



# Attachment Orientations and Family Functioning: The Mediating Role of Emotion Regulation

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#### **ABSTRACT**

Attachment insecurity has been found to be associated with poor family functioning. The mechanisms underlying this link, however, are less explored. This study examines the potential mediating role of emotion regulation in the association between attachment orientations and family functioning. Self-report scales measuring attachment, family functioning, and emotion regulation were administered to 132 adults (58% women; 57.63 years). Results showed that both attachment anxiety and attachment avoidance were associated with poor family functioning. Furthermore, emotion suppression, but not positive reappraisal, was found to partially mediate the association between attachment insecurity (both anxiety and avoidance) and perceived family functioning. Findings suggest that emotion regulation seems to play a role in the impact that attachment orientations may have on family functioning.

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Attachment; emotion regulation; perceived family functioning

## Introduction

The majority of studies has focused on the association between attachment orientations and the quality of romantic relationships, leaving less explored the impact that these patterns may have on the general perceived family context (Dickstein et al., 2004; Mikulincer & Shaver, 2012). The available studies centered on the perspectives that individuals have about their family functioning have demonstrated differences in perceived family functioning according to attachment orientations, such that more securely attached individuals tend to report higher or healthier family functioning, a more positive family climate and higher levels of family cohesion and adaptability in comparison to more insecurely attached individuals (e.g. Dickstein et al., 2004; Diehl et al., 1998; Mikulincer & Florian, 1999; Pedro et al., 2015).

Even fewer studies have therefore examined underlying mechanisms that might help to explain the link between attachment and family functioning, a step that is essential to improve family therapy (Mikulincer & Shaver, 2012). To date, only one study has examined the role of a potential mediator, namely marital satisfaction, as a linking mechanism in the association between attachment and perceived family functioning

(assessed in terms of cohesion, adaptability, and triangulation) (Pedro et al., 2015). The authors found that for women, both attachment anxiety and attachment avoidance were negatively associated with levels of marital satisfaction, which in turn were associated with levels of cohesion, adaptability, and triangulation. For men, however, only attachment avoidance was associated with family functioning with marital satisfaction mediating only the link between attachment avoidance and triangulation (Pedro et al., 2015).

The aim of the present study is to extend previous research by examining attachment in the family context and exploring the potential mediating role of emotion regulation. Emotion regulation has been found to mediate the association between attachment and individual psychological functioning within different contexts (e.g. Brandão et al., 2018; Cronin et al., 2018; Karreman & Vingerhoets, 2012). For this reason, we believe that these findings may be extended to the family functioning.

# **Attachment Theory and Family Functioning**

Attachment theory was initially developed by John Bowlby to understand infant-parent relationships but soon he recognized that attachment needs were activated "from the cradle to the grave" leading to researchers to examine attachment-related differences across the life span (Bowlby, 1969). According to attachment theory, infants, as result of the process of evolution and natural selection, would born innately equipped with a set of behaviors that allow them to form an emotional bond and to attain proximity from attachment figures to obtain safety and protection, essential for their survival (Bowlby & Base, 1988). The cumulative early life experiences with these figures as well as the supportive exchanges with them across life span would be responsible for the development of the internal working models (i.e. mental representations of themselves, the others and the world). These internal working models, also known as attachment orientations, would lead to subsequent dispositional differences in the way an individual evaluates, appraises, and behaves within close relationships (Fraley & Shaver, 2000; Mikulincer & Shaver, 2019).

Attachment orientations has been defined along two orthogonal dimensions: attachment anxiety and attachment avoidance (Fraley et al., 2015). Attachment anxiety would be characterized in terms of insecurities about others' availability as a result of inconsistent patterns of caregiving, leading to a greater worry and rumination about others' rejection and abandonment (Campbell & Marshall, 2011; Cassidy, 2000; Fraley & Shaver, 2000). Attachment avoidance would be characterized in terms of discomfort with others' closeness and emotional intimacy as a result of the emotionally insensitive and ineffective patterns of caregiving, leading to a tendency to invest less in relationships and to be emotionally independent (Campbell & Marshall, 2011; Hazan & Shaver, 1994).

It is now well recognized that attachment orientations shape romantic relationships with more insecurely attached individuals having more relational difficulties (e.g. Givertz et al., 2019; Martins et al., 2016; Sandberg et al., 2017). More securely attached individuals (i.e. those who are low in attachment anxiety and attachment avoidance) tend to report more stable and satisfying romantic relationships, to use more adaptive



patterns of communication within these relationships, and to experience higher levels of intimacy, commitment, and emotion involvement (Mikulincer et al., 2002).

Few studies, however, have explored attachment-related variations in family functioning. As Mikulincer and Shaver (2012) highlighted if there is evidence that attachment insecurity negatively impacts the romantic relationships, it is expected that this negative impact can extend to the family system. There is some evidence for the link between attachment and perceived family functioning. For example, Diehl et al. (1998) found that more securely attached individuals tend to describe their current family climate in a more positive way (in terms of adaptation, partnership, growth, affection, and resolve), in comparison to more insecurely attached individuals. Mikulincer and Florian (1999) found that more securely attached individuals reported high levels of family cohesion and adaptability, while more avoidantly attached individuals reported low levels of cohesion and adaptability and more anxiously attached individuals reported high levels of family cohesion but low levels of family adaptability. Moreover, Dickstein et al. (2004) found that individuals with a secure adult and marital attachment experienced a healthier family functioning. Finally, Crespo et al. (2008) found that both attachment anxiety and attachment avoidance were significantly associated with family ritual meaning.

Psychological mechanisms linking attachment orientations and family functioning remained underexplored. As previously described, marital satisfaction seems to be one important mediator (Pedro et al., 2015), but other potential mechanisms should be explored. We argued that one possible mediator between attachment and family functioning would be emotion regulation, a construct that is theoretically related to both attachment (e.g. Mikulincer & Shaver, 2019) and dyadic and interpersonal relationships (e.g. Bloch et al., 2014; Guerrero et al., 2009; Niven et al., 2012).

# **Emotion Regulation as a Linking Mechanism**

Emotion regulation is defined as "the processes by which individuals influence which emotions they have, when they have them, and how they experience and express these emotions" (Gross, 1998, p. 275). Most of the research on emotion regulation has followed the process model of emotion regulation proposed by Gross (1998) and has investigated the role of two specific strategies: cognitive reappraisal, an antecedent-focused strategy that includes efforts to change the way one thinks about an emotion-eliciting situation; and emotion suppression, a response-focused strategy that includes efforts to hide or inhibited the emotion-expressive behavior (Gross & John, 2003). Although cognitive reappraisal has been linked to positive outcomes because it occurs early in the emotion generative process allowing changing the emotional response, emotion suppression has been associated with poor outcomes since it occurs later in the emotion generative process, when only the behavioral aspect of the emotion response (and not the emotion response itself) can be modified (Gross & John, 2003). Moreover, distancing emotion strategies, such as emotion suppression, have been associated with more adaptational costs (e.g. Waldinger & Schulz, 2010).

Attachment theory is a useful framework for understanding individual differences in emotion regulation (Mikulincer & Shaver, 2019). Studies have shown that more avoidantly attached individuals tend to rely on emotion regulation strategies that favor cognitive distancing and emotional disengagement (i.e. use more attachment deactivating strategies) (Cabral et al., 2012; Mikulincer & Shaver, 2012, 2019; Pascuzzo et al. 2013). Specifically, they are more likely to use emotion regulation strategies such as denial and suppression of emotions or inhibition of emotional expression (e.g. Karreman & Vingerhoets, 2012; Monti & Rudolph, 2014; Winterheld, 2016). More anxiously attached individuals, on the contrary, tend to heighten their engagement in distress and to think anxiously or gloomily about situations (i.e. use more hyperactivating attachment strategies) (Mikulincer & Shaver, 2012, 2019). Specifically, they are more likely to use strategies such as rumination or intensification of emotional expression, especially negative ones (e.g. Burnette et al., 2009; Winterheld, 2016).

Emotion regulation has been associated with improvements in dyadic relationships outcomes, with more emotion communication and less emotion control being associated with more marital satisfaction (e.g. Bloch et al., 2014; Mirgain & Cordova, 2007). Moreover, emotion regulation skills have been mediating the association between attachment and marital satisfaction (Guerrero et al., 2009) and between attachment and coping (e.g. Cabral et al., 2012).

## The Current Study

So far, no study has examined the potential mediating role of emotion regulation on the association between attachment orientations and perceived family functioning. This study aims to extend previous findings by examining the associations between attachment, emotion regulation, and family functioning. Accordingly, given the role played by attachment orientations on shaping emotion regulation (e.g. Mikulincer & Shaver, 2012, 2019) and given the role played by emotion regulation in dyadic relationships (e.g. Bloch et al., 2014; Guerrero et al., 2009) and in interpersonal functioning (e.g. Niven et al., 2012), we hypothesize that attachment insecurity will be negatively associated with perceived family functioning through the use of less adaptive emotion regulation strategies (namely lower cognitive reappraisal and higher emotion suppression) (Gross & John, 2003).

#### Method

# **Participants**

Based on an a priori power analysis conducted with G\*Power software (version 3.1.7) for running multiple regressions, the desired sample size was set at 119, using an  $\alpha$  of 0.05 and a power of 0.95 to detect at least medium effect sizes (f=0.15) (Faul et al., 2009).

A community sample of participants were recruited through convenience sampling between March and June 2019 to participate in this cross-sectional study. The final sample consisted of 132 individuals, 76 females and 56 males, ranging in age from 38 to 83 years (M = 57.63 years, SD = 7.84). The majority of participants were involved in committed romantic relationships (64%), with a mean length of 27 years (SD = 12.83). Around 40% had a university degree and most were employed (68%).



#### Measures

All measures were completed in Portuguese. The demographic form included information regarding participants' age, gender, education, marital status, and length of relationship.

#### **Adult Attachment**

The Experiences in Close Relationships—Relationship Structure (ECR-RS; Fraley et al., 2011; Portuguese version: Moreira et al., 2015) was used to assess individual differences in attachment. The ECR-RS is a 9-item self-report questionnaire designed to assess attachment anxiety (i.e. concerns about abandonment) and attachment avoidance (i.e. discomfort with closeness) in close relationships (e.g. romantic partner, mother, and friend). Participants were asked to identify an adult person with whom they have a close and strong emotional relationship; then they were asked to rate each item in regard to their thinking about that person. Attachment anxiety included three items (item example: "I often worry that this person does not really care for me") and attachment avoidance included six items (item example: "It helps to turn to people in times of need"—item reversed). Each item is rated in a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). Internal consistency in the original validation studies varied between 0.72 to 0.91 for attachment anxiety and between 0.72 and 0.96 for attachment avoidance (Fraley et al., 2011; Moreira et al., 2015). In this study, internal consistency for both subscales was also good (Cronbach's  $\alpha = 0.88$  for attachment anxiety and 0.77 for attachment avoidance).

# **Emotion Regulation**

The Emotion Regulation Questionnaire (ERQ; Gross & John, 2003; Portuguese version: Brandão et al., 2017) was used to measure emotion regulation. The ERQ is a 10-item self-report scale designed to assess two dimensions of the emotion generative process, that is emotion suppression (i.e. changing the way one behaviorally responds to emotion-eliciting events) and cognitive reappraisal (i.e. changing the way one thinks about potentially emotion-eliciting events). Emotion suppression included four items (item example: "I keep my emotions to myself") and cognitive reappraisal included six items (item example: "I control my emotions by changing the way I think about the situation I'm in"). Each item is rated on a 7-point Likert scale ranging from 1 (strongly disagree) to (7) (strongly agree). Internal consistency in the original validation studies varied between 0.68 and 0.76 for emotion suppression and 0.75 and 0.82 for cognitive reappraisal (Brandão et al., 2017; Gross & John, 2003). Internal consistency for both subscales was also good in the present study (Cronbach's  $\alpha = 0.70$  for emotion suppression and 0.83 for cognitive reappraisal).

#### **Family Functioning**

The McMaster Family Assessment Device (FAD; Epstein et al., 1983) was used to assess family functioning. The FAD is a 60-item self-reported scale made up of seven dimensions: problem-solving, communication, roles, affective responsiveness, behavior control, and general functioning. For this study, only the general functioning dimension was used. The general functioning dimension included 12 items (item example: "We are able to make decisions about how to solve problems"). Each item is rated on a 4-point Likert scale ranging from 1 (strongly agree) to (4) (strongly agree). Internal consistency in the original validation study was 0.83 (Epstein et al., 1983). In this study, internal consistency was good (Cronbach's  $\alpha = 0.86$ ) but one item was excluded because it weakened the internal consistency of the subscale.

#### **Procedure**

This study was approved by the Ethical Committee of CIP – Universidade Autónoma de Lisboa. The objectives of the study and participation requirements were described in the front page and participants had the opportunity to raise questions. Written informed consent was obtained from all participants. The time required to complete the questionnaires varied from 7 to 10 min. Participants were volunteers and did not receive any incentive or monetary compensation for their participation in the study.

## **Data Analysis**

SPSS (version 25; IBM, SPSS Inc., Chicago, IL) was used to conduct the analyses. Associations among study variables were calculated using Pearson's correlation. Independent-samples *t* tests were conducted to explore gender differences among study variables. Mediation analyses were conducted using the PROCESS macro (Model 4) developed by Hayes (2015). Two models were tested. In the first model, attachment anxiety was the independent variable, cognitive reappraisal and emotion suppression were the mediators' variables, and the family functioning was the outcome. In the second model, attachment avoidance was the independent variable, cognitive reappraisal and emotion suppression were the mediators' variables, and the family functioning was the outcome.

Indirect effects were subjected to follow-up bootstrap analyses (bias corrected) with 5000 samples and a 95% percentile confidence interval estimate (CI). When CI does not include zero it means that the effect is significant (Hayes, 2015). Unstandardized coefficients were reported. The  $\alpha$  level was set at p < 0.05.

## **Results**

#### **Preliminary Analysis**

Descriptive statistics and correlations among the study variables can be found in Table 1. Attachment anxiety was positively associated with emotion suppression and negatively associated with family functioning. Attachment avoidance was positively associated with attachment anxiety and negatively associated with emotion suppression. Emotion suppression was negatively associated with family functioning.

We found gender differences only in cognitive reappraisal [t(130) = -3.11, p = 0.002] and emotion suppression [t(130) = 2.06, p = 0.040]. Women (M = 5.18; SD = 1.42) reported more cognitive reappraisal than men (M = 4.44; SD = 1.22) while men (M = 4.07; SD = 1.38) reported more emotion suppression than women (M = 3.56; SD = 1.45). No

| Table 1. Descriptive and reason correlations among study variables (N=132). |             |         |         |         |        |   |
|---|-------------|---------|---------|---------|--------|---|
|   | M (SD)      | 1       | 2       | 3       | 4      | 5 |
| 1. Attachment anxiety   | 3.04 (1.85) | -       |         |         |        |   |
| 2. Attachment avoidance   | 2.36 (.98)  | 0.113   | _       |         |        |   |
| 3. Emotion suppression  | 3.78 (1.44) | 0.255*  | 0.299*  | -       |        |   |
| 4. Cognitive reappraisal  | 4.87 (1.38) | 0.154   | -0.128  | 0.121   | _      |   |
| 5. Family functioning   | 3.19 (.54)  | -0.380* | -0.306* | -0.265* | -0.029 | - |

**Table 1.** Descriptive and Pearson Correlations among Study Variables (N=132)

Note. \*p < 0.01.

gender differences were found between men and women in attachment anxiety [t(130)] = 1.86, p = 0.065], in attachment avoidance [t(130) = 1.29, p = 0.199], nor in family functioning [t(130) = -0.56, p = 0.576].

#### **Mediation Models**

First, the total effects of attachment anxiety in predicting family functioning were examined. The relationship between attachment anxiety and cognitive reappraisal was not significant (b = 0.12, SE = 0.06, t = 1.78, p = 0.077) but with emotion suppression was (b = 0.20, SE = 0.07, t = 3.01, p = 0.003), with more anxiously attached individuals reporting higher levels of emotion suppression.

With all variables entered in the model, family functioning was significantly predicted by attachment anxiety (b = -0.11, SE = 0.02, t = -4.68, p < 0.001) and emotion suppression (b = -0.07, SE = 0.03, t = -2.21, p = 0.029) but not by cognitive reappraisal (b = 0.02, SE = 0.03, t = 0.57, p = 0.573)  $(R^2 = 0.18)$ . With emotion regulation strategies entered in the model, the association between attachment anxiety and family functioning statistically significantly reduced (b = -0.10, SE = 0.02, t = -4.06, p < 0.001), indicating a partial mediation. Examining the confidence intervals, emotion suppression had a significant indirect effect (effect -0.01, SE = 0.01, 95% CI -0.031, -0.001) but cognitive reappraisal had not (effect -0.00, SE = 0.00, 95% CI -0.006, 0.013).

Second, the total effects of attachment avoidance in predicting family functioning were examined. The relationship between attachment avoidance and cognitive reappraisal was not significant (b = -0.18, SE = 0.12, t = -1.47, p = 0.077) but with emotion suppression was (b = 0.44, SE = 0.12, t = 3.57, p < 0.000), with more avoidantly attached individuals reporting higher levels of emotion suppression.

With all variables entered in the model, family functioning was significantly predicted by attachment avoidance (b = -0.17, SE = 0.05, t = -3.66, p < 0.001) and emotion suppression (b = -0.07, SE = 0.03, t = -2.10, p = 0.038) but not by cognitive reappraisal (b = 0.02, SE = 0.03, t = 0.46, p = 0.644)  $(R^2 = 0.13)$ . With emotion regulation strategies entered in the model, the association between attachment anxiety and family functioning was statistically significantly reduced (b = -0.14, SE = 0.05, t = -2.91, p = 0.004) indicating a partial mediation. Examining the confidence intervals, emotion suppression had a significant indirect effect (effect -0.03, SE = 0.02, 95% CI -0.072, -0.002) but cognitive reappraisal had not (effect -0.00, SE = 0.01, 95% CI -0.012, 0.016).

Given the gender differences found in emotion regulation strategies, we tested a moderated-mediation model to examine if gender could be a moderator in the association between attachment (both anxiety and avoidance) and emotion regulation (PROCESS model 7) or the association between emotion regulation and family functioning (PROCESS model 14). The index of moderated mediation for all models was not significant.

#### **Discussion**

The present study examined the association between attachment insecurity (both anxiety and avoidance) and levels of perceived family functioning in a community-based sample of adults and explored the potential mediating role of emotion regulation on this association. While extant research has provided evidence for the link between attachment insecurity and perceived family functioning, the way attachment insecurity impacts family functioning is far less examined. With regards to our hypothesis, we found that, as expected, both attachment anxiety and attachment avoidance were negatively associated with levels of perceived functioning, which is in accordance with previous studies (e.g. Dickstein et al., 2004; Diehl et al., 1998; Pedro et al., 2015). Furthermore, we found that emotion suppression but not cognitive reappraisal, partially mediated this association.

It seems that the way individuals regulate their emotions, that are shaped by their attachment orientations (e.g. Mikulincer & Shaver, 2012, 2019), contributes to the way members of the family interact. Specifically, emotion suppression, a common strategy used by more avoidantly attached individuals, seems to be a costly form of emotion regulation with impact on social interactions in general (e.g. Richards et al., 2003) and in the family functioning in particular, as suggested by our findings. It seems that the reduced expression of emotions, promoted by the need for cognitive distancing and emotional disengagement—characteristics of the attachment avoidance (Mikulincer & Shaver, 2012, 2019)—may contribute to reduce family members responsiveness and to disrupt family interpersonal coordination and interaction by masking social signs and cues (e.g. Richards et al., 2003; Gross, 2002).

With regards to attachment anxiety, and contrary to some studies that highlight the use of more hyperactivating attachment strategies such as rumination or intensification of emotional expression (e.g. Burnette et al., 2009; Winterheld, 2016), we found that attachment anxiety was associated with more emotion suppression and, consequently, with poor perceived family functioning. This is not a surprise since findings about attachment anxiety has yielded mixed conclusions in terms of its link with emotion regulation (e.g. Feeney, 1995; Tan et al., 2012) and with family functioning (e.g. Crespo et al., 2008; Diehl et al., 1998). In terms of emotion regulation, their worries about their capacities to express their emotions and their doubts about the others' availability and responsiveness may lead them to suppress their emotions or to express their emotions in other ways (Mikulincer & Shaver, 2019). Both, the suppression of emotions and the possible expression of emotion in indirect ways can contribute to undermine family functioning. Overall, our findings seem to suggest that the social costs of emotion suppression are also extant to the family context. In terms of family functioning, some studies have found that attachment anxiety was related to higher cohesion. However, it seems that more anxiously attached individuals may confuse cohesion with intrusiveness given their needs related to closeness (e.g. Mikulincer & Shaver, 2012).

Results regarding cognitive reappraisal were null. We did not find any association neither with attachment nor with family functioning. More anxiously attached individuals are often insecure about others' availability and worried about others' rejection and abandonment (Campbell & Marshall, 2011; Cassidy, 2000; Fraley & Shaver, 2000). For this reason, it is possible that they present a reduced cognitive flexibility to reappraise events in a more positive way (Winterheld, 2016). The lack of association between attachment avoidance and cognitive reappraisal was already found in previous studies (e.g. Gross & John, 2003). As pointed by Winterheld (2016), engaging in cognitive reappraisal can be especially difficult for more avoidantly attached individuals because they would need to confront their attachment-related threatening thoughts. It seems that cognitive reappraisal may be an important emotion regulation strategy to take into account when studying secure attachment (Winterheld, 2016) but not when studying attachment insecurity.

#### **Limitations and Future Research**

We must acknowledge some limitations. This study relies on cross-sectional data which limits our capacity to determine the directions of the relationships and to draw causal inferences. Longitudinal studies are needed to improve our understanding about the associations among study variables.

Also, it is based on self-report questionnaires which can lead to response and social desirability biases. Moreover, relying on self-report data is not enough to understand the complex and dynamics associations between attachment, emotion regulation, and family functioning. Future studies should include other type of data collection (e.g. observation; daily diaries).

We use a convenience sample that can limit the generalization of findings. Also, we only collected data from one member of the family; a multi-informant approach should be adopted in future studies. Finally, cultural differences were not considered. Future studies should explore further this issue since differences according to culture have been found in previous studies (e.g. Western and non-Western societies; Alavi et al., 2020). Also, the age of the participants was not considered. Future studies should better understand the role of age on the link between attachment, emotion regulation, and family functioning.

# **Clinical Implications**

Our findings provide important insights for family therapists. Because attachment orientations are relatively difficult to change, identifying more malleable targets of interventions is critical. Emotion regulations strategies can be an important target in family therapy.

Family therapists may work with family members to promote more adaptive strategies for regulating their emotions. Especially, family therapists may contribute to improve family functioning by helping the family members (especially those with higher levels of attachment anxiety and avoidance) to develop more effective strategies to identify and sign emotions, and to express and respond to families' emotions.

#### **Disclosure statement**

The authors declare no conflict of interest.

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# Data availability statement

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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