Romantic attachment, unforgiveness and relationship satisfaction in couples: A dyadic mediation analysis

Mónica Guzmán-González[1], Paula Contreras[1], and Giulia Casu[2]

[1] Universidad Católica del Norte, Chile

[2] University of Bologna, Italy

Corresponding author:

Mónica Guzmán-González, School of Psychology, Universidad Católica del Norte, Avenida Angamos 0610, Antofagasta, Chile. Email: moguzman@ucn.cl

Abstract

Adult romantic attachment is strongly associated with couple relationship functioning, and many efforts have been made to identify the mechanisms underlying this link. Nevertheless, no previous study considered unforgiveness when investigating the relationship of romantic attachment with relationship satisfaction in couples. We used the actor–partner interdependence mediation model to explore the associations between romantic attachment and relationship satisfaction as mediated by unforgiveness (i.e., avoidance and revenge motivations) in a convenience sample of 104 Chilean couples. The couples completed self-report measures of romantic attachment, unforgiveness, and relationship satisfaction. Actor insecure attachment was associated with lower relationship satisfaction directly and indirectly. Indirectly, higher actor levels of attachment anxiety and avoidance were linked, respectively, to greater revenge and avoidance motivations, and thus to lower relationship satisfaction. Partner attachment avoidance was associated with lower relationship satisfaction only directly. Higher partner levels of attachment anxiety were associated with

lower avoidance motivation, and thus with higher relationship satisfaction. These dyadic findings further attest to the detrimental role of attachment avoidance and unforgiveness against the couple's functioning. The novel finding that attachment anxiety may indirectly promote a couple's relationship satisfaction deserves further investigation. The implications for couple counseling and therapy are discussed.

Relationship satisfaction, defined as an individual's subjective evaluation of the positive emotions experienced within the couple (Li & Chan, 2012), is one of the most explored areas in family research. The enduring interest in relationship satisfaction is based on consistent evidence that satisfaction with one's romantic relationship is strongly associated with several mental and physical health indicators (Mikulincer & Shaver, 2016).

In the field of couple research, attachment theory is a helpful framework for understanding relationship satisfaction, as it offers explanations about differences in the way people experience close relationships (Feeney, 2016). A number of studies report a strong association between attachment and relationship satisfaction (for a review, see Mikulincer & Shaver, 2016), and efforts have been made to identify the mechanisms underlying this link. Several individual and relational variables have been proposed as mediating the relationship of attachment with relationship satisfaction, such as dyadic trust, forgiveness, and perceived partner support (Fitzpatrick & Lafontaine, 2017; Kachadourian et al., 2004; Karantzas et al., 2014). Another potential mediating variable could be unforgiveness, defined as a combination of negative emotions, motivations, and cognitions in the aftermath of an interpersonal hurt (Worthington & Sandage, 2016). Indeed, attachment has been linked to the way people deal with interpersonal hurts, and unforgiveness, in turn, has been associated with lower relationship satisfaction (He et al., 2018; Lawler-Row et al., 2006; Van Monsjou et al., 2015). However, past research has mainly focused on forgiveness (Chung, 2014; Kachadourian et al., 2004). The present study aims to fill this gap by investigating the role of unforgiveness in the relationship of attachment with relationship satisfaction.

Romantic Attachment and Relationship Satisfaction

Attachment theory assumes a universal human need to create close emotional bonds that can provide comfort and protection during times of threat and suffering (Bowlby, 1979). Originally focused on early relationships, this conceptual framework was extended to adult

romantic bonds by Hazan and Shaver (1987). These authors suggested that adult behavior in close relationships is shaped by mental schemes, namely internal working models (IWMs), whose origins lie in early childhood relationships with primary caregivers. IWMs are mental representations of the self's capabilities for mobilizing support by others and feelings of being loved and valued by others (model of self), as well as representations of the availability, responsiveness, and goodwill of others (model of other) (Bartholomew & Horowitz, 1991). IWMs guide future interactions in interpersonal contexts, especially the ones that encourage intimacy, like romantic bonds (Feeney, 2016).

Individual differences in adult attachment can be explained in terms of two dimensions: attachment anxiety and attachment avoidance (Brennan et al., 1998), which are related to the model of self and the model of other, respectively. Attachment anxiety refers to the fear of abandonment and rejection by attachment figures and is characterized by an excessive need for approval, based on one's negative self-concept as someone who does not deserve affection, care, and protection. Attachment avoidance refers to discomfort with dependence and closeness and is characterized by excessive self-reliance and reluctance to self-disclosure, which is based on a negative representation of others as unavailable in times of need (Bartholomew & Horowitz, 1991). Securely attached individuals show low levels of attachment anxiety and avoidance, as they view themselves as worthy of love and feel comfortable with depending on others. In contrast, insecurely attached individuals exhibit high levels of attachment anxiety and/or avoidance, based on a negative representation of themselves and/or others (Bartholomew & Horowitz, 1991).

It is well established that insecure attachment is associated with poor couple relationship outcomes such as lower levels of relationship satisfaction (Feeney, 2016; Mikulincer & Shaver, 2016). As for attachment anxiety, this link can be attributed to the tendency of anxiously attached individuals to be highly vigilant toward signals of rejection

or potential abandonment, to be emotionally dependent and to display intense distress and protest behaviors when the partner is perceived as unavailable (Li & Chan, 2012; Mikulincer & Shaver, 2003). As for attachment avoidance, this association can instead be explained in terms of the tendency of avoidantly attached individuals to have limited desire for closeness, their reluctance to self-disclosure and intimacy, and their inclination to suppress emotions with the partner (Mikulincer & Shaver, 2003). Noteworthy, there is evidence that attachment avoidance is associated with lower relationship satisfaction more strongly than attachment anxiety (Feeney, 2016; Li & Chan, 2012; Mikulincer & Shaver, 2016).

Unforgiveness as a Mediator Between Romantic Attachment and Relationship Satisfaction

One of the pathways from attachment insecurity to lower relationship satisfaction might be through unforgiveness. Unforgiveness is an emotional, cognitive, and motivational response to a transgression (Worthington & Sandage, 2016), defined as the violation of implicit or explicit relationship norms (Fincham, 2015). Unforgiveness involves emotions such as hurt, bitterness, resentment, and anger, often coupled with rumination, and the associated motivations of avoiding the person who committed the offense and/or seeking revenge (Wade & Worthington, 2003; Worthington & Sandage, 2016). In the face of a transgression, people may keep emotional and/or physical distance from those who have hurt them and manifest disengagement and withdrawal (i.e., avoidance motivation). Also, people may experience thoughts of revenge that encompass a desire to see the person who committed the offense suffering or an attempt to "even the score" (i.e., revenge motivation) (Martin et al., 2019; McCullough et al., 1998). Such motivations are conceptualized as part of a basic and natural response of human beings that prevents them from being damaged and protects the self (McCullough et al., 2009). People may use different strategies to reduce unforgiveness, such as denying the transgression, seeking justice, reframing the situation, or

forgiving, among others (Worthington & Sandage, 2016). In the literature, there has been a tendency to conceptualize unforgiveness as the polar opposite of forgiveness, despite they are related but distinct constructs (Stackhouse et al., 2018; Wade & Worthington, 2003). As argued by Wade and Worthington (2003), forgiveness is one way to deal with unforgiveness. It necessarily implies the reduction of avoidance and revenge motivations, in addition to the presence of benevolence toward the offender, whereas reduced unforgiveness does not always involve forgiveness.

Attachment theory provides a theoretical basis for understanding how people perceive transgressions as well as the related experience of unforgiveness (Kimmes & Durtschi, 2016; Worthington & Sandage, 2016). Indeed, IWMs are primarily activated in threatening situations such as interpersonal transgressions (Lawler-Row et al., 2006) and affect the way individuals appraise an offense, the person who committed it, and themselves (Worthington & Sandage, 2016). Also, attachment characteristics reflect an individual's ability to regulate negative emotions, which are typically activated in the face of a transgression (Mikulincer & Shaver, 2003). Insecurely attached individuals are probably less able to manage the threat represented by a hurt, and more inclined to experience high degrees of unforgiveness, as reported in past research (Beltrán-Morillas et al., 2019; Kimmes & Durtschi, 2016; Van Monsjou et al., 2015). Specifically, anxiously attached individuals are sensitive to signals of rejection and abandonment and can experience high levels of unforgiveness, expressed in avoidance and/or revenge motivations, especially when the relationship is at risk for rupture because of a hurt (Beltrán-Morillas et al., 2019; Kimmes & Durtschi, 2016). One reason for this is that anxiously attached individuals tend to catastrophize the meaning of a transgression and to experience high rumination and strong distress, as they interpret the hurtful behavior of the other as a confirmation of their model of themselves as unworthy of care (Mikulincer & Shaver, 2016). On the other hand, avoidantly

attached individuals tend to interpret the hurtful behavior of others more negatively, due to their representation of others as untrustworthy, and are more likely to keep distant from those who have hurt them and to react destructively (Feeney, 2004). Also, and due to their discomfort with closeness, they are prone to exacerbate their disengagement in the context of a transgression (Martin et al., 2019). In sum, it is likely that the level of attachment insecurity shapes the experience of unforgiveness, especially in romantic relationships.

In turn, unforgiveness motivations have been linked to lower relationship satisfaction, greater relationship instability, and higher distress (Fincham, 2015; Guzmán, 2010; He et al., 2018; Mikulincer & Shaver, 2016). Indeed, the persistence of feelings of hurt, resentment, and anger, expressed as avoidance and seeking revenge toward the partner, can erode the sense of trust, reciprocity, and intimacy within the couple (Makinen & Johnson, 2006).

Considering the aforementioned associations between attachment insecurity, unforgiveness, and relationship satisfaction, we propose that unforgiveness may play a mediating role in the relationship of attachment insecurity with poor relationship satisfaction in couples. Such a mediation model is based on the notion that attachment orientations are formed early in life and are assumed to influence the way individuals deal with transgressions in adult close relationships and the related experience of unforgiveness (Mikulincer & Shaver 2003, 2016). In turn, there is evidence to posit avoidance and revenge motivations as affecting relationship satisfaction (Makinen & Johnson, 2006).

A Dyadic Approach

Romantic attachment, reactions to partner transgressions, and relationship satisfaction are inherently dyadic processes (Fitzpatrick & Lafontaine, 2017; Martin et al., 2019; Mikulincer & Shaver, 2016). Dyadic relationships operate in a dynamic and reciprocal way, where each partner influences the attitudes, emotions, and behaviors of the other

partner (Mikulincer & Shaver, 2016). To capture these dyadic processes, data analytic approaches have been developed that take into account the interdependence that exists between the couple members and allow simultaneously estimating actor and partner associations. Actor associations refer to those between one's own independent variable and one's own outcome, whereas partner associations refer to those between the partner's independent variable and one's own outcome (Kenny et al., 2006).

The mediation model we propose in the present study (i.e., unforgiveness as a mediator of the relationship between attachment insecurity and relationship satisfaction) has not been tested yet adopting a dyadic approach. A number of previous studies examined associations between romantic attachment, unforgiveness, and relationship satisfaction using a dyadic approach. However, they focused on either the associations of romantic attachment with relationship satisfaction, those of romantic attachment with unforgiveness, or those of unforgiveness with relationship satisfaction. In other words, previous dyadic studies have examined only portions of the mediation model proposed in this study. Most studies examining the associations of romantic attachment with relationship satisfaction reported an inverse relationship of actors' attachment anxiety and avoidance with relationship satisfaction (Conradi et al., 2017; Mondor et al., 2011; Pepping & Halford, 2012). No association was found between the partners' attachment anxiety and relationship satisfaction in some studies (Conradi et al., 2017; Molero et al., 2016), but in others, the partners' attachment anxiety was linked to lower relationship satisfaction for women but not for men (Mondor et al., 2011; Pepping & Halford, 2012). As for the partner's attachment avoidance, its association with lower relationship satisfaction was reported for both genders in some studies (Molero et al., 2016) but not in others (Conradi et al., 2017; Mondor et al., 2011; Pepping & Halford, 2012). Dyadic studies on unforgiveness were few and most conceptualized and measured unforgiveness as a response for a single specific partner

transgression (Gordon et al., 2009; Martin et al., 2019; Paleari et al., 2009). A recent study examined the associations between romantic attachment and unforgiveness and found that actors' and partners' attachment anxiety was unrelated to unforgiveness; instead, actors' and partners' attachment avoidance predicted greater avoidance motivation for both genders. In men only, greater revenge motivation was predicted by both actors' and partners' attachment avoidance (Martin et al., 2019). Finally, studies that examined the associations between unforgiveness and relationship satisfaction reported that actors' and partners' global unforgiveness was associated with lower relationship satisfaction in both genders (Fincham & Beach, 2002; Gordon et al., 2009; Paleari et al., 2009).

In summary, findings of previous dyadic studies demonstrate the importance of adopting a dyadic perspective, as evidence of partner associations was found. Previous dyadic findings also further indicate that a mediating role of unforgiveness in the relationship between attachment insecurity and relationship satisfaction is worthy of investigation. The examination of the interplay between attachment and transgression-related motivations from a dyadic perspective could expand our knowledge about the mechanisms linking insecure attachment to worse couple functioning and guide clinical and counseling interventions with couples.

The Present Study

This study goes beyond previous research by examining the role of unforgiveness in the relationship of romantic attachment with relationship satisfaction in couples. Given the importance of the relationship context in unforgiveness (Fincham, 2015), we focused on unforgiveness as an individual's tendency to experience avoidance and revenge motivations across multiple partner transgressions. A dyadic approach was adopted and the Actor-Partner Interdependence Mediation Model (APIMeM; Ledermann et al., 2011) was used. Specifically, two APIMeMs were tested, one for each unforgiveness motivation as the mediator.

Based on theory and research discussed above, our general hypotheses were that, for both partners: (1) higher actor levels of attachment anxiety and avoidance would be directly associated with lower relationship satisfaction and (2) higher actor levels of unforgiveness motivations would mediate the direct associations of greater attachment anxiety and avoidance with lower relationship satisfaction. Specifically, actors' greater attachment insecurity would be associated with lower relationship satisfaction through actors' greater avoidance and revenge motivations in response to partner transgressions. Due to the inconsistency or scarcity of previous dyadic findings, no hypotheses were formulated about associations between the partner's insecure attachment and relationship satisfaction, nor about the mediating role of the partner's unforgiveness motivations. Therefore, this part of our study was exploratory in nature.

Method

Participants and Procedure

Participants were recruited through various means, such as advertisements in universities and public places, personal and professional contacts, and word of mouth. Inclusion criteria were both partners being older than 18 years old, in a committed heterosexual relationship, cohabiting for at least 1 year, and both partners being willing to participate. Couples or individual partners who contacted the research team were screened for eligibility by trained research assistants. Those who met all the inclusion criteria were explained the scope of the study and given personally two separate, identical assessment packets to complete at home and return within 2 weeks. Each assessment packet included a consent form to be signed and the study questionnaire. Participants were instructed to complete the questionnaire individually and to not discuss the questions or answers with their partner. They were ensured that their answers would not be given to any third party, including their partners, and told that they could contact the research assistant at any time for questions. The study complied with the Declaration of Helsinki and was approved by the University Research Board prior to data collection. Participation was entirely voluntary.

Of the 140 individuals or couples who contacted the research team, 134 (95.71%) met the inclusion criteria and agreed to consent. Of these, 113 (84.33%) returned the assessment packets. Nine couples (7.96%) were excluded because one or both partners returned an incomplete packet, with missing key variables. Thus, the final sample included 104 couples (104 women and 104 men). Mean age was 37.26 years for women ($SD = 8.75$; range 20-54 years) and 39.95 years for men ($SD = 9.54$; range 20-60 years). Thirty-two percent of women ($n = 33$) and 33.65% of men ($n = 35$) had tertiary education, and 61.54% of women ($n = 64$) and 91.35% of men ($n = 95$) were employed. More than half of the couples ($n = 62$, 59.62%) were married and 80.77% ($n = 84$) had children. Mean relationship length was 13.13 years ($SD = 9.53$; range 1-37 years), 21.15% of couples ($n = 22$) reported being together for more than 20 years, and 30.77% ($n = 32$) had been together for more than 10 years.

Measures

A sociodemographic questionnaire was developed for this study that assessed gender, age, educational level, job status, and relationship history (being married, having children, and relationship length).

A 34-item Chilean validated version (Guzmán, 2010) of the Experiences in Close Relationships (ECR) scale (Brennan et al., 1998) was used to assess romantic attachment. The Chilean ECR scale includes 18 items measuring attachment anxiety (e.g., "I worry about being abandoned") and 16 items measuring attachment avoidance (e.g., "Just when my partner starts to get close, I find myself pulling away"). Each item is rated on a 7-point scale (1 = strongly disagree to 7 = strongly agree). Higher scores on the ECR scale represent more insecure attachment. The ECR scale is a widely used measure of adult attachment, with evidence of psychometric soundness (Mikulincer & Shaver, 2016). In this study, Cronbach's α was .88 (women) and .82 (men) for attachment anxiety and .87 (women) and .80 (men) for attachment avoidance.

The 12-item Transgression-Related Interpersonal Motivations Inventory (TRIM-12; McCullough et al., 1998) is one of the most widely used measures of unforgiveness (e.g., Beltrán-Morillas et al., 2019; Wade & Worthington, 2003). It consists of two scales: avoidance (7 items; e.g. "I keep as much distance between us as possible") and revenge motivation (5 items; e.g. "I′ll make her/him pay"). Items are rated on a 5-point scale (1 = strongly disagree to 5 = strongly agree). Higher scores on the TRIM-12 subscales indicate more unforgiving motivations. In the original TRIM-12, respondents are asked to rate the items based on a specific transgression. For the purpose of this study, we slightly modified the TRIM-12 instructions. We asked participants to think of situations in which they felt hurt or treated unfairly by their current partner and to answer the items based on the thoughts and feelings they usually experienced in such situations. Similar modifications to the TRIM-12 instructions have been applied by other researchers interested in measuring the general tendency to forgive partner transgressions (Kachadourian et al., 2004). We used the validated Chilean version of the TRIM-12, which showed adequate validity and reliability (Guzmán, 2010). In this study, Cronbach's α was .89 (both women and men) for avoidance motivation and .73 (women) and .85 (men) for revenge motivation.

The 48-item Marital Satisfaction Scale (MSS; Roach et al., 1981) was used to assess relationship satisfaction. Each item (e.g., "I consider my marital situation to be as pleasant as it should be") is rated on a 5-point scale (1 = strongly disagree to 5 = strongly agree). Higher scores on the MSS represent greater relationship satisfaction. We used the Chilean version of the MSS (Tapia & Poulsen, 2009), which was validated in married and cohabiting individuals. The items were reworded slightly to make them suitable for use with unmarried relationships also (e.g., "I consider my couple situation to be as pleasant as it should be"). The Chilean MSS showed adequate reliability and validity as a single-factor measure of favorability of attitude towards one's committed or married relationship. In this study Cronbach's α was .96 (women) and .95 (men).

Statistical Analyses

An average of 1.11% (range 0-12%) of the data were missing on the study variables. Little's Missing Completely at Random (MCAR) test indicated that data were MCAR, χ^2 (8621, $n = 208$) = 8820.43, $p > .05$, thus expectation maximization was used to replace the missing data at the individual item level (Schlomer et al., 2010). Preliminary bivariate correlations between study variables were computed separately for women and men and within couples. Differences between dyad members' mean scores in the study variables were examined using repeated measures analysis of variance (ANOVA). To test for the need to include covariates or confounding variables in the dyadic models, women's and men's avoidance and revenge motivations and relationship satisfaction were correlated (Pearson's correlation) with age and relationship length, and compared (ANOVA) among groups based on being married or not and having children or not. Variables were included in the models if they were at least moderately ($r \geq |.30|$ or Cohen's $d \geq 0.50$) associated with the mediator or outcome for either women or men (Frigon & Laurencelle, 1993).

Using structural equation modeling, a simple actor-partner interdependence model (APIM; Kenny et al., 2006) was preliminarily applied to search for the direct associations of actors' and partners' attachment anxiety and avoidance with relationship satisfaction. To test for the role of each unforgiveness motivation in mediating these associations, two APIMeMs (Ledermann et al., 2011) were then estimated. If significant direct paths emerged in the simple APIM, they were maintained in the APIMeMs. To confirm the direction of the indirect associations in the light of the cross-sectional design of this study, we also tested plausible alternative models. Specifically, we estimated two reverse mediation models with relationship satisfaction as the mediator between insecure attachment and unforgiveness motivations.

Empirical distinguishability by gender was preliminarily tested by constraining each path as equal among dyad members and testing each constraint individually (Garcia et al., 2015; Ledermann et al., 2011). For each equality constraint, a χ^2 difference test ($\Delta\chi^2$) was conducted to determine whether holding that association equal across dyad members would cause a significant

decrease in model fit. Maximum likelihood estimation was used for all models. Goodness of fit was evaluated with the following criteria: root mean square error of approximation (RMSEA) $\leq .06$, standardized root mean-square residual (SRMR) $\leq .08$, and comparative fit index (CFI) $\geq .95$ (Hu & Bentler, 1999). To determine the significance of the indirect effects in the APIMeMs, bootstrapping was used (Preacher & Hayes, 2008). We inferred consistent mediation if the indirect association and the corresponding direct association were of the same sign, and inconsistent mediation if these had opposite signs (MacKinnon et al., 2000).

As suggested by Kenny and Cook (1999), sample size recommendations in multiple regression analyses were followed, given the use of structural equation modeling without latent variables in our analyses. A power analysis indicated that, with seven independent variables (i.e., three male and female predictors and one covariate) and $\alpha = .05$ (two-tailed), at least 103 couples were needed to reach enough power (.80) to detect a medium effect size. A power analysis using the Monte Carlo method was also performed (Muthén & Muthén, 2002), which indicated that, with one covariate, four independent variables, two mediator variables, and two outcome variables, an effect size of .25 (small-to-medium), and 104 couples, an adequate model fit would be obtained: $\chi^2(4) = 4.40$, $p = .36$, RMSEA = .04, and SRMR = .02.

Interpretation of results was based on both statistical significance ($p < .05$ and bootstrapped 95% confidence intervals not including zero for indirect associations) and measures of effect size, with Pearson's r of .10 considered small, .30 medium, and .50 large, and Cohen's d of 0.20, 0.50, and 0.80 considered small, medium, and large, respectively (Cohen, 1988). Power analysis was performed with G*Power 3.1 (Faul et al., 2007). Preliminary analyses were conducted with IBM SPSS 25, and dyadic models were estimated using path analysis in Mplus 7.2 (Muthén & Muthén, 1998-2012).

Results

Preliminary Analyses

Within-dyad correlations were all positive. Thus, as individuals reported higher levels of attachment anxiety and avoidance, avoidance and revenge motivations, and relationship satisfaction, so did their partners. These correlations were significant for all variables, with small-to-large effect sizes (rs between .20 and .63) (see Supplemental Table 1). Women and men did not differ in attachment anxiety, $F(1,103) = 1.37$, $p = .25$, $d = 0.12$, attachment avoidance, $F(1,103) = 0.53$, $p = .47$, $d = 0.08$, nor in relationship satisfaction, $F(1,103) = 3.75$, $p = .06$, $d = 0.16$. Women reported slightly higher avoidance motivation, $F(1,103) = 7.61$, $p = .01$, $d = 0.33$ and revenge motivation than men, $F(1,103) = 5.58$, $p = .02$, $d = 0.30$ (see Supplemental Table 1). The correlations of age and relationship length with unforgiveness and relationship satisfaction were small-to-medium, ranging from -.28 ($p < .01$) to .13 ($p > .05$) for women and from -.34 ($p < .001$) to .16 for men ($p > .05$) (see Supplemental Table 1). Women's age correlated $\geq -.30$ with men's unforgiveness motivations, hence, this variable was included as a covariate in APIMeMs. Nonsignificant results of ANOVAs indicated that mean scores in unforgiveness and relationship satisfaction did not vary depending on being married or having children in either women or men (see Supplemental Table 2). Therefore, these variables were not entered in the models.

APIM

There were no significant differences among women and men in the direct actor and partner associations of attachment anxiety and avoidance with relationship satisfaction, as all $\Delta\chi^2$ tests were nonsignificant ($p > .05$). Thus, the more parsimonious model with empirically indistinguishable associations was tested, with all paths constrained to be equal across gender. The fit of this model was adequate, $\chi^2(4) = 4.734$, $p = .316$, RMSEA = .042, SRMR = .029, CFI = 0.996.

Actors' attachment anxiety was directly associated with lower relationship satisfaction, $b = -.17$, $SE = .05$, $z = -3.28$, $p = .001$, but partners' attachment anxiety was not, $b = -.01$, $SE = .05$, $z = -0.28$, $p = .78$. Actors' and partners' attachment avoidance was directly associated with lower

relationship satisfaction, $b = -.52$, $SE = .05$, $z = -10.38$, $p < .001$, and $b = -.23$, $SE = .05$, $z = -4.71$, p < .001, respectively (see Supplemental Figure 1).

APIMeMs

Because all $\Delta\chi^2$ tests were nonsignificant ($p > .05$), women and men did not differ in the actor and partner associations of attachment anxiety and avoidance with unforgiveness motivations, nor in the actor and partner associations between unforgiveness motivations and relationship satisfaction. Thus, using the APIMeM for indistinguishable dyads, equality constraints were imposed on these gender-equivalent associations. Total and indirect associations in the APIMeMs are reported in Table 1. Path estimates are shown in Figures 1 and 2. Results are presented separately for each unforgiveness motivation.

Avoidance motivation. The fit of the APIMeM with avoidance motivation as the mediator was adequate (Figure 1).

Figure 1. APIMeM with avoidance motivation as the mediator. Standardized path estimates are reported. Standard errors are in parentheses. Covariate, nonsignificant paths, and within- and between-partner correlations are omitted from the figure for clarity. Model fit statistics: $\chi^2(17) = 23.374$, $p = .138$, RMSEA = .060, SRMR = .055, CFI = .975.

$^*p < .01$; $^{**}p < .001$.

RMSEA = root mean square error of approximation; SRMR = standardized root mean square residual; CFI = comparative fit index.
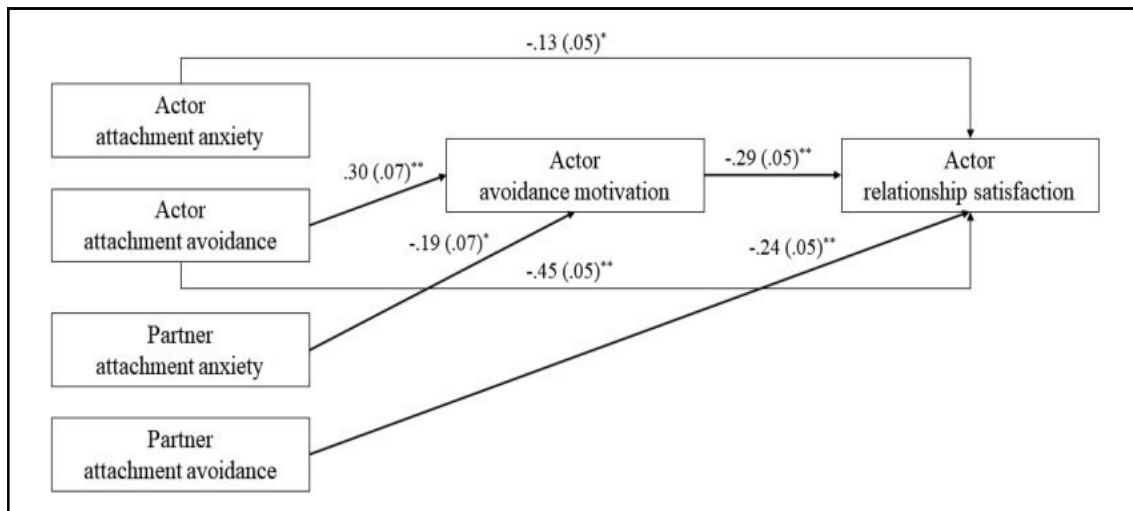
A significant indirect relationship was found between the partner's attachment anxiety and relationship satisfaction, which was inconsistent in nature (Table 1). The direct, nonsignificant association between the partner's attachment anxiety and relationship satisfaction was negative in sign. However, the association via avoidance motivation was positive, such that the partner's higher attachment anxiety was linked to lower avoidance motivation, and thus to higher relationship satisfaction. Avoidance motivation consistently mediated the relationship between actors' attachment avoidance and relationship satisfaction. Higher actor levels of attachment avoidance were associated with greater avoidance motivation, and thus with lower relationship satisfaction.

Revenge Motivation. The APIMeM with revenge motivation as the mediator showed an adequate fit to the data (Figure 2).

Figure 2. APIMeM with revenge motivation as the mediator. Standardized path estimates are reported. Standard errors are in parentheses. Covariate, nonsignificant paths and within- and between-partner correlations are omitted from the figure for clarity. Model fit statistics: $\chi^2(17) = 14.008$, $p = .667$, RMSEA $< .001$, SRMR $= .059$, CFI $= 1.000$.

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

RMSEA = root mean square error of approximation; SRMR = standardized root mean square residual; CFI = comparative fit index.

Revenge motivation consistently mediated the relationship between actors' attachment anxiety and relationship satisfaction (Table 1). Higher actor levels of attachment anxiety were associated with higher revenge motivation, and thus with lower relationship satisfaction.
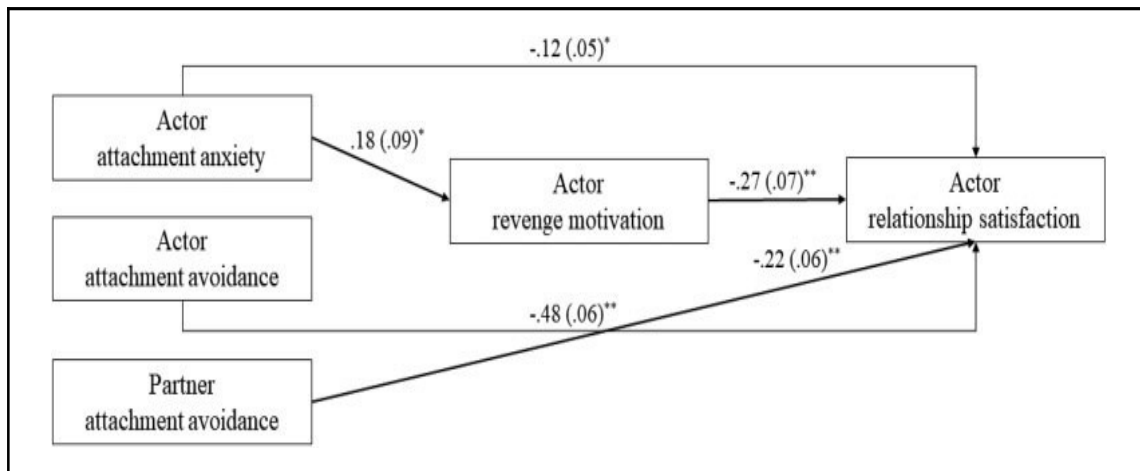
Reverse Mediation Models

In the alternative APIMeMs switching the mediator and outcome variables (i.e., including relationship satisfaction as the mediator between attachment insecurity and unforgiveness), the reverse mediation was significant and the same pattern of associations as in the original models was observed. Higher actor levels of attachment anxiety and avoidance were associated with lower relationship satisfaction, and thus with higher levels of both avoidance, $b = .09$, $SE = .03$, 95% CI [.03, .17] and $b = .29$, $SE = .06$, 95% CI [.18, .42], respectively, and revenge motivations, $b = .09$, $SE = .04$, 95% CI [.03, .18] and $b = .28$, $SE = .07$, 95% CI [.17, .45], respectively. The partner's higher attachment avoidance was associated with lower relationship satisfaction, and thus with higher levels of both avoidance, $b = .13$, $SE = .03$, 95% CI [.07, .20], and revenge motivations, $b = .13$, $SE = .04$, 95% CI [.07, .22].

Table 1.

Total and Indirect Effects in the APIMeMs with Avoidance and Revenge Motivations

	Avoidance motivation			Revenge motivation		
	b	*SE*	95% CI	*b*	*SE*	95% CI
Actor attachment anxiety → Relationship satisfaction						
Total effect ANX_A → RS_A	**-.15**	**.05**	**[-.26, -.04]**	**-.17**	**.06**	**[-.29, -.06]**
Total IE ANX_A → RS_A	-.02	.02	[-.06, .03]	**-.05**	**.02**	**[-.11, -.01]**
Specific IE ANX_A → UM_A → RS_A	-.02	.02	[-.07, .02]	**-.05**	**.02**	**[-.12, -.01]**
Specific IE ANX_A → UM_P → RS_A	.01	.01	[-.01, .03]	.00	.01	[-.01, .01]
Partner attachment anxiety → Relationship satisfaction						
Total IE ANX_P → RS_A	**.05**	**.02**	**[.02, .10]**	-.01	.02	[-.05, .04]
Specific IE ANX_P → UM_P → RS_A	-.01	.01	[-.02, .00]	-.01	.01	[-.03, .01]
Specific IE ANX_P → UM_A → RS_A	**.06**	**.02**	**[.02, .10]**	.01	.02	[-.04, .04]
Actor attachment avoidance → Relationship satisfaction						
Total effect AVD_A → RS_A	**-.53**	**.05**	**[-.66, -.41]**	**-.53**	**.06**	**[-.65, -.40]**
Total IE AVD_A → RS_A	**-.09**	**.02**	**[-.16, -.04]**	-.04	.03	[-.11, .00]

	b	SE	CI	b	SE	CI
Specific IE AVD$_A$ → UM$_A$ → RS$_A$	**-.09**	**.02**	**[-.16, -.04]**	-.04	.03	[-.11, .00]
Specific IE AVD$_A$ → UM$_P$ → RS$_A$	.00	.01	[-.01, .01]	.00	.01	[-.01, .01]
Partner attachment avoidance → Relationship satisfaction						
Total effect AVD$_p$ → RS$_A$	**-.25**	**.05**	**[-.38, -.15]**	**-.23**	**.06**	**[-.35, -.12]**
Total IE AVD$_p$ → RS$_A$	-.01	.02	[-.07, .04]	-.01	.02	[-.05, .03]
Specific IE AVD$_p$ → UM$_P$ → RS$_A$	-.01	.02	[-.03, .02]	-.01	.01	[-.02, .01]
Specific IE AVD$_P$ → UM$_A$ → RS$_A$	-.01	.01	[-.05, .04]	-.01	.02	[-.04, .04]

Note. Subscripts A and P indicate actors and partners, respectively. Significant effects are in bold. APIMeM = Actor-Partner Interdependence Mediation Model; ANX = attachment anxiety; AVD = attachment avoidance; UM = unforgiveness motivation; RS = relationship satisfaction; IE = indirect effect; *b* = standardized estimate; *SE* = standard error; CI = confidence interval.

Discussion

This study examined the associations between romantic attachment and relationship satisfaction as mediated by unforgiveness motivations in couples. Couple members were not statistically distinguishable by gender, thus the same pattern of associations held in female and male partners. Actor attachment anxiety and avoidance were related to relationship satisfaction directly and indirectly. Partner attachment anxiety was only indirectly, and partner attachment avoidance only directly, associated with relationship satisfaction.

The first hypothesis on direct actor associations between attachment insecurity and relationship satisfaction was confirmed: both higher actor levels of attachment anxiety and avoidance were directly associated with lower relationship satisfaction, in line with previous consistent evidence (Conradi et al., 2017; Fitzpatrick & Lafontaine, 2017; Pepping & Halford, 2012). Attachment avoidance was associated with relationship satisfaction more strongly than attachment anxiety, coherent with previous research (Feeney, 2016; Li & Chan, 2012; Mikulincer & Shaver, 2016). The second hypothesis about actor unforgiveness motivations mediating the associations of actors' greater attachment insecurity with lower relationship satisfaction was only partly confirmed. As hypothesized, actors' attachment anxiety was associated with greater revenge motivation, and thus with lower relationship satisfaction. Anxiously attached individuals hold a negative model of self and ambivalent models of others (Hazan & Shaver, 1987; Mikulincer & Shaver, 2016). They strongly desire closeness and reassurance from their partners and at the same time they have doubts about their ability to gain the partner's care and responsiveness. This makes them especially vulnerable to hurt feelings and more likely to make negative attributions about their partners' behaviors (Guzmán, 2010). They tend to respond to partner transgressions with intense resentment and excessive rumination (Mikulincer & Shaver, 2016) and exhibit more desires for revenge (Guzmán et al., 2015), which, in turn, might have detrimental effects on their relationship satisfaction (Makinen & Johnson, 2006). Contrary to hypotheses, actors' attachment anxiety was

unrelated to avoidance motivation. It is likely that when faced with a partner transgression, anxiously attached individuals, rather than avoiding, exacerbate expressions of hurt feelings, anger and protest, and employ guilt-inducing strategies as a way to keep closeness and avoid abandonment (Overall et al., 2014).

As expected, actors' greater attachment avoidance was associated with higher avoidance motivation, and thus with lower relationship satisfaction. As avoidantly attached individuals hold a negative model of other, they perceive others as untrustworthy and unreliable and provide negative explanations for their partners' behavior. This is likely to exacerbate their deactivating strategies, such as emotional and cognitive distancing from the partner, as a self-protective strategy in response to partner transgressions. As previously suggested, deactivating strategies employed by avoidantly attached individuals in the face of partner transgressions might exacerbate a sense of dissatisfaction within the couple (Mikulincer & Shaver, 2016). Different from hypotheses, actors' attachment avoidance was unrelated to revenge motivation. Previous authors instead reported that avoidantly attached individuals tend to react destructively to and seek revenge for their partners' transgressions (Feeney, 2004; Guzmán, 2010), although in a recent study this was observed in men only (Martin et al., 2019). On the one hand, it is possible that avoidantly attached individuals suppress their feelings of anger and retaliation toward the partner (Mikulincer & Shaver, 2003, 2016), prioritizing other strategies than seeking revenge, like distancing. On the other hand, there is some evidence that avoidantly attached individuals tend to perceive a lower number of transgressions than anxiously attached ones (Martin et al., 2019), and to deny the relevance of threatening events, coherently with their deactivating strategies (Jang et al., 2002). This may weaken the link between attachment avoidance and revenge motivation. Despite these possible explanations, this finding deserves further investigation.

Regarding partner associations, partner attachment anxiety was not directly associated with relationship satisfaction, which has been reported in some previous studies (Conradi et al., 2017;

Molero et al., 2016) but not in others (Mondor et al., 2011; Pepping & Halford, 2012). However, another study on Chilean couples in long-term relationships reported no associations between partner attachment anxiety and marital satisfaction (Heresi Milad et al., 2014). There was instead a direct partner association between attachment avoidance and relationship satisfaction: the higher one's partner's discomfort with closeness and intimacy, the lower one's own relationship satisfaction, consistent with previous evidence (Fitzpatrick & Lafontaine, 2017; Molero et al., 2016). This association was not mediated by unforgiveness motivations, as the partner's avoidance and revenge motivations were unrelated to relationship satisfaction. A possible explanation for this pattern of partner associations might that Chile is a collectivistic society, where seeking closeness is highly valued (Rojas-Méndez et al., 2008). As for partner attachment anxiety, some of the characteristics of anxiously attached individuals might be consistent with cultural expectations and thus have no detrimental effects on the relationship satisfaction of their partners. As for partner attachment avoidance, having an avoidantly attached partner might determine greater relationship dissatisfaction within cultures where interdependence and other-oriented behaviors are highly valued, such as Chile (Friedman et al., 2010). It is also possible that other variables than unforgiveness motivations mediate the link of partner attachment avoidance with relationship satisfaction, such as empathy and attributions (Kimmes & Durtschi, 2016), which is worthy of being tested in future studies.

Interestingly, we found an inconsistent indirect relationship between partner attachment anxiety and relationship satisfaction through actor avoidance motivation. Higher partner levels of attachment anxiety were associated with lower avoidance motivation, and thus with higher relationship satisfaction. Two possible interpretations of this indirect association can be advanced. On the one hand, when being the cause of a transgression within the couple, anxiously attached individuals might experience intense shame and worry due to their negative model of self. This might increase their attempts to seek proximity and intimacy, based on their fear of abandonment

(Gross & Hansen, 2000). In response to these attempts, the offended partners might diminish their avoidance motivations, and in this way increase their own relationship satisfaction. On the other hand, there is evidence that anxiously attached individuals tend to employ guilt-inducing strategies, for example, through exacerbated expressions of hurt feelings, vulnerability, and helplessness as a way of eliciting compassion and support, which ultimately moves the offender partner closer (Overall et al., 2014). Future studies should test these hypothesized explanations.

Because the cross-sectional design of this study did not exclude the possibility of reverse causation, we tested alternative reverse mediation models. Specifically, we re-estimated each APIMeM including relationship satisfaction as the mediator between attachment insecurity and unforgiveness. Noteworthy, the directionality of the associations could not be established. Indeed, significant indirect associations were detected when switching the mediator and outcome variables, with an identical pattern of associations as in the original mediation models. Thus, we cannot disprove that attachment insecurity decreases relationship satisfaction, which in turn leads to greater unforgiveness motivations in response to partner transgressions. However, most longitudinal studies considered unforgiveness as a predictor of relationship outcomes, showing that unforgiveness was associated with ineffective conflict resolution 1 year later (Fincham et al., 2007) and prospectively predicted lower marital quality over a 6-month period (Paleari et al., 2009). Experimental findings also suggest that unforgiveness may result in lower relationship satisfaction (Karremans & Van Lange, 2004). Furthermore, couple therapy interventions addressing unresolved relational transgressions have shown to be effective in improving dyadic satisfaction (e.g., Greenberg et al., 2010). Noteworthy, reciprocal directions of effects have been observed between unforgiveness and marital quality over time (Paleari et al., 2005). Thus, it seems plausible that unforgiveness in response to partner transgressions affects how satisfied a person is with her/his relationship, and then this association becomes reciprocal. Prospective studies are needed to clarify the directionality of the dyadic relations among romantic attachment, unforgiveness motivations, and relationship

satisfaction. In particular, using longitudinal methods would allow better understand how couple members' unforgiveness motivations and relationship satisfaction may influence each other over time.

In addition to the correlational design that prevents causal interpretations, other limitations must be acknowledged in the present study. We did not control for the number, severity or type (e.g., criticism, infidelity, or deception) of the transgressions recalled, which has been linked to unforgiveness (Beltrán-Morillas et al., 2019; Martin et al., 2019; Paleari et al., 2009). Anxiously attached individuals are likely to have negative trust-related memories more easily accessible and place more weight on these negative experiences (Mikulincer & Shaver, 2003). Thus, when asked for their typical avoidance and revenge motivations in response to partner transgressions, they might recall more and more severe transgressions and thus report higher unforgiveness. Future dyadic research should control for the number, severity, and type of transgressions committed by the partner, as to deepen our findings. Furthermore, this study included only cohabiting and heterosexual couples from the general population. Most couples had children and had been together for more than 10 years, which limits the generalizability of our findings. Replication studies in other samples (i.e., dating partners, childless and/ or same sex couples, as well as couples seeking therapy) could address this limitation. Cross-cultural studies are also needed to clarify whether the dyadic associations found in this study represent a common pattern across countries/cultures. We proposed that cultural expectations specific to Chilean collectivistic society might explain some of our findings. However, future studies that include a measure of collectivism are warranted to elucidate this possibility. Finally, sample size requirements did not allow including both unforgiveness motivations in a single APIMeM or distinguishing between couples with congruent or discrepant attachment insecurities. To overcome this limitation, larger samples should be recruited to test more complex multiple mediation dyadic models.

Despite these limitations, this was the first study to address unforgiveness motivations as mediators between attachment insecurity and relationship satisfaction from a dyadic perspective. Besides further attesting to the detrimental role of attachment avoidance and unforgiveness against the couple's functioning, this study offers new insights into how the partner's attachment anxiety may indirectly promote relationship satisfaction, which is an interesting direction for future research. Altogether, our findings offer guidance on potential pathways of interest for future longitudinal studies, which are especially needed to better understand the dynamic associations between unforgiveness and relationship satisfaction that a couple might experience.

Our findings have potential implications for clinicians working with couples. Unforgiveness and its inherent emotions are among the main reasons for couples to seek help and counseling (Makinen & Johnson, 2006). According to our findings, clinicians should pay special attention to how attachment insecurity relates to dyad members' transgression-related motivations, which may affect the relationship satisfaction of both partners. An empirically validated attachment-based model to improve distressed relationships is Emotionally Focused Couple Therapy (EFT; Greenberg & Johnson, 2010). Within EFT, negative couple interactions, such as those resulting from unforgiveness, are reframed in terms of negative cycles, underlying emotions, and unmet attachment needs. EFT process of change includes three stages: de-escalation of negative cycles, restructuring of the emotional bond, and consolidation of therapeutic gains. Once the negative cycle has been de-escalated, central change events are the re-engagement of the more avoidant partner and the softening of the more anxious partner. This restructuration is a key aspect that helps alleviate distress and increase relationship satisfaction (Makinen & Johnson, 2006). Consistent with the EFT framework, our findings suggest that keeping physical and/or emotional distance and desires for revenge after a transgression could contribute to negative interaction cycles by respectively preventing avoidantly and anxiously attached partners from experiencing true gratification in their relationship. In addition, the limited desires for closeness and intimacy of

avoidantly attached individuals could negatively affect their partners' relationship satisfaction due to unmet attachment needs. Our finding that individuals' attachment anxiety could be beneficial for the relationship satisfaction of their partners by discouraging their withdrawal after transgressions also fits with the EFT notion that recognizing the partner´s attachment needs contributes to couple functioning (Greenberg & Johnson, 2010). Noteworthy, for transgressions that may constitute attachment injuries (e.g., infidelity), a specific model has been developed within the EFT approach, namely the Attachment Injury Resolution Model (Zuccarini et al., 2013).

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