quality and two measures of psychosocial adjustment, bullying and excessive reassurance-seeking. Two models were used to predict bullying behavior and excessive reassurance-seeking, respectively. In both cases, main effects for gender, positive relationship qualities, and negative relationship qualities were included in a first step, and interaction terms between gender and both domains of relationship quality were added in a second step. A sample equation is provided below:

Step 1:

$$\textit{bullying} = C + B_1\textit{gender} + B_2\textit{negative qualities} + B_3\textit{positive qualities}$$

Step 2:

$$\begin{aligned} \textit{bullying} = C + B_1\textit{gender} + B_2\textit{negative qualities} + B_3\textit{positive qualities} \\ + B_4\textit{gender} \times \textit{positive qualities} + B_5\textit{gender} \times \textit{negative qualities} \end{aligned}$$

Bullying. The first step indicated that higher levels of negative friendship qualities were associated with higher levels of peer-reported bullying behavior. The step including the interaction terms was not significant (see Table 2).

Excessive Reassurance Seeking. The first step of the model investigating associations with excessive reassurance-seeking revealed that gender and positive friendship qualities were significantly associated with excessive reassurance-seeking. Being female and lower levels of positive friendship quality were related to more self-reported excessive reassurance-seeking. The second step revealed a significant interaction between gender and positive friendship qualities (see Table 3). Post hoc probing was conducted according to the guidelines described by Preacher, Curran, and Bauer (2006). First, the regression was reduced to include only the significant predictors in order to avoid possible multicollinearity of related constructs. Second, the variables were centered and slope estimates were calculated. Third, these slopes were evaluated for significance at the two available levels of the moderator variable (girl and boy). The results of this probe revealed that the slope for excessive reassurance-seeking and friendship quality was significant for girls, such that low levels of positive friendship quality were associated with high levels of excessive reassurance-seeking. For boys, the slope was not significantly different from zero (see Figure 1).

Discussion

The present study provides evidence that in mid-adolescence, the absence of positive qualities in a romantic relationship is associated with higher levels of self-reported excessive reassurance seeking for girls only, and the presence of negative qualities in a romantic relationship is associated with higher levels of peer-reported bullying for boys and girls. These results support the anticipated patterns of girls' and boys' behavior while participating in a

romantic relationship of poor quality, and showed that girls demonstrate a pattern that we expected to be unique to boys.

We found that girls are more likely to engage in excessive reassurance-seeking in their social relationships while they participate in a romantic relationship marked by low levels of positive relationship qualities. Since no causal inferences can be made at present, a consideration of the possible mechanism underlying this association is purely speculative in nature. There are numerous possible explanations for the association. One possibility is that girls who enter romantic relationships carry certain expectations about levels of warmth and companionship that they desire to experience with their partners. If the relationship fails to exhibit those qualities, some girls could begin to wonder whether they are liked as much as they thought they were. In order to soothe this discomfort, some turn to other social contexts to request feedback about their desirability. Because positive feedback from a friend momentarily alleviates the distress, excessive reassurance-seeking becomes a possible maladaptive pattern for responding to a situation in which a girl's romantic relationship does not contain the levels of warmth that she had hoped it would.

Alternatively, girls who already tend to request feedback from their peers in an excessive manner might do the same thing in a romantic relationship. In a pattern similar to the one noted by what Paprocki and Baucom (2017) called "relationship anxiety," some girls' continual requests to their partners for assurance about their desirability could in fact make them appear less desirable in their romantic relationship, and warmth in the relationship is stifled.

Finally, some girls could carry a general disposition towards relationships that renders them unable to develop intimacy or to trust that the relationship is truly desired by the other person. This could lead to simultaneous experiences of romantic relationships that lack warm

companionship and a tendency to excessively seek reassurance from peers about their desirability.

The observed pattern of maladaptive interpersonal behavior for girls was related to their perception of the absence of positive qualities in their romantic relationship. This finding is consistent with those of Galliher and colleagues (2004), who found the absence of positive relationship qualities to be salient in girls' ratings of global relationship function (alongside the presence of negative qualities). The pattern that the two domains of relationship functioning predicted separate maladjustment outcomes (the presence of negatives was associated with bullying and the absence of positives predicted reassurance-seeking) suggests that specific types of maladaptive behaviors may go along with the specific form of relationship distress being experienced. In this instance, the absence of desired positive relationship components was associated with a behavior, albeit maladaptive, that sought to increase the presence of positive interpersonal experiences.

The finding that the association between the absence of positive qualities and excessive reassurance-seeking was only present for girls does not indicate that there is no maladaptive behavior associated with low levels of this domain of relationship quality for boys. The absence of positive relationship qualities for boys could still be salient, as demonstrated by Galliher et al. (2004), but the current investigation might not have included the relevant social behavior for boys.

For boys, there was a strong association between the negative domain of relationship quality and bullying peers. This result, alongside the finding that boys were not likely to engage in excessive reassurance-seeking under any of the possible circumstances associated with the quality of their romantic relationships, is in line with the theoretical framework that males are

more likely to respond to distress with aggressive than affiliative behaviors. Once again, there is no basis for inferring the directionality of the association between bullying and negative romantic relationship factors. A highly conflictual relationship could promote one's tendency to be aggressive towards others, or a boy who already bullies may bring similar aggressive behaviors into his romantic relationship, or an external factor could influence a general disposition towards aggression in both peer and romantic contexts.

The pattern of the association between relationship quality and psychosocial adjustment for boys was the reverse of the hypothesized association; the presence of negative qualities predicted their adjustment measure, rather than the absence of positive. One important consideration in interpreting these findings is that the outcome being measured was the presence of a negative interpersonal process, bullying. As such, the result of the current study is theoretically and empirically consistent with adult romantic relationships, in which negative behaviors often promote additional negative behaviors in other contexts (Epstein & Baucom, 2002). Additionally, other than the findings by Galliher et al., there have been no reported studies in the adolescent or adult romantic literature in which the absence of positive relationship behavior predicted the presence of negative behavior; thus, their original finding could be an anomaly, and further investigation is needed to ferret out these discrepancies.

The association between negative relationship qualities and bullying was not limited to boys. Instead, both girls and boys exhibited the same association. This finding affirms that withdrawal-and-aggression is not merely the domain of males, even while tend-and-befriend behaviors are expressed predominantly by females. The finding that the presence of strong negative relationship factors is associated with other negative behaviors, irrespective of gender, demonstrates the forceful nature with which negative relationship processes can pervade various

components of an individual's social context. The tendency to carry negative experiences from one context into another is conceptualized as "emotional contagion" (Hatfield, Cacioppo & Rapson, 1994; Falconier et al., 2015). This process accounts for the way that an unpleasant interaction with one's supervisor at work could incite a harsh word to a spouse or child upon returning home from the office. The evidence that – regardless of directionality – negative experiences in a romantic relationship go along with a tendency to express aggression in other social contexts for both genders, affirms that contagion with the presence of negatives in social relationships is a phenomenon for both males and females.

Another way to interpret this finding is to consider the relative ways in which one partner's behaviors can influence the subsequent behaviors of the other partner. There is evidence that "negative reciprocity" is a strong phenomenon in close relationships (Mathes, 2015), and it is perhaps much stronger than "positive reciprocity" (Gottman, 1998). This means that responding to a negative with a negative (*e.g.*, responding to an accusation with a contemptuous dismissal), is more likely than responding to a positive with another positive (*e.g.*, responding to an empathic comment by demonstrating interest in the other partner's perspective). Overcoming the phenomenon of negative reciprocity is a demanding task that requires a strong ability to inhibit the impulse to retaliate to a partner's negative display. Since mid-adolescents' behavioral inhibition processes are underdeveloped compared to the adult subjects on whom the reciprocity literature has focused (Blakemore, & Choudhury, 2006), both the male and female participants in this study could be even more likely to demonstrate the phenomenon of negative reciprocity. Therefore, the result that negative romantic relationship processes demonstrated a salient relationship with aggression in other social contexts, irrespective of gender, is consistent with the literature on these relationship processes.

A noteworthy methodological consideration is the strength of the association of negative relationship processes across different reporters. Whereas the presence of negative romantic relationship factors was measured via self-report, participants' propensity to engage in bullying behavior was reported about them by their peers. With the goal of measuring associations between adjustment within romantic relationships and broader psychosocial functioning in other contexts, this cross-reporter association on negative behaviors increases the robustness of the current study.

Given the correlational nature of the data being presented, a notable limitation of the findings is the inability to elucidate a clear mechanism describing the pathways through which these constructs relate to one another. Additionally, while the measure for girls' psychosocial adjustment related their functioning within their romantic relationship to their broader social context, both measures were collected via self-report. Common method variance is a valuable factor to consider in interpreting the results. Finally, the model predicting excessive reassurance-seeking showed the interaction term to be significant to an alpha level of .07, and therefore it was not significant to the .05-level. The use of an alpha level that is slightly higher than convention warrants caution in interpreting the results.

Despite the above limitations, the current study presents evidence that girls and boys behave differently in the context of a romantic relationship that is marked by low levels of positive relationship quality. The literature on excessive reassurance-seeking makes it clear that while this behavior drives social affiliates away from the individual, it also puts her at risk of experiencing further psychological difficulty (Prinstein, Borelli, Cheah, Simon, & Aikins, 2005). A longitudinal follow-up of this study could serve the two-fold purpose of elucidating the

directionality of the phenomenon and exploring whether boys exhibit a separate maladaptive patterns in the context of a romantic relationship lacking positive qualities.

Additionally, given the aforementioned limitations of this study, clinical implications are not clearly available as direct applications of these findings. They provide a basis for further investigation regarding the extent to which enhancing adolescents' romantic relationship skills might contribute to greater psychological adjustment, which has been successful with adults (Epstein & Baucom, 2002), but further study is necessary before it would be prudent to develop an intervention around these phenomena.

Overall, the present findings point towards further consideration of romantic relationships as highly salient in the lives of adolescents. As the avenue through which many individuals express romantic desires for the first time, clear understandings of the patterns of adjustment associated with romance in adolescence and early adulthood can inform the adult literature on potential links to long-term trajectories of maladjustment in interpersonal relationships and psychological functioning.

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Table 1. Correlations, means, and standard deviations of model variables

Measure	1	2	3	4
1. Positive Friendship Quality	-	-.057	.014	-.019
2. Negative Friendship Quality	.046	-	.233	.503**
3. Excessive Reassurance-Seeking	-.234	.122	-	-.025
4. Bullying Behavior	.157	.139	-.061	-
Mean (<i>SD</i>)	3.99 (.720)	1.707 (.773)	1.124 (.326)	.009 (.857)

Note: boys on right side of diagonal; girls on left side of diagonal; means are for full sample

* $p < .05$; ** $p < .01$.

Table 2. Hierarchical regression for the prediction of peer-reported bullying behavior.

Predictors	Step Statistics			Final Statistics	
	ΔR^2	b (se b)	β	b (se b)	β
Step 1, Main effects	.081*				
Gender		.012 (.150)	-.0007	-.458 (.886)	-.265
Negative Relationship Quality		.292 (.094)	.269**	.395 (.131)	.364**
Positive Relationship Quality		.110 (.106)	.090	.007 (.151)	.006
Step 2, Two-way interactions	.018*				
Gender x Positive Relationship Quality				.214 (.211)	.492
Gender x Negative Relationship Quality				-.219 (.188)	-.258
Total R^2	.179**				

* $p < .05$; ** $p < .001$.

Table 3. Hierarchical regression for the prediction of self-reported excessive reassurance-seeking.
Excessive Reassurance-Seeking

Predictors	Step Statistics			Final Statistics	
	ΔR^2	b (se b)	β	b (se b)	β
Step 1, Main effects	.062*				
Gender		.096 (.058)	.144	.652 (.345)	.978
Negative Relationship Quality		.060 (.037)	.143	.055 (.051)	.131
Positive Relationship Quality		-.070 (.041)	-.146	.008 (.059)	.016
Step 2, Two-way interactions	.026*				
Gender x Positive Relationship Quality				.018 (.073)	.054
Gender x Negative Relationship Quality				-.152 (.082)	-.911
Total R^2	.088**				

* $p < .05$; ** $p < .001$.

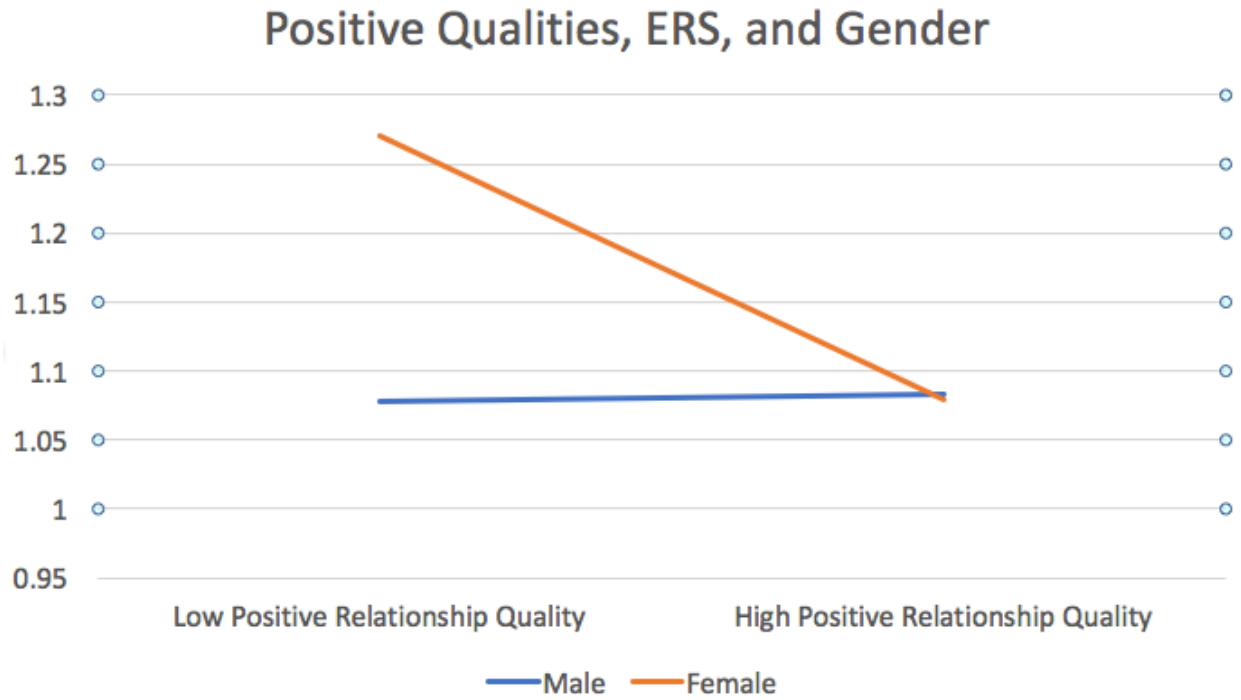


Figure 1. Excessive reassurance seeking by positive relationship qualities and gender. This figure illustrates the interaction between positive relationship qualities and gender in the model predicting excessive reassurance seeking. (ERS = excessive reassurance-seeking)