Insecure attachment and depressive symptoms: The mediating role of rumination, empathy, and forgiveness

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1. Introduction

Research generally points to the benefits of replacing anger with forgiveness for individuals, relationships, and societies. For example, forgiveness promotes harmony, trust, and reconciliation and improved mental well-being and physical health (e.g., Toussaint & Webb, 2005; Worthington & Scherer, 2004). Despite benefits, evolutionary perspectives suggest that people are predisposed to respond with vengeance. However, after initial unforgiving motivations are evoked, forgiveness can be reached if the victim values the relationship, cares about the offender, and feels secure in the relationship (McCullough, 2008). When is this transformation of motivation more attainable? This study maintains that differences in motivation to forgive are representative of differences in relationship orientation. More specifically, we integrate attachment theory with an evolutionary theory of forgiveness to explore if excessive rumination and an inability to empathize help explain the links between insecure attachment and reduced forgiveness found in previous research (Burnette, Taylor, Worthington, & Forry, 2007). Specifically, we focus on forgiveness, or the dispositional tendency to be more or less forgiving across time, people and situations (Roberts, 1995). We also extend past work by examining the mental health ramifications (i.e., depressive symptoms) of insecurely attached individuals’ responses to offenses.

1.1. Attachment theory

Attachment research initially focused on how children experience a sense of security in relationships with their primary caregivers. Bowlby (1969/1982) contended that human beings are born with an innate but adaptable motivational system selectively designed to promote safety by inducing a need to seek proximity to attachment figures, especially in response to threat. The theory has been extended to relationships throughout the lifespan (Hazan & Shaver, 1987). Across this work, most researchers agree that the attachment system varies along two distinct dimensions of anxiety and avoidance (e.g., Simpson, Rholes, & Phillips, 1996).

Relational conflicts, such as interpersonal offenses, activate the attachment system. In times of relationship threat, according to Fraley and Shaver (2000), the avoidance dimension should influence the strategies individuals use to regulate their attachment needs, whereas the anxiety dimension should predict affective processes. Consequently, these two components of the attachment system manifest themselves differently in social interactions. Individuals high in avoidance expect others to act in an uncaring and rejecting manner, and often respond to conflict with blame, aloofness, and withdrawal (e.g., Pietromonaco, Greenwood, & Barrett, 2004). In contrast, individuals low in avoidance anticipate that others will be responsive to their needs, and therefore are more likely to respond with communication, compassion, and support-seeking. Highly anxious individuals exaggerate potential negative consequences of conflict, and tend to respond with anger,
hurt, and excessive rumination as opposed to the more emotion-ally regulated responses typical of individuals low in attachment anxiety (Simpson et al., 1996).

1.2. Attachment, rumination, empathy, and forgiveness

Drawing from attachment theory research, we suggest that these general patterns of conflict management also will be revealed in the forgiveness process. Scholars suggest that forgiveness is a motivational transformation that inhibits relationship-destructive responses and instead promotes positive behaviors, thoughts, and feelings toward the offender (e.g., Worthington, 2005). A plethora of research has shown that attachment anxiety and avoidance can hinder this transformation process (Burnette et al., 2007; Finkel, Burnette, & Scissors, 2007; Kachadourian, Fincham, & Davila, 2005; Lawler-Row, Younger, Piferi, & Jones, 2006; Mikulincer, Shaver, & Slav, 2006). However, it is not yet clear what the mediating mechanisms are in the link between insecure attachment and reduced forgiveness. Based on attachment theorizing (e.g., Fraley & Shaver, 2000) and past forgiveness research, we examine rumination and empathy as potential mediators.

When experiencing an attachment threat (e.g., a transgression), anxiously attached individuals have difficult regulating their emotions. They become preoccupied with uncertainty about whether they are cared for, tend to amplify the negative consequences of relationship difficulties, and often ruminate excessively (Campbell, Simpson, Boldry, & Kashy, 2005). Building on this research and work linking excessive rumination to reduced state and dispositional forgiveness (e.g., Barber, Maltby, & Macaskill, 2005; Brown & Phillips, 2005; Burnette et al., 2007; Kachadourian et al., 2005; McCullough et al., 1998; Paleri, Regalia, & Fincham, 2005), we hypothesize that anxiously attached individuals’ lack of forgiveness is mediated by rumination. In contrast, when avoidant individuals experience an attachment threat, they seek psychological and even physical distance, downplay or devalue the worth of the relationship, and derogate the offender (Mikulincer & Shaver, 2005). In times of threat, these strategies have been shown to impede helping behavior (e.g., Wayment, 2006) and emotional identification with others (e.g., Pietromonaco et al., 2004). These social support processes are hindered, in part, by the inability to empathize with others (Weinfield, Sroufe, Egeland, & Carlson, 1999) and this lack of empathy has, in turn, been linked to reduced forgiveness, (e.g., Berry, 1998; Paleri, Regalia, & Fincham, 2005). Thus, for individuals high in avoidance, we hypothesize that empathy mediates the attachment-forgiveness link.

1.3. Attachment, forgiveness processes, and depression

We also examine the mental health ramifications (i.e., depressive symptoms) of insecurely attached individuals’ responses to offenses. Considerable attention has been given to the role of interpersonal processes in the insecure attachment–depression link (e.g., Roberts, Kassel, & Gottlib, 1996; Simpson & Rhodes, 2004). For example, research has revealed that insecurely attached individuals’ inability to harness social support contributes to negative health outcomes (e.g., Besser & Priel, 2008). Similarly, we suggest that insecurely attached individuals’ responses to interpersonal offenses will contribute to depressive symptoms. Lack of empathy is an aspect of the forgiveness process that has been linked to reduced well-being including more depressive symptoms (e.g., Lee, Brennan, & Daly, 2001) and excessive rumination also has negative mental health consequences (Thomsen, 2006). Additionally, a great deal of research supports the link between unforgiving motivations and reduced life satisfaction, psychosomatic symptoms and depression (e.g., Bono et al., 2008; Lawler-Row & Piferi, 2006; Orth, Berking, Walker, Meier, & Znoj, 2008). Building on this work, we propose an overall process model that examines the links between interpersonal (e.g., forgiveness and empathy) and intra-personal responses (e.g., rumination) to offenses and depressive symptoms for insecurely attached individuals (see Fig. 1).

2. Method

2.1. Participants and procedure

We recruited 221 undergraduate students (141 women) to participate (4.6% African American, 0.9% Asian American, 87.2% Caucasian, 4.1% Hispanic, and 3.2% other). All participants reported being involved in a romantic relationship for at least two months (M = 19.30 months; SD = 15.85). Most indicated their relationship status as dating steadily (2.3% friendship, 10.5% dating casually, 79.5% dating steadily, 4.5% engaged, 0.9% married, and 1.8% other). Participants completed a battery of assessments (see Table 1).

2.1.1. Attachment

We used the 36-item Experiences in Close Relationships-Revised (ECR-R) to assess attachment anxiety and avoidance (Fraley, Waller, & Brennan, 2000). The measure consists of two subscales, Anxiety (e.g., “I worry about being abandoned”) and Avoidance (e.g., “Just when my partner starts to get close, I find myself pulling away”). Responses are assessed on a 7-point scale, with scores ranging from 1 = strongly disagree to 7 = strongly agree.

2.1.2. Forgivingness

We used the Trait Forgiveness Scale (TFS; Berry et al., 2005), a 10-item measure of forgivingness (e.g., “I can usually forgive and forget an insult,” “I am a forgiving person”), with endpoints 1 = strongly disagree and 5 = strongly agree. Five studies adduced evidence for validity and reliability (Berry, et al., 2005).

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Table 1

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* p < .05.
2.1.3. Rumination

We used six items (e.g., “Long after an argument or disagreement is over with, my thoughts keep going back to what happened”) from the Rumination-Reflection Questionnaire (RRQ; Trapnell & Campbell, 1999) to assess rumination. Responses ranged from 1 = strongly disagree to 7 = strongly agree.

2.1.4. Empathy

We used the Empathic Concern subscale of the Interpersonal Reactivity Index (IRI) (e.g., “I often have tender, concerned feelings for people less fortunate than me”) to assess dispositional empathy (Davis, 1983). Responses ranged from 1 = does not describe me well to 5 = describes me very well.

2.1.5. Depressive symptoms

We used the Center for Epidemiologic Studies Depression Scale (CES-D) (Radloff, 1977) to assess depressive symptoms (e.g., “I was bothered by things that don’t usually bother me,” “I felt that everything I did was an effort”). Responses ranged from 1 = rarely or none of the time to less than 1 day to 4 = most or all of the time to 5–7 days.

3. Results

3.1. Analysis strategy

We employed structural equation modeling with maximum likelihood (ML) in LISREL 8.72 (Joreskog & Sorbom, 2005) to test our proposed model. Based on recent recommendations (Little, Cunningham, Shahar, & Widaman, 2002; Williams & O’Boyle, 2008), we chose to parcel because our primary interest was in the overall structural model, not in understanding the exact relations among individual items and measured variables (see Table 1 for descriptive information on scales). Additionally, using parcels has advantages, including higher reliability (Kishton & Widaman, 1994), a reduction in the number of measured variables in the model (Cooffman & MacCallum, 2005) and a greater likelihood of meeting the assumptions of maximum likelihood, including normality (West, Finch, & Curran, 1995). Among the options available, the internal consistency approach is a common parceling strategy when scales are unidimensional; this approach assures that the parcels are equally powerful indicators (Williams & O’Boyle, 2008). Based on the recommended strategy for the internal consistency approach (Little et al., 2002), we used exploratory factor analysis results to alternately assign items to one of three parcels for each unidimensional latent construct (i.e., anxiety, avoidance, rumination, empathy, and forgivingness). For multifaceted scales (i.e., depression), we used the domain representative approach in which the indicators for each parcel are created such that each includes a random combination of items from the multiple facets associated with the assessment. Creating parcels in this way results in indicators that include the broad latent variable.1

In line with recommendations from Anderson and Gerbing (1988), we first estimated the fit of the measurement model before examining the overall structural model. We incorporated four goodness of fit indices to evaluate model fit: the Chi-square test, the Comparative Fit Index (CFI), the Root Mean Square Error of Approximation (RMSEA), and the Standardized Root Mean Square Residual (SRMR). A CFI above .95 and an RMSEA and a SRMR between .05 and .08 suggest good fit (Hu & Bentler, 1999; Millsap, 2002). For the measurement model, we found adequate fit, \( \chi^2 (120) = 173.24 \), CFI = .98, RMSEA = .04, and SRMR = .05. After confirming the fit of the measurement model, we conducted chi-square difference tests to compare competing structural models.

3.1.1. Results

Model 1 had direct and indirect paths from anxious attachment to forgivingness (indirect path through rumination) and depressive symptoms. It also had direct and indirect paths from avoidance attachment to forgivingness (indirect path through dispositional empathy) and depressive symptoms. Model 1 revealed adequate fit, \( \chi^2 (121) = 199.67, p < .001 \). However, the Chi-square test is sensitive to sample size and does not necessarily reflect fit. Three additional fit indices suggested adequate fit, CFI = .98, RMSEA = .06, and SRMR = .06.

We next conducted several nested model comparisons. We removed the two non-significant direct paths from avoidance to forgivingness and depression in Model 2 (see Fig. 1). Constraining these paths to be zero caused no degradation in fit, \( \chi^2 (2) = 2.13, p > .10 \). Thus, we retained Model 2 as the more parsimonious model. We examined the effect of removing the direct path between anxious attachment and depression in Model 3. Model fit worsened significantly, \( \chi^2 (1) = 17.36, p < .001 \). We also examined the effect of removing the direct path from anxious attachment to forgivingness in Model 4. Once again, model fit worsened significantly, \( \chi^2 (1) = 7.03, p < .01 \).

Thus, Model 2 appears to exhibit superior fit, \( \chi^2 (123) = 201.80, p < .001 \), CFI = .98, RMSEA = .06, and SRMR = .07. This overall process model suggests that the effect of avoidant attachment on forgivingness is fully mediated by empathy and that the effect of avoidant attachment on depression is fully mediated by empathy and forgivingness. For anxious attachment, the link to forgivingness is partially mediated by rumination and the link to depression is partially mediated by rumination and forgivingness.

4. Discussion

This work reveals the relevance of attachment orientations in predicting forgivingness and depressive symptoms. Results confirmed the assertion that the link between insecure attachment and reduced forgivingness is largely mediated by excessive rumination for individuals high in attachment anxiety, but is mediated by an inability to emphasize for individuals high in avoidance. This pattern of results is consistent with previous attachment theorizing as well as with McCullough's (2008) evolutionary approach suggesting that forgiveness is more likely if a relationship is valued, if an offender is deemed worthy of care, and if the victim feels relatedely safe. Victims high in attachment avoidance are particularly likely to struggle to forgive because they lack empathy and derogate the offender (perceiving him or her to be less worthy of care). People high in attachment anxiety struggle to forgive because they engage in rumination that is often fearful in nature (the relationship is perceived to be less safe).

We also examined the health implications (i.e., depressive symptoms) of insecurely attached individuals’ responses to offenses. We found that lack of forgivingness partially mediated the relation between anxious attachment and depressive symptoms and fully mediated the relation between avoidant attachment and depressive symptoms. We also found that rumination and lack of empathy contributed to depressive symptoms. These findings support the assertion that positive social interactions and effective relationship maintenance strategies such as the expression of empathy and forgiveness are important for well-being (e.g., Dush & Amato, 2005). Additionally, this initial research into the forgiveness process for insecurely attached individuals and the subsequent relation to depressive symptoms paves the way for future research. For example, building on Fraley and Shaver’s (2000)...
theoretical proposition that the anxiety dimension predicts affective responses, whereas the avoidance dimension predicts cognitive strategies, researchers could examine if anxious attachment is related to differences in affect regulation with greater fear, hurt and anger, contributing to an inability to reach forgiveness (Mikulincer & Shaver, 2005). Likewise, future studies could test the prediction that greater attachment avoidance is associated with unkind attributions and mistrust. These different emotional and cognitive responses, in turn, may reveal links to depressive symptoms and could have relevant implications for forgiveness-promoting interventions.

Furthermore, the relations between attachment, forgiveness, and depressive symptoms might lie within basic personality structures. Attachment orientation is related to agreeableness, neuroticism and extraversion (see Shaver & Brennan, 1992) and these traits predict forgiveness and depression (e.g., Brose, Rye, Lutzius, & Ross, 2005; Maltby, Macaskill, & Day, 2001; van den Berg & Pitaru, 2005). For example, the angry hostility facet of neuroticism (which correlates with attachment anxiety) predicts unforgiving motivations two and a half years after an offense (Maltby et al., 2008). Recent research has also begun to explore how the HEXACO model of personality differs from the Big Five in predicting trait forgiveness (Shepherd & Belicki, 2008). Additionally, a plethora of research supports the proposition that personality traits have important implications for relationship functioning (e.g., Aspin, Roberts, & Shiner, 2005; Roberts, Kuncel, Shiner, Caspi, & Goldberg, 2007). Thus, future work should examine an overall process model of the relations between stable personality traits, attachment, forgiveness, and depression.

4.1. Limitations and future directions

Because this study incorporated university students in the United States, the question arises as to whether the processes identified herein extend to other populations, such as older adults or members of varying cultural backgrounds. For example, dependency needs of older adults differ as a function of attachment and thus may differentially influence the forgiveness process (Besser & Priel, 2008). Additionally, researchers have found that forgiveness tends to be higher in collectivistic relative to individualistic cultures. A member of a collectivistic culture may be more sensitive to the relational context surrounding an offense than someone from an individualistic culture (e.g., Suwarton, Prawasti, & Mullet, 2007). Thus, the model validated in this study also should be tested in populations with more diverse age groups and cultural backgrounds.

This research employed self-reported forgiveness not linked to specific offenses. Tsang, McCullough, and Hoyt (2005) measured forgiveness by aggregating ratings of six actual offenses. By grounding participants' responses in actual offenses, the effect of socially desirable responding may be diminished. Similarly, although observers may be relatively poor at judging whether a person has forgiven a specific offense, they may be more accurate at rating the overall forgiveness of someone they know well. Thus, our initial findings could be bolstered by future studies employing methods that use informed observers to triangulate a person's level of forgiveness.

Although past research has shown that insecure attachment can cause differences in forgiveness of individual transgressions (Finkel et al., 2007), we are unable to draw causal conclusions about the relations in the model with this research design. Future research employing experimental methods and longitudinal designs is necessary to address the direction of the proposed associations especially in light of studies demonstrating that the link between forgiveness and adjustment is bidirectional. For example, a study of interpersonal transgressions found that psychological adjustement facilitated forgiveness (Orth et al., 2008). Research suggests that forgiveness predicts well-being, but there is also evidence supporting the reverse causal model in which increases in well-being predicted increases in forgiveness (Bono et al., 2008). Additional research has demonstrated that rumination can act as a mediator between forgiveness and psychological health (Ysselsteyn, Matheson, & Anisman, 2007) and that avoidance of ruminative thoughts can facilitate forgiveness (Wortman & Wade, 1999). In consideration of these studies showing bidirectional relations among forgiveness, rumination, and well-being, a logical next step is to conduct research that permits stronger causal inferences.

We believe that our empirically supported model makes a contribution to the literature by integrating McCullough's (2008) evolutionary perspective with attachment theory to examine the forgiveness process. Moreover, this study is the first, to our knowledge, to reveal the role that insecurely attached individuals' dispositional responses to offenses (e.g., empathy and forgiveness) play in the link between attachment and depressive symptoms. Continuing to study the forgiveness process through personality and developmental perspectives such as attachment theory could have relevant implications for improved relationship functioning as well as personal well-being.

References
