Relationship between Insecure Attachment and Emotion Regulation: The Moderation Effect of Gender

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The present study aimed to investigate the potential moderation effect of gender on the relationship between insecure attachment and emotion regulation. We recruited 129 first-year psychology student participants from the University of Groningen, female = 100, male = 29, and ages ranging from 17 to above 25. They complete the Experiences in Close Relationships-Revised and the Difficulties in Emotion Regulation Scale. However, contrary to our hypothesis, the results did not display a significant moderation effect. Nonetheless, consistent with previous research, our findings indicated a significant association between insecure attachment and emotion regulation (β = .868, t = 7.68, p = <.001). People struggling with insecure attachment demonstrated poorer emotion regulation skills. In line with existing literature, these findings emphasize the role of attachment styles in shaping emotion regulation skills. Future research should explore additional factors, such as culture and socioeconomic status, that may influence this relationship. While we did not find significant evidence to support our hypothesis, this study contributes to the existing body of literature by shedding light on the association between insecure attachment and emotion regulation and the relevance of addressing attachment-related concerns in interventions aimed at improving emotion regulation skills.

Keywords: Insecure attachment, emotion regulation, gender

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In the past, research has increasingly focused on attachment styles (Del Giudice, 2019). Attachment and, more specifically, insecure attachment styles can be split into two different dimensions: Anxious and Avoidant. Anxious attachment describes the type of attachment where the person is most concerned with the fear of abandonment or rejection, as well as self-doubt. Avoidant attachment is mainly presented through the tendency to seek emotional distance along with strong independence from others and discomfort in intimacy (Brennan et al., 1998; Gillath et al., 2008). However crucial to understand is that both forms of insecure attachment derive from a parent-child relationship that lacks security. As these children develop, they learn to insecurely attach to their parents due to incoherent, unexpected behavior and mood changes in the caregivers/parents as a mechanism of self-preservation (Bowlby, 1969). Insecure attachment styles create fundamental problems for individuals, as they are relatively stagnant throughout life and influence any interpersonal relationship (Bowlby, 1969). Pearce et al. (2019) found that individuals with avoidant attachment tend to have fewer close friendships than the ones with anxious attachment. To establish gender differences between males and females, a study by Del Giudice (2019) found that boys generally scored higher on avoidance towards friends, and girls scored higher on anxiety in friendships.

Furthermore, stereotypically boys tend to portray more avoidant attachment, and girls more anxious attachment in general (Del Giudice, 2019). When investigating the mental health aspect of attachment, Fyske et al. (2021) found that insecure attachment is associated with being an indicator or a risk factor for many psychopathological disorders, such as substance use, but also overall anger control issues. Anger management and many other

forms of emotional control are a concern of emotion regulation/ coping skills, and hence emotion regulation will be further investigated.

Emotion regulation is defined as an adaptive approach to dealing with emotional stress (Gratz & Tull, 2010). It is described as an individual's experience of what they feel, how they feel it, and when/how they will express these feelings as a response (Gross, 1998). Gratz and Roemer (2004) established four components of what it means to be emotionally competent. Those are: (a) recognizing, comprehending, and acknowledging emotions, (b) being capable of pursuing goal-oriented actions while suppressing impulsive reactions when facing negative emotions, (c) utilizing contextually appropriate techniques to adjust the intensity and/or duration of emotional reactions, and (d) being prepared to tolerate negative emotions as a fundamental aspect of seeking fulfilling experiences in life. In sum, emotion regulation is about the inhibition of impulses when faced with negative emotions to regain control over one's behavior back, hence an essential contributor to, for example, anger management (Leith & Baumeister, 1996). The link between insecure attachment styles and emotion regulation suggests that parents with issues with emotion regulation are more likely to provoke insecure attachment in their children. These parents are incapable of coping with stress productively, and their children learn to copy and adapt to the parent's behavior (Marziali et al., 2003).

Consequently, a lack of emotion regulation abilities is also linked to behavioral issues and psychological disorders such as self-harming behavior and anxiety (Gross, 2013; Gross et al., 2006; Mennin et al., 2005; Midkiff et al., 2018). A general implication of emotion regulation is that women are more emotionally responsive and more capable of expressing a large variety of emotions, as well as increased emotional awareness (Van Middendorp et al., 2005; Barrett et al., 2000), on the other hand, men are more likely to express less variety and more particular emotions such as anger and lean more to suppression of the emotions they

feel uncomfortable with (Flynn et al., 2010). Garnefski et al. (2004) presented evidence that women are likely to use a wider variety of emotion regulation strategies and are more often vocal about their feelings. Overall, maladaptive emotion regulation skills are highly associated with reduced well-being as well as insecure attachment styles (Lewin & Rawana, 2021).

As previously mentioned, emotion regulation poses a problem in individuals with insecure attachment. Brenning and Braet (2013) did a study that portrays the association well. By performing two separate cross-sectional studies, they tested whether there was an association between attachment and emotion regulation (specifically dysregulation and suppression) and found supporting results for both. Suppression of emotion is a mechanism in which the individual actively inhibits the expression of an emotion. Dysregulation is when one experiences difficulties managing their emotions. Suppression is concerned with controlling the outward expression of one's feelings, and dysregulation concerns the internal experience of an emotional state (Brenning & Braet, 2013). They also found a trend that girls generally lean towards anxious attachment and emotion dysregulation, and boys report more avoidant attachment and difficulties with suppression of emotion (Brenning & Braet, 2013). Therefore, girls tend to experience emotion but cannot regulate/cope with this emotion. Whereas boys use suppression, meaning they try to minimize or avoid a negative emotion altogether.

Further research proposed that the initial attachment style influences the emotion regulation strategies that are being developed later in life. This is fundamentally important as these mostly prolong throughout a lifespan (Brumariu, 2015) and thus influence daily life. Anxiously attached individuals were found to exaggerate their emotions more, likely to garner the caregivers' attention and affection (Shaver & Mikulincer, 2002). Altogether, insecurely attached individuals have decreased flexibility when faced with regulating

negative emotions due to their lack of opportunities to learn productive emotion regulation skills at home or in other relationships.

Combining the three variables (gender, attachment, and emotion regulation) might be a promising approach for future directions in structuring psychotherapy for individuals dealing with insecure attachment and emotion regulation issues (Slade & Holmes, 2019; Hallion et al., 2018). Since there is evidence that gender differences can be observed within emotion regulation as well as insecure attachment, the association of the two might differ among the genders; hence we further investigated it. Available data support this assumption, such as Velotti et al. (2016). Velotti et al. (2016) examined this moderation effect of gender on emotion regulation considering attachment style in newlywed couples and found significant results. However, research on this relationship is limited to Velotti et al. (2016) and this study. To broaden the understanding of why gender plays an important role, the current study aimed to investigate further the effect of gender on the association between insecure attachment and emotion regulation. Based on the findings of the previous study (Velotti et al., 2016), it was hypothesized that gender would moderate the association between insecure attachment and emotion regulation, such that women show a more robust association compared to men.

The gap to fill with this study is more background information on different samples and how they may vary (from, let us say, newlywed couples from South Africa), not specifying relationship status but attachment in general. It aims to generalize the research body when compared to previous studies done by Velotti et al. (2016) and Brenning and Braet (2013), with the main focus on the moderation effect and not the different dimensions of each scale.

Method

Procedure

The participants were first-year psychology students at the University of Groningen recruited via the SONA platform. The data was assessed through a self-report format that lasted approximately 30 minutes. First, the participants were provided with information about the content of the study and thereupon asked to give consent to the study, disclosing to them that this study might provoke slight distress for individuals struggling with interpersonal relationships. We ensured their unidentifiability by only collecting their SONA numbers and deleting them before further investigating the data. Afterward, the participants were asked to provide information regarding their age as well as their gender. Afterward, the participants completed the survey. After completing the survey, we provided a mood repair exercise to mitigate the potential distress caused by the survey. Afterward, we presented them with a debriefing form to inform participants of the aim of the study in more detail. Finally, we provided contact information in the form of the email address of our instructor. The university student counselors' contact information was also provided for those needing follow-up support in case of psychological distress. The participants received research credits in exchange for their participation. The data was designed and collected through Qualtrics and approved by the Ethics Committee of our University.

Participants

The study was posted on the Sona first-year participant pool of the University of Groningen, where the first-year students could sign up for participation to gain 0.8 credits. Students were asked to indicate their age (ranging from 17 to above 25); 67 participants (46.9%) indicated being between the ages of 16 and 20 years old; 66 (46.2%) reported to be between age 20 and age 25, and the minority, 3 participants (2.1%) stated their age to be 25 or above. When asked about gender following pattern emerged, their gender female = 100 (76%); male = 29 (22%); other = 3 (2%). We had an original sample of N =143 participants. Our sample included 7 participants that had some missing values. Hence they were excluded.

Furthermore, participants who indicated “other” or “do not wish to answer”, thus not identifiable on a binary scale, were removed from our data as well, giving us a total sample of N = 129.

Measures

Experience in Close Relationships-Revised (ECR-R)

ECR-R is a 36 items questionnaire measuring adult attachment (Fraley et al., 2000). It is divided into two subscales: anxiety (α= .94) and avoidance (α= .91) in romantic attachment. In total, 18 items measure anxiety (e.g., *“I often worry that my partner does not really love me”*), with items 9 and 11 being reverse-coded. Furthermore, the other 18 items measure avoidance (e.g., *“I prefer not to be too close to romantic partners.”*). The questionnaire is formatted on a Likert scale (1= *“strongly disagree”*; 7= *“strongly agree”*). Moreover, the two subscales, anxiety (α = .93) and avoidance (α =.87), show significant reliability in our sample.

Difficulty in Emotion Regulation Scale (DERS)

The DERS is a self-report questionnaire consisting of 36 items designed by Gratz and Roemer (2004) with great internal consistency (α= .93). The scale measures emotion regulation by asking participants to what degree item statements apply to them. It is formatted on a five-point Likert scale reaching from 1= *“almost never”* to 5= *“almost always*”. The items 1, 2, 6, 7, 8, 10, 17, 20, 22, 24, and 34 were reverse coded. This instrument is divided into six subscales, namely: Non-acceptance of emotional responses, Difficulties engaging in goal-directed behaviors, Impulse Control Difficulties, Lack of emotional awareness, Limited access to emotion regulation strategies, and Lack of emotional clarity. An example item is: *“I have difficulty making sense out of my feelings.”* Our study showed high internal consistency for the DERS (α= .94).

Data analysis

The data was analyzed by SPSS v.29 with an extension of the Macro PROCESS Model v.4.2 by Hayes (2012), using model 1. with 5000 bootstrap samples. We checked assumptions according to linear regression models and found that all assumptions were met (elaborate in the result section). A moderation analysis was then performed on the dependent variable, emotion regulation, the independent variable, insecure attachment, and the moderator gender.

Results

Information on descriptives and demographics are presented in Table 1

Table 1.

Descriptive Statistics

	N	*Mean (SD)*	*Min-Max*	*Skewness*	*Kurtosis*
ECRR	131	156.27 (23.01)	111-225	.55	-.16
DERS	129	221.44 (35.18)	147-290	-.26	-.72

A Macro PROCESS analysis was performed to investigate the moderating effect of gender on insecure attachment and emotion regulation. The first step was to check the assumptions for moderation (Hayes, 2012).

Assumption Check

First, we examined the assumption of linearity of the variables, which was met based on the scatterplot. Next, we checked multicollinearity by investigating the variance inflation factor (VIF = 1, Tolerance = 1) and proved it was not an issue as it was below the suggested cutoff score (= 4). The third assumption is the independence of residuals. By looking at the

Durbin Watson = 2.035, we can see that this assumption since it is within the acceptable range of 1.5 to 2.5 (Garson, 2012). Additionally, we created a P-P Plot to test for normality. After examining the plot, we can conclude that we had a normal distribution. We continued by checking for outliers, concluding that we do not have outliers in our sample, examining the Cook's distance with all values being below (= 1). Therefore, all assumptions for moderation analysis were met.

Moderation analysis

The moderation was performed on the dependent variable, emotion regulation, the independent variable, insecure attachment, and the moderator gender. The results showed that the interaction effect between my independent variable, insecure attachment and gender was not significant (β = -.361, *F(1, 121)= 1.02*, p = .315, t = -1.00, *95% CI* [-1.07, .348]). Thus, gender did not moderate the effect of insecure attachment on emotion regulation. Hence, our hypothesis was rejected, which means that the association between insecure attachment and emotion regulation was not different between males and females in our study. However, the main effect of insecure attachment on emotion regulation was significant (β = .868, t = 7.68, p = <.001), indicating a significant positive relationship between the independent variable insecure attachment and the dependent variable emotion regulation.

Discussion

In this study, we investigated the moderation effect of gender on the relationship between insecure attachment and emotion regulation. Our study hypothesized that gender would function as a moderator for the previously mentioned relationship. There was no significant interaction effect of gender on insecure attachment and emotion regulation, suggesting that there is no observable difference in the relationship between insecure attachment and emotion regulation tendencies among males and females. When comparing our results to previous studies, it is essential to mention that our results are inconsistent with a study by Velotti et al.

(2016). Velotti et al. (2016) similarly investigated gender as a moderator in the relationship between insecure attachment and emotion dysregulation. They found that gender does moderate this association for one dimension of the DERS, namely the Goals subscale. The goals dimension concerns the amount of effort needed to maintain one's goals when faced with emotional stressors. High scores on this dimension indicate greater difficulty in the maintenance of effort towards one's goals. They found that the Goal subscale predicts the interaction effect of gender on the association between insecure attachment (avoidant and anxious) and emotion regulation. In detail, they found that females that reported greater attachment anxiety show greater difficulty in the maintenance of goal-directed behavior. When investigating attachment avoidance, they discovered that greater avoidance corresponds with greater scores on the Goals subscale in males and lower scores on the Goals subscale in females (Voletti et al., 2016). It can be assumed that this contradicting evidence stems from the sample that was investigated in the current study. While we used a sample of first-year psychology students, with the majority being females, Voletti et al. (2016) examined a sample of 229 newlywed couples, having an equal amount of males and females. Additionally, they inspected the different dimension of each scale and their subscales and not the overall effect.

Even though our results for the moderation analysis were insignificant, we did find significant results for the main effect between insecure attachment and emotion regulation. This is in line with previous research by Brenning and Braet (2013). They examined the association between insecure attachment and emotion regulation and found that emotion dysregulation and suppression of sadness and anger were positively related to anxious attachment. An avoidant attachment was positively related to anger dysregulation and sadness suppression. Individuals with insecure attachments might tend to rely on maladaptive emotion regulation skills. This might be due to the fact that individuals with insecure

attachment most likely had caregivers incapable of teaching/modeling adaptive emotion regulation skills to their children (Bowlby, 1969). These assumptions align with previous research by Brenning and Braet (2013).

Limitations and Future Directions

Generally, the study procedure was well planned out, with a convenient sample of first-year psychology students at the University of Groningen and a self-report online questionnaire consisting of two scales plus a mood repair. However, the sample might be one of the major limitations as we did not have a sufficient balance between male (22%) and female (78%) participants, giving us exponentially more data for the female compared to the male participants. Additionally, we did not consider non-binary individuals in our study, which poses a limitation of inclusivity of our results. The overall sample was relatively small ($N = 129$) and not sufficient enough to reach power with a small effect size ($d = 0.02$, $p < .05$), meaning that our study might lack the capacity to adequately detect statistically significant effects, even if they exist in our population. Suggestions for future research would be a general population sample, as compared to psychology students. Psychology students might portray biased beliefs towards the two dimensions of concern (insecure attachment and emotion regulation), as they are key concepts within their field of study/interest. As well as a sample that is more balanced regarding the number of males and females, maybe even considering non-binary people. Additionally, thriving for a bigger sample would help to meet power requirements in future research.

Generalizability is an essential aspect of most studies within the field of psychology. Nonetheless, we did not consider differences in cultural backgrounds and how they might affect these associations as well as the moderation. Van Lijzendoorn and Kroonenberg (1988) found that overall secure attachment is the most common type of attachment in all cultures.

However, they also found some variation within insecure attachment between individualistic and collectivist cultures. Individualistic countries show higher levels of anxious-avoidant attachment, probably due to thriving for independence in these cultures. On the other hand, collectivist countries showed more ambivalent resistance as they experienced more communal living and separation from the primary caregiver (Van Lijzendoorn & Kroonenberg, 1988). In addition, although we did have an item asking for the subject's age, we did not analyze different age groups and how they might experience differences on the two scales. Giromini et al. (2017) found that, as age increases, scores on DERS decrease, meaning that individuals will show less difficulty in emotion regulation with increasing age. Overall, it can be assumed that the socioeconomic status of most participants is somewhere along the lines of the upper middle class, as most international students need to be able to pay the tuition fee at this university.

Previous studies have investigated the differences in socioeconomic status and emotion regulation skills and found significant results. Troy et al. (2017) investigated this relationship using the Emotion Regulation Questionnaire (ERQ). They found a significant interaction between socioeconomic status and the cognitive reappraisal ability dimension of mentioned scale, which means that a higher capability of cognitive reappraisal was linked to fewer depressive symptoms among individuals low in socioeconomic status. Therefore, it would be interesting to investigate the moderation of gender on insecure attachment and emotion regulation, considering these underlying factors and investigating how they differ in different contexts. Another limitation might be that our participants had external motivation to participate. They need SONA credits to fulfill the requirements of the propaedeutic year of the University of Groningen, and our study provided them with 0.8 Sona Credits. This might have influenced their responses as they were less interested in the research and more focused on their gain. This might have led to some individuals not filling out the entire questionnaire

in our sample. Hence they had to be deleted, reducing our sample size. Additionally, we used self-report measures that are viable to biases.

In conclusion, our research question was solely concerned with the moderation effect of gender on insecure attachment and emotion regulation. It did not specifically investigate the different dimensions of either insecure attachment or emotion regulation. Our interest was whether there was a general difference in attachment and emotion regulation among the genders to establish what the majority of males or females struggle with within interpersonal relationships. This might simplify future clinical practice through faster categorization of properties of underlying mechanisms of the patient. Because we did not find any difference between the genders, a suggestion for future research would be to look more into the different dimensions of each scale and how they differ among genders.

Theoretical and Practical Implications

Even though we did not find significant results for the interaction effect, our results suggest that the association between insecure attachment and emotion regulation is the same for men and women. Nonetheless, there are implications that can be drawn from the significant main effect observed in our study. Firstly, insecure attachment can function as a risk factor for emotion dysregulation. Insecure attachment immensely affects mental health (Flykt et al., 2021). Flykt et al. (2021) found that insecure attachment functions as a risk factor for many psychopathological disorders, substance use. Similarly, Slade and Holmes (2019) highlight in their work the importance of understanding the clients' attachment in all interpersonal relationships and how it influences therapy outcomes positively or negatively. They highlighted that the attachments of therapist and client interact, meaning an anxious therapist is likely to heighten a patient's defense mechanism. Contrary, a secure attachment

between therapists and clients can predict greater participation in therapy (Slide & Holmes, 2019).

Lewin & Rawana (2021) found that maladaptive emotion regulation skills are associated with reduced well-being, as well as insecure attachment, posing a greater risk for any psychopathology. Hallion et al. (2018) were able to provide evidence for the DERS having predictive utility in adults with psychopathological disorders. Leading me to the implication that since, in our sample, the association between insecure attachment and emotion regulation could not be moderated by gender, both men and women struggling with these two concepts are at the same risk for poor well-being. Moreover, our study and other research suggest that insecure attachment and emotion regulation are highly associated with each other, potentially leading to a more informed, client-focused approach to therapy and more potential positive future outcomes when combined (Brenning & Breat, 2013). Learning about the patients attachment style can give information on how to address maladaptive emotion regulation strategies, and therefore improve psychopathological symptoms and well-being. Liu and Ma (2019) provided evidence for this relationship, discovering that emotion regulation mediating the relationship between insecure attachment and substance abuse. Other research on adults in romantic relationships further reinforces this notion. Their evidence proved that anxious attachment and emotion dysregulation have strong impact on reports of psychopathological distress. Hence Pascuzzo et al. (2015b), proposed that attachment focused incentives such as Emotion Focused Couples Therapy (EFT; Johnson, 2004) could functionally reduce psychopathological symptoms through addressing attachment and emotion regulation strategies. This incentives works especially good for individuals with anxious attachments. Another type of interventions for family conflicts is the Attachment Based Family Therapy (ABFT) by Diamond et al. (2003), focuses on improving

attachment relationship between adolescent and parent with psychopathological symptoms such as depression.

Conclusion

In sum, our results did not provide support for the moderating effect of gender on the association between insecure attachment and emotion regulation. However, they did support previously found evidence for the association between insecure attachment and emotion regulation. This points out the importance of understanding the interplay of attachment and emotion regulation and how understanding this can aid therapists. Our sample was small, as well as unbalanced among the genders. Additionally, we did not consider contextual factors such as culture and socioeconomic status. Future research should try to incorporate these factors into their analysis to further our understanding of the relationship between insecure attachment and emotion regulation throughout different contexts. More advanced therapy programs should be developed to address the association between insecure attachment and emotion regulation and to improve psychopathology.

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