Romantic Experiences and Depressive Symptoms: Testing the Intensifying Roles of Rejection Sensitivity and Relationship Commitment

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Abstract

Longitudinal associations between couple relationship satisfaction and dissolution, rejection sensitivity, and depression were investigated using structural equation modeling. Rejection sensitivity and relationship commitment were expected to exacerbate or attenuate some model paths. Participants were aged 17 to 21 (N = 179) in couple relationships. Relationship dissolution was less likely among those who were more satisfied and had lengthier relationships. A greater chance of dissolution was also associated with rejection sensitivity among those high in commitment but not among those who were low in commitment. With regards to predicting depression, rejection sensitivity, but not relationship factors, was directly associated with later depressive symptoms. When the current findings were integrated with previous research, it appears that negative relational thoughts and behaviours of high-rejection-sensitive persons were more likely to be activated and associated with mental health problems when personal relationship satisfaction or commitment was elevated.

The formation, maintenance and dissolution of close relationships can result in negative affect, sleeplessness and many other symptoms of depression (Monroe, Rohde, Seeley, & Lewinsohn, 1999; Welsh, Grello, & Harper, 2003; Zimmer-Gembeck, Seibenbruner, & Collins, 2001; Zimmer-Gembeck & Gallaty, 2006). A first episode of clinical depression often occurs between 13 and 19 years of age and depression often becomes chronic or recurs during the emerging adulthood years (Lewinsohn, Clarke, Seeley, & Rohde, 1994). In the current study of late adolescents and emerging adults between 17 and 21 years of age (labeled 'late adolescents' for brevity), couple dissolution and relationship satisfaction were examined as correlates of depressive symptoms over time. Additionally, the roles of participants' sensitivity to rejection and commitment to the relationship were investigated.

Couple Relationships, Depression, and Individual Vulnerability to Rejection

Interpersonal rejection, particularly romantic rejection, is one of the most potent and distressing events humans can experience. Yet, individuals differ in how much they expect rejection and their anxiety about rejection (Feldman & Downey, 1994). The term *rejection sensitivity* has been used to describe "individuals who anxiously or angrily expect, readily perceive, and react intensely to rejection" (Feldman & Downey, p. 233). High-rejection-sensitive persons perceive ambiguous partner behaviour as more uncaring, are more hypervigilant for rejection, report lower relationship satisfaction and have shorter romantic relationships, and become more depressed when rejected (see Mort, 2006 for a review). In addition, there is evidence that high-rejection-sensitive persons generate their own stress by prompting negative interpersonal experiences and more rejection via their unpleasant behaviours. These emotions and behaviours can erode relationships and ultimately lead to dissolution and declining mental health (Downey, Bonica, & Rincon, 1999; Stackert & Bursik, 2003).

As well as having direct associations with relationship interactions and depression, rejection sensitivity may function as an individual vulnerability that increases mental health problems when faced with relationship difficulties. Multiple theorists identify individual difference variables, such as rejection sensitivity or the related constructs of heightened anxiety about abandonment and insecure attachment, as vulnerabilities that can increase the impact of stress on mental health (Hammen, 2003; Hazan & Shaver, 1987; Shirk, Gudmundsen, & Burwell, 2005). It is also likely that such interpersonal vulnerabilities interfere with accruing mental health benefits from positive relationships. Hence high rejection sensitivity may play a moderating role by exacerbating the association between interpersonal stress and mental health or attenuating the association between positive relationship experiences and mental health. In the current study, the expected positive association between romantic dissolution (i.e., stress) and depression was expected to be stronger among high-rejection-sensitive persons as compared to others. The expected negative association between romantic satisfaction and depression was expected to be weaker among high-rejection-sensitive persons as compared to others.

Bidirectional Associations: Depressive Symptoms and Relationships

In this study, depression was expected to be both a precursor and an outcome of relationship dissolution. This has repeatedly been acknowledged, but such birdirectional associations are less often empirically examined (Barnett & Gotlib, 1998; Coyne, 1976; Katz & Beach, 1997; Weinstock & Whisman, 2004). Depression can be a precursor of dissolution, because it is often accompanied by behaviours that erode relationship satisfaction. For example, marital distress has been found to be a consequence of depressive symptoms, as well as a vulnerability factor for depression (Heim & Snyder, 1991). Depressed people can be overly dependent on their partners and seek reassurance in ways that may distance their partners (Barnett & Gotlib, 1998, Van Orden & Joiner, 2006). In Coyne's (1976) Interactional Model of Depression, depressed individuals are described as having fewer positive interactions within their relationship and less satisfying relationships, which maintains or increases depressive symptom levels.

Relationship Commitment as a Moderator

Relationship commitment, defined as making a long-term investment in a relationship, varies greatly during late adolescence. Such commitment may overlap with, but is not redundant with relationship satisfaction (Fehr, 2003). For example, in Rusbult's (Rusbult & Buunk, 1993) relationship investment model, satisfaction is associated with commitment, but they are two separate model components. It is easy to imagine a young person who is highly satisfied with her couple relationship, but who does not anticipate the relationship to last an extended period of time or expect it to be a life-long partnership or marriage (Furman, Brown, & Feiring, 1999). The level of commitment is an important consideration when studying interpersonal relationships and depressive symptoms. For example, the association between relationship and mental health problems is more often supported when the focus is on committed relationships (i.e., marriage) rather than on dating relationships (Weinstock & Whisman, 2004).

Greater commitment implies more investment in the relationship. This includes personal commitments of dedication and stronger feelings for the other. Greater commitment is also likely to come with certain structures, such as more shared activities, shared friends and public displays of the relationship (Johnson, 1991). Relationship problems could have a more significant impact on mental health when commitment is high, because high personal investments are at risk and problems can change the structure of multiple social domains. This also implies more loss and arenas of perceived rejection, which could have more mental health implications for high-rejection-sensitive persons than others. As such, high commitment, as compared to low commitment, was expected to strengthen associations between relationship dissolution, rejection sensitivity and depression.

The Current Study

In summary, cross-lag, longitudinal associations between depressive symptoms, relationship dissolution and rejection sensitivity were tested and expected. Additionally, the influence of relationship satisfaction was considered, and rejection sensitivity and commitment were tested as moderators of associations in this model. Relationship length and participant gender were examined as these were anticipated to be important covariates.

Method

Participants

The 179 participants (52 males, 127 females) were in their first year of university, unmarried, and 21 years of age or less (M = 18.3 years, SD = 1.4). Following procedures used in previous research (e.g., Stackert and Bursik, 2003), all participants were in a steady couple relationship of at least 1-month duration. Assessments were completed at two times over a 6-month period and represented 66% of the original 271 participants at the time 1 (T1) assessment. Participants reported more satisfying relationships (t(271) = -4.4, p < .01) and were slightly less rejection sensitive (t(271) = 2.1, p = .04) than those who participated at T1 only. There was no other significant group differences in measured variables, all p > .40.

Overall, 82% of the 179 participants were white/Caucasian and 96% were Australian citizens. The average length of relationship at T1 was nearly 13 months. Of the 179 participants, 112 participants (63%) were in the same romantic relationship at both waves of assessment, whereas 67 participants (37%) had dissolved their relationship.

Measures

Measures at T1 and time 2 (T2) included the Beck Depression Inventory (α = .84 and .88, respectively; Beck, Ward, Mendelsohn, Mock, & Erbaugh, 1961), and the Rejection Sensitivity Questionnaire (α = .84 and .83, respectively; Downey & Feldman, 1996). To measure relationship satisfaction at T1, the Relationship Assessment Scale (Hendrick, 1988) was used (α = .88). To measure relationship commitment at T1, each participant answered two questions: "How would you rate your level of commitment to X?" with response options from 0 (no

commitment at all) to 2 (a lot of commitment), and "How likely do you think it will be that you will be with X for the rest of your life?" with response options from 0% to 100%. These two items were correlated, r = .63, p < .01.

At T2, participants were asked to report on the status of their T1 relationship. If dissolution was reported, participants reported who initiated the break-up and provided details about any new steady couple relationship. For analyses, relationship dissolution was coded 1, whereas a code of 0 was assigned if the relationship had not dissolved.

Procedure

Following human research ethics committee approval for the study, T1 participants completed the questionnaire in groups of about 20 after providing informed consent. The T2 assessment was completed by mail. On average, survey completion took 20 minutes.

Results

Gender Differences

Some gender differences were found. Hence, gender was accounted for in all models. On average, boys were more rejection sensitive than girls (t(178) = 3.02, p < .01) and a higher proportion of boys than girls experienced relationship dissolution (50% and 32%, respectively, $\chi 2 = 5.22$, p < .05). Girls were more satisfied with their relationships than boys (t(178) = -2.62, p < .05). Depression and commitment did not show a gender difference (p > .55 for both).

Primary Model

Hypotheses were tested by estimating cross-lag autoregressive path models. Maximum likelihood estimation available within AMOS software was used to fit these structural models. Model testing began by freeing all hypothesised paths and all within time covariances. Some nonsignificant paths were fixed to 0; those that were significant and retained are shown in Figure 1. This model provided a good fit to the data on all fit indices: $\chi^2(11, N = 176) = 15.47$, p = .16, CFI = .98, RMSEA = .048 (90% CI .000 to .099).

Other than the stability of rejection sensitivity and depressive symptoms, three of the eight hypothesised directional paths were significantly different from 0 (see Figure 1). These paths indicated that participants who reported longer relationships at T1 and more satisfaction with their relationships were less likely to report romantic dissolution at the T2 assessment: -.15 and -.47, p < .05 and p < .01, respectively. In addition, individuals relatively higher in rejection sensitivity showed greater increases in depressive symptoms over time: .20, p < .05.

Diathesis-Stress Model: Rejection Sensitivity as a Moderator

Our next two models examined whether associations between depressive symptoms, relationship dissolution, and relationship satisfaction were different among individuals high vs. low in rejection sensitivity. This began with testing a two-group model (high-rejection-sensitive, n = 56 and low-rejection-sensitive, n = 123) with all paths fixed to be equal between groups. The directional paths in the model were then freed to allow them to differ between groups, and the χ^2 -difference test was used to compared the fit of this model to the fit of the model with paths constrained to be equal between groups.

When all *directional* paths were freed to differ between the two rejection sensitive groups (except stabilities), this model had a good fit to the data: $\chi^2(16, N=176)=16.4$, p=.43, CFI = 1.00, RMSEA = .012 (90% CI .000 to .071). Yet, there was not a significantly better fit of this 2-group model when compared to a model with all paths fixed to be equal for the groups ($\chi^2(21, N=176)=24.3$, p=.28, CFI = .97, RMSEA = .030, 90% RMSEA CI .000 to .073): $\chi^2_{\text{difference}}$ (5) = 7.9, p>.05. Nevertheless, there was one path difference worth noting. Among high-rejection-sensitive participants there was a positive and significant association between T1 relationship satisfaction and T2 depressive symptoms: .25, p<.05, whereas this association was negative and not significant among lower-rejection-sensitive participants: -.13, p>.05. Hence, high-rejection-sensitive participants with *higher* levels of relationship satisfaction reported relatively *more* increases in depressive symptoms over time, but there was no association between relationship satisfaction and changes in depressive symptoms over time among lower-rejection-sensitive participants.

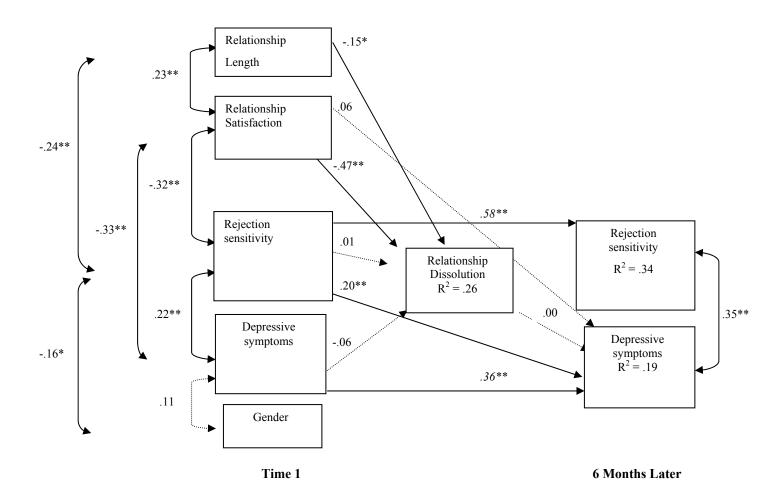


Figure 1. Standardised path coefficients for the hypothesised structural model (N = 176). $\chi^2(11, N = 176) = 15.47$, p = .16, CFI = .98, RMSEA = .048 (90% CI .000 to .099).

Commitment as a Moderator

Paralleling the analysis procedure that compared high vs. low rejection sensitivity groups, associations between depressive symptoms, relationship dissolution and relationship satisfaction were compared for those high vs. low in relationship commitment. Those in the *high commitment* group reported 'a lot of commitment' on the first item and reported a greater than 50% chance that the relationship was for life on the second item (n = 103, 57.5%). Those in the *low commitment* group reported 'low commitment or "some commitment' on the first item, reported a less than 50% chance of a lifetime relationship on the second item or both (n = 76, 42.5%).

When all *directional* paths were freed to differ between the two groups (except stabilities), this model had a very good fit to the data: $\chi^2(19, N = 176) = 15.0$, p = .72, CFI = 1.00, RMSEA = .005 (90% CI .000 to .050). The χ^2 -difference test showed that this 2-group model provided a significantly better fit than the 1-group model ($\chi^2(27, N = 176) = 34.9$, p = .14, CFI = .96, RMSEA = .041, 90% RMSEA CI .000 to .076): $\chi^2_{\text{difference}}(8) = 19.9$, p < .05. Path estimates for the two groups are shown in Figure 2.

Three directional paths accounted for the significantly better fit of the 2-group model. Relationship satisfaction was more strongly negatively associated with dissolution when commitment was low rather than high, and the association was only significant when commitment was low (see Figure 2). In addition, rejection sensitivity had a positive and significant effect on dissolution and T2 depressive symptom when commitment was high, but not when commitment was low.

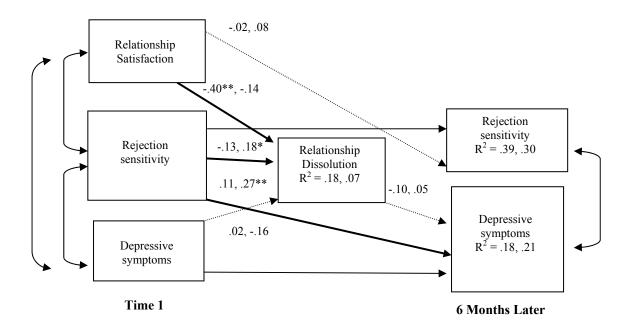


Figure 2. Standardised path coefficients for the 2-group model allowing directional paths to differ for participants classified as low versus high in commitment to the couple relationship.

Note. The first value on each path is the estimate for individuals low in relationship commitment (n = 76); the second value is the estimate for those high in commitment (n = 103). $\chi^2(20, N = 176) = 24.8$, p = .21, CFI = .97, RMSEA = .037 (90% CI .000 to .078). Model fit was significantly better when compared to a model with paths fixed to be equal between groups. Bolded paths are those that accounted for the better fit of the 2-group model. Gender and relationship length were included in the model, but are not shown here. See Figure 1 for concurrent correlations between measures.

Discussion

These findings show that individuals who are more satisfied with their couple relationships and who have maintained these relationships for a longer time are less likely to dissolve their unions. After relationship satisfaction and length of relationship were accounted for, however, there was mixed support for our expectation of rejection sensitivity as an antecedent of dissolution. There was a small bivariate correlation showing that participants higher in rejection sensitivity were at an increased risk of dissolution and one association was found after considering commitment as a moderator of model pathways. Nevertheless, in contrast to one previous study (Downey, Freitas, Michaelis, & Khouri, 1998), there was no association in the primary model between earlier rejection sensitivity and later dissolution after accounting for relationship satisfaction and length.

Past research has shown a link between low romantic relationship satisfaction, romantic rejection or dissolution and depressive symptoms (Monroe et al., 1999; Welsh et al., 2003). Concurrent associations were found between depressive symptoms and relationship satisfaction. However, when all late adolescents were considered as a single group and when accounting for earlier depressive symptoms, neither the degree to which adolescents were satisfied in their romantic relationships nor romantic dissolution was associated with later depressive symptoms.

Instead of romantic satisfaction and stress, it was rejection sensitivity that was most informative about late adolescents' depressive symptoms over time. Adolescents who are more sensitive to rejection are concerned about the possibility of rejection and also expect rejection more than others (Downey & Feldman, 1996). Rejection sensitivity itself captures a distinctive cognitive processing disposition that comes with some degree of personal distress. As such, individuals who are more sensitive to rejection were expected to have more depressive symptoms than those adolescents with less sensitivity to rejection. This was supported by the findings of this study. Late adolescents who were more sensitive to rejection had higher levels of self-reported depressive symptoms concurrently and had increasing depressive symptoms over time.

Other associations emerged when late adolescents' level of commitment to the relationship was considered. First, there was some evidence that rejection sensitivity is associated with later relationship dissolution, but only among late adolescents who expressed high commitment to their relationships. High-rejection-sensitive persons have been found to play a role in their own relationship problems (Downey et al., 1998). The current study findings support this conclusion, but show that this may be the case only when high-rejection-sensitive persons express high personal commitment to their relationships.

The association between rejection sensitivity and later depressive symptoms also was stronger for participants who reported more commitment to the relationship at the first wave of measurement than for those who reported less commitment. Although all individuals who are high in rejection sensitivity generally have elevated concerns and anxiety about rejection when compared to others (Downey & Feldman, 1996), feeling highly committed to another may activate even more than the typical levels of rumination and concern about rejection, generating even more stress in the form of rejection, culminating in relationship problems and increasing depressive symptoms.

Finally, depression was expected to be a driver of relationship dissolution. Our analyses did show that participants who reported more depressive symptoms were also concurrently lower in relationship satisfaction and higher in rejection sensitivity. Yet, there was little evidence of an association between earlier depressive symptoms and relationship dissolution, regardless of how the data were segmented. In summary, there was little evidence that depressive symptoms generated relationship problems. Instead individuals high in rejection sensitivity seem to generate their own relationship and mental health problems, especially and maybe only when they assert high levels of personal commitment to their couple relationships.

There are a number of limitations to consider when interpreting this study. First, only Australian university students with steady partners were included. Research has shown that high-rejection-sensitive persons and individuals with high levels of depressive symptoms may avoid or not be involved in romantic relationships (e.g., see Torquati & Vazsonyi, 1999). Therefore, the study participants might have had a more limited range of sensitivity and depression than would be found in a general sample of students or community members. Second, multiple sources of social support were not considered. Participants may have had varying levels of social support from family or friends that helped them adjust to relationship dissolution (Kincaid & Caldwell, 1991); support from family and friends have been found to be significant correlates of late adolescents' mental health (Zimmer-Gembeck & Gallaty, 2006). Third, two items were used to measure commitment and these had not been validated in previous research. Using a validated measure will be important in future research. Finally, the time lag between assessments was about six months, which may be too short for depressive symptoms to substantially change.

To conclude, romantic relationships and individual perceptions of relationships and social competencies are critical developmental advances made in adolescence and emerging adulthood. Continuing research on these topics is likely to lead to best practices in interventions designed to assist individuals to compensate for or modify their individual vulnerabilities, such as rejection sensitivity. The end goals of such research are happier young people and good relationships.

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