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Personality Vulnerability as a Mediator between Attachment and Depression: The Moderating Role of Self-Esteem

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Abstract

Objective: The purpose of this study was to investigate the effect of insecure attachment to depression, through the mediation of personality vulnerability and the simultaneous moderation of self-esteem, in the context of a two configurations psychodynamic conceptual framework, namely interpersonal relatedness and self-definition. **Methods and Measures:** The participants were 323 outpatients, recruited from mental health centers and the psychiatric departments of general hospitals in Athens, Greece. They were administered the Cartes de Modèles Individuels de Relations—CAMIR, the Depressive Experiences Questionnaire—DEQ, the Rosenberg Self-Esteem Scale—RSES, and the Beck Depression Inventory—BDI. We employed hierarchical regression and moderated mediation analysis. **Results:** Depression correlated negatively with self-esteem and positively with all the other measures and was significantly predicted by all the variables. Consistent to our expectations, results also indicated that the self-critical mediating process, that is responsible for producing the effect of the detached attachment style on depressive symptoms, depends significantly on the value of self-esteem. However, the, mediated by dependency, association between preoccupied attachment pattern and depressive symptomatology was not significantly moderated by self-esteem. **Discussion:** The identification of at-risk individuals and the selection of the suitable and effective intervention may be especially helpful for the clinicians who work with individuals with depression.

Keywords

Depression, Attachment, Dependency, Self-Criticism, Self-Esteem

1. Introduction

Major depressive disorder (MDD) represents a common, often chronic and recurrent, gravely impairing mental disorder. It is considered as the leading cause of disability in terms of quality of life, mortality, and morbidity, with great socioeconomic impact (Blackburn, 2019; Chen et al., 2025; Greenberg et al., 2021). In view of its detrimental effect, it is of great importance to examine the factors that are accountable for its recurrence, endurance, and aggravation. Shedding light on them may promote prevention and treatment endeavors.

1.1. Vulnerability and MDD

In recent years several studies have explored the potential relation between personality variables and MDD. Blatt (1974) proposed, from a psychoanalytic perspective, a model in which personality evolves through the dialectic transaction between two personality configurations, the anaclitic and the introjective, each of which arises from disruptions in the developmental process of establishing interpersonal relatedness and attaining self-definition, a positive sense of self, respectively (Blatt & Shichman, 1983). Blatt (2008) postulated that the normal developmental process can lead to the formation of mature, satisfying relationships involving reciprocity and mutuality. It can also give rise to the establishment of an integrated, consolidated, and differentiated self-identity and sense of individuality. This theoretical formulation has been validated in studies of MDD (Blatt et al., 1982; Straccamore et al., 2017; Zuroff & Mongrain, 1987). Hence, disruptions in the aforementioned process provoke psychological disturbances or else vulnerabilities to MDD, that is dependency and self-criticism. The former personality type seeks for approval of others and becomes depressed when important social ties are thwarted. The latter gains approval through academic or work success. The distorted preoccupation with issues of relations and the neglect of issues of self-definition can be a source of distress. Conversely, the exaggerated worry about accomplishments and achievement omitting the concern about relations can also cause depressed mood. The two configurations, apparently, were conceptualized into measurable depressogenic dimensions through the Depressive Experiences Questionnaire, dependency and self-criticism (Blatt et al., 1976).

1.2. Attachment and MDD

Attachment has been associated with adult depressive symptomatology (Roberts et al., 1996). Childhood experiences become encoded into relationship patterns named internal working models (Bowlby, 1973) that may resemble a mental strategy. Three adult attachment categories have been delineated by Main (Main & Goldwyn, 1984). The autonomous includes people who are objective and self-confident, and lack defensive behavior; while those with elevated scores in the preoccupied/enmeshed attachment tend to feel overwhelmed in their close relationships, they are afraid of abandonment, and are not sure about the commitment of those proximate to them. Finally, people with detached/dismissing attachment reject re-

lationships, do not trust their family members, appreciate self-sufficiency, independence, and emotional control, and their idealized self-image can be overturned.

Along with the previously stated associations, literature encompasses studies regarding correlations between personality vulnerabilities, attachment patterns, and MDD (Cortés-García et al., 2020; Morley & Moran, 2011; Wei et al., 2004). Blatt's (1974) descriptions of the two personality constructs share similarities with the two main insecure attachment patterns, the enmeshed/preoccupied and the avoidant/dismissing. Common to both frameworks is the combination of two paths, of self and others, pertaining to MDD, namely the focus on the development of the self in a relational context. On the one hand, the fear of losing acceptance and love or being abandoned by the rejecting important others is the area of agreement between anaclitic dimension and preoccupied attachment. On the other hand, the mental representation of self as weak and incompetent and of others as critical and, subsequently, the ambivalence about one's self-image, when someone realizes the difference between the ideal and the real, seems to be the common ground between introjective dimension and detached attachment (Corveleyn et al., 2005). The relationship between vulnerability types and attachment in MDD has been emphasized by researchers (Klerman et al., 2004; Levy & Blatt, 1999).

1.3. Self-Esteem and MDD

Another relationship that has received attention is the association of attachment with self-esteem and MDD (Hankin et al., 2005; Kang et al., 2014). Self-esteem refers to how people approve of and value themselves (Blascovich & Tomaka, 1993). The relationships throughout one's life are transformed into models, representations of self and others. These early transactions become working models in the adult life that function as rules concerning the achievement of self-worth and the availability and responsiveness of the others. Insecure attachment may lead to poor self-perception and to negative view of oneself and important others and contribute to MDD (Bowlby, 1980). Wei et al. (2005) have indicated the mediational role of self-image in the association between insecure attachment and MDD. Self-esteem has been studied both as a causal risk factor for and as a consequence of MDD (Orth et al., 2009). Nevertheless, relatively little work has been conducted regarding the potential connection between self-esteem and depressive vulnerabilities. Dependency may involve reciprocity and at the same time a clear and well-articulated sense of self, because the development of an individual as a demarcated entity is defined by the increasing capacity for mature interactions with significant others. The differentiation, integrity, and autonomy of one's self emerge, are established, and maintained through interpersonal relationships (Blatt, 2008). Self-criticism has also been linked with self-esteem (McCranie & Bass, 1984).

1.4. Hypothetical Model

Overall, in line with the two-polarities theoretically and empirically supported model of personality developed by Blatt (Blatt, 2004, 2008), that was used as a

valid framework in order to formulate our hypothetical model, this study focused on the intermediate factors between attachment and MDD. More precisely, in keeping with previous research, preoccupied attachment accords with the dependent vulnerability type (Zuroff & Fitzpatrick, 1995) and is expected to connect, through the loss of object love, with low-self-esteem. On the other hand, detached attachment is associated with self-critical vulnerability type (Zuroff & Fitzpatrick, 1995) and is expected to link, via the loss of ideal self-image, with low self-esteem. In light of the above-mentioned hypotheses, we explored the, mediated by personality vulnerability, relation between insecure attachment and depressive symptoms, via the moderation of self-esteem (**Figure 1**).

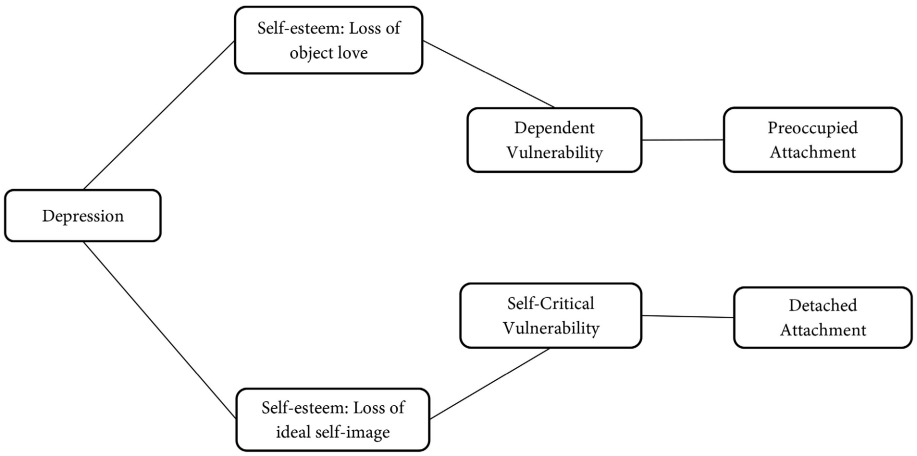

Figure 1. Hypothetical model.

Consistently with this aim, the following hypotheses were tested: Dependency will significantly mediate the association between preoccupied attachment and MDD, while self-criticism will significantly mediate the association between detached attachment and MDD. Simultaneously, self-esteem is expected to regulate the association between attachment, depressive vulnerability types, and depressive symptoms (Blankstein et al., 2008; Iancu et al., 2015; Rice et al., 1998). Researchers have investigated depression with other variables, for instance De Alwis et al. (2024) examined the connection between the need for affiliation and depression in university students, taking into consideration the mediating and moderating role of self-esteem and insecure attachment. Moreover, a meta-analysis (Smith et al., 2021) of longitudinal studies has explored the relationship between depressive vulnerability and depressive symptoms. Nevertheless, to the best of our knowledge, our study is the first to determine the jointly role of these psychological traits in MDD.

2. Materials and Methods

2.1. Participants and Procedure

A convenience sample of 323 adult outpatients, aged between 18 and 56 years, participated in the research. This study primarily received permission from the

Institutional Review Board of the University of Athens and approval from the National Health Operations Center and the directorate of each of 15 outpatient clinics of mental health centers and psychiatric departments of general hospitals in Athens, Greece, which implement a protocolized diagnostic process. Then the psychiatrists of each setting were contacted and 18 psychiatrists agreed to cooperate. During the study, the patients visiting these settings were attending either their first appointment or a subsequent, re-examination, one. The diagnostic procedure included the psychiatric interview, that lasted almost an hour, whereas the subsequent appointments were shorter in duration. The individuals who were approached and agreed to participate in the study numbered 345. They were recruited for the research voluntarily, on the basis of their medical file according to which, those who met the DSM diagnostic criteria for major depressive disorder, single episode or recurrent, joined the study group. The exclusion criteria comprised additional psychiatric disorders, such as bipolar disorders, organic brain syndrome, severe alcohol or drug addiction, mental retardation or other cognitive impairment that might create impediments in the accuracy of the assessment. The comorbidities permitted were dysthymic disorder, anxiety and personality disorders. All the selected subjects were administered the BDI and did not take part if they had a score of ≤10, that is, the cut-off score of mild depression according to the US and the Greek standardization samples (Tzemos, 1984). Subsequently, 19 patients were excluded due to their BDI score, as well as three questionnaires with missing values, that reached or exceeded 2% of the items. The remaining 323 individuals received a consent form with information about the purpose of the study, its confidential nature, their ensured anonymity, and the ability to communicate with the researchers. The completion of the questionnaires took place at the waiting areas of the settings, under surveillance, in individual sessions, after the appointment with their psychiatrist and responding to BDI; and it lasted approximately an hour and a half. The procedures followed were in accordance with the Declaration of Helsinki ethical principles. No reward or compensation were offered.

2.2. Measures

Vulnerability was measured by the Depressive Experiences Questionnaire-DEQ (Blatt et al., 1976). It includes 66 items and three factors, dependency, and self-criticism, corresponding to the anaclitic and introjective type, respectively, and efficacy, that was excluded from the present study, because it was outside of its scope and it is not included in Blatt's theoretical concept. Participants rate the statements on a 7-point Likert scale from 1 (strongly disagree) to 7 (strongly agree). Since there is no Greek version, the multiple forward backward approach, suggested by Guillemin et al. (1993), was applied. Confirmatory factor analysis was carried out with AMOS (version 21) to corroborate the factor structure. It showed a good fit to the data according to the fit indices, χ^2 (271) = 617.541, $p < .001$, $\chi^2/df = 2.279$, GFI = .94, TLI = .94, CFI = .95, RMSEA = .04, SRMR = .05. The Cronbach's alphas in the current study were .86 and .81 for dependency and

self-criticism, correspondingly.

Insecure attachment was evaluated by Cartes de Modèles Individuels de Relations-CAMIR (Pierrehumbert et al., 1996). It is a 72-item scale that describes the attachment strategies and provides information on the quality of an adult's attachment through internal working models. Responses are given on a 5-point Likert scale ranging from 1 (totally true for me) to 5 (totally untrue for me). It includes four templates, the secure and the insecure, the preoccupied, the detached, and the unresolved that was out of the current study's aim. Based on the research of Bowlby and Ainsworth, CAMIR has acceptable psychometric properties with the coefficient alpha ranging from .68 to .95 and has been associated with MDD, suicide attempts, and schizophrenia (Pierrehumbert et al., 2002). In its Greek standardization, coefficient alpha values ranged from .73 to .80 (Theotoka et al., 2001). In the current study the coefficient alphas were .77 and .90 for preoccupied and detached attachment, respectively.

The Rosenberg Self-Esteem Scale-RSES (Rosenberg, 1965) was administered to document general self-worth. It comprises 10 items and uses a 5-point scale that ranges from 1 (totally disagree) to 5 (totally agree). The internal consistency was good with alpha coefficients ranging from .77 to .88. The test-retest reliability index has ranged from .85 to .88. RSES has also exhibited good concurrent, predictive, and construct validity (Blascovich & Tomaka, 1993). In its Greek validation the coefficient alpha was .80 (Galanou et al., 2014). The coefficient alpha in the current study was .77.

Beck Depression Inventory-BDI (Beck et al., 1961) was used to measure the severity of recent depressed mood and has been validated in the Greek language (Tzemos, 1984). It is an instrument containing 21 items that reflect symptoms' intensity rating from 0 to 3. It has showed good reliability with an average coefficient alpha of .81 and .86 in non-clinical and psychiatric populations, correspondingly. The test-retest reliability has ranged from .48 to .86 in clinical populations and from .60 to .90 in non-clinical populations. High construct, discriminant, and criterion validity have also been demonstrated with BDI (Beck et al., 1988). The coefficient alpha in this study was .75.

2.3. Statistical Analysis

Initially, means, standard deviations, and correlations (Pearson's r) between all study measures were computed. In order to test the hypothesis that the variables play an important role in predicting MDD, a hierarchical multiple regression analysis was carried out controlling for confounding demographic variables, such as comorbid disorder, hospitalization in a psychiatric department, psychotherapy, and pharmacotherapy, that were not used in the moderated mediation analyses. We finally performed mediation and moderation analyses into a unified model (Hayes et al., 2017; Hayes & Preacher, 2013). The bootstrapping technique with bias-corrected 95% confidence intervals was taken with 5,000 resampling (Preacher & Hayes, 2008). This approach was used to assess the statistical significance of the indirect effect, from the independent variable to the dependent through the me-

diator, across differing levels of the moderator (Hayes, 2015, 2017; Mackinnon et al., 2004). In particular, insecure preoccupied attachment was the predictor variable, with dependent vulnerability as the mediator in the first case, whereas insecure detached attachment was the predictor with self-critical vulnerability as the mediator in the second case. The outcome variable was depressive symptoms and self-esteem was the proposed moderator. Hence, we tested the conditional indirect effect of self-esteem on the relationship between insecure attachment and depressive symptoms via depressogenic vulnerability to depressive symptoms. **Figure 2** presents the hypothetical conceptual, moderated mediation, model that tests whether self-esteem moderates the direct effect c' (prime) and the effect of path b. If the resampling distribution confidence interval of the indirect effect does not include zero, the indirect effect is considered statistically significant (Preacher & Hayes, 2008). All analyses were attained by SPSS-26 and PROCESS, a regression-based modeling tool designed to analyze effects in multiple mediation and moderation models (Hayes, 2015, 2017).

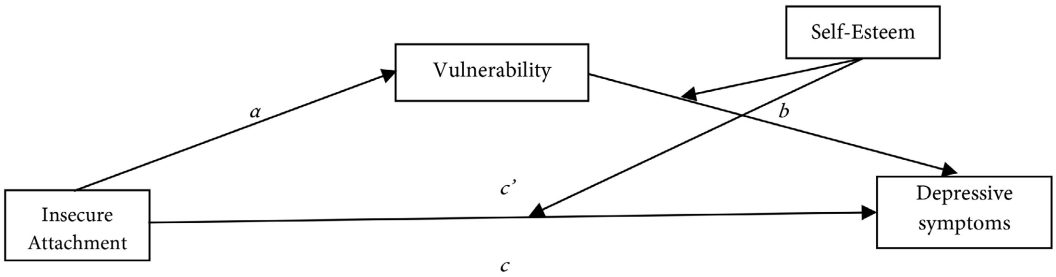

Figure 2. Moderated mediation model: Relationship between insecure attachment and depressive symptoms mediated by vulnerability and moderated by self-esteem.

3. Results

3.1. Descriptive Statistics, Correlations, and Hierarchical Multiple Regression

The sample of the study consisted of 323 MDD outpatients, with a mean age of 37.4 years (SD = 11.7), 67 (20.7%) males and 256 (79.3%) females, 22 (6.8%) with elementary, 21 (6.5%) junior high-school, 127 (39.3%) high-school, 44 (13.6%) college, and 109 (33.8%) university graduate or post-graduate education. Among them 96 (29.7%) had comorbidity with dysthymic disorder, anxiety and personality disorders whereas 227 (70.3%) did not, 173 (53.6%) had received or received pharmacotherapy while 150 (46.4%) had never taken medication, 173 (53.6%) had been or were treated with psychotherapy whereas 150 (46.4%) had never undergone treatment, and 291 (90.1%) had never been hospitalized while 32 (9.9%) had been hospitalized in the past. Participants were predominantly (94.4%) of Greek origin.

The means and standard deviations are presented in **Table 1**. Most of the correlations were small to medium. The two insecure attachment patterns demonstrated the strongest association. Dependency showed a higher positive correlation with MDD than self-criticism. Self-esteem had negative correlations with all the measures. Subsequently, according to the Beta values of the hierarchical mul-

tiple regression all the variables were significant predictors of MDD (Table 2). More specifically, the control variables predicted 9.8% of the variance, F (4, 318) = 9.777, $p < .001$ (step 1), preoccupied and detached attachment (step 2 and 3) predicted 14.9% of the variance, F (5, 317) = 12.294, $p < .001$, and 16.2% of the variance, F (6, 316) = 11.370, $p < .001$, of MDD, respectively. When dependency and self-criticism (steps 4 and 5) were added, the variance of MDD changed 17.4%, F (7, 315) = 10.714, $p < .001$, and 24.7%, F (8, 314) = 14.174, $p < .001$, correspondingly. In the final step 6, self-esteem predicted 39.1%, F (9, 313) = 24.001, $p < .001$, of the variance of the outcome variable.

Table 1. Correlations, means, and standard deviations of preoccupied and detached attachment, dependency, self-criticism, self-esteem, and depression.

Variables	CAMIR preoccupied attachment	CAMIR detached attachment	DEQ dependency	DEQ self-criticism	RSES self-esteem	BDI depression
CAMIR preoccupied attachment	1	.55**	.40**	.32**	−.24**	.32**
CAMIR detached attachment		1	.18**	.36**	−.27**	.31**
DEQ dependency			1	.30**	−.51**	.42**
DEQ self-criticism				1	−.14**	.23**
RSES self-esteem					1	−.55**
BDI depression						1
M (SD)	3.25 (.67)	2.97 (.84)	5.43 (.94)	4.80 (.97)	3.09 (.78)	23.76 (7.92)

Note: **$p < .01$, BDI: Beck Depression Inventory, CAMIR: Cartes de Modèles Individuels de Relations, DEQ: Depressive Experiences Questionnaire, RSES: Rosenberg Self-Esteem Scale.

Table 2. Hierarchical regression analysis for the prediction of depression.

Variables	Beta	*t*	Adj. R^2	SE	R^2 Change	F Change	df
Step 1							
Comorbid diagnosis	−.035	−.658					
Pharmacotherapy	.213	3.664					
Psychotherapy	.138	2.448					
Hospitalization	.100	1.786	.098	.358	.110	9.777***	4, 318
Step 2							
CAMIR preoccupied attachment	.242	4.475	.149	.348	.053	20.024***	1, 317
Step 3							
CAMIR detached attachment	.149	2.412	.162	.345	.015	5.815**	1, 316
Step 4							
DEQ dependency	.133	2.398	.174	.343	.015	5.750**	1, 315
Step 5							
DEQ self-criticism	.308	5.586	.247	.327	.073	31.203***	1, 314
Step 6							
RSES self-esteem	−.446	−8.698	.391	.294	.143	75.658***	1, 313

Note: **$p < .01$, ***$p < .001$. BDI: Beck Depression Inventory, CAMIR: Cartes de Modèles Individuels de Relations, DEQ: Depressive Experiences Questionnaire, RSES: Rosenberg Self-Esteem Scale.

3.2. Moderated Mediation Analyses

3.2.1. Anaclitic Moderated Mediation

As mentioned earlier, we tested the effect of self-esteem on the relationship between preoccupied attachment and depression via dependent vulnerability to depressive symptoms. The effect of dependent vulnerability on MDD was not significantly moderated by self-esteem (Interaction M × W coefficient = −.032, SE (HC4) = .023, t = −1.354, ns) while self-esteem was found to significantly moderate the effect of preoccupied attachment on MDD (Interaction X × W coefficient = −.069, SE (HC4) = .032, t = −2.169, $p < .05$). The interaction of the b path explains .4% while the interaction of the direct effect explains .8% of the variance of depressive symptoms. Higher dependent vulnerability was associated with higher depressive symptoms, B = .043, SE (HC4) = .021, t = 2.035, $p < .05$ (Table 3). The overall moderated mediation model was not supported with the index of moderated mediation = −.018 (SE = .014) (95% CI = −.047; .008). In particular, as zero is within the CI, it is indicated a non-significant moderating effect of self-esteem on the indirect effect, via dependent vulnerability, on depressive symptoms, although the analysis provided direct evidence of moderation of the indirect effect of preoccupied attachment by self-esteem. Subsequently, we can say with 95% confidence that the indirect effect of preoccupied attachment on depressive symptoms through dependent vulnerability does not depend on self-esteem. The indirect effects are not all significantly different from each other, as displayed in the significant index of moderated mediation. The conditional indirect effect was strongest in those low in self-esteem (1 SD below the mean; effect = .139, SE = .042, 95% CI = .056; .222) and mean self-esteem (effect = .085, SE = .028, 95% CI = .031; .140) and, not significantly, lowest in those high in self-esteem (1 SD above the mean, effect = .031, SE = .032, 95% CI = −.031; .094). Hence, we have an overall non-significant indirect effect.

Table 3. Unstandardized OLS regression coefficients with confidence intervals estimating preoccupied attachment, dependent vulnerability, self-esteem, and depressive symptoms.

	Dependent Vulnerability (M)			Depression (Y)		
	Path	Coeff. (SE)	95% CI	Path	Coeff. (SE)	95% CI
Preoccupied Attachment (X)	a_1→	.572*** (.068)	.439, .705	c_1' →	.085** (.028)	.031, .140
Dependent Vulnerability (M)				b_1 →	.043* (.021)	.001, .085
Self-Esteem (W)				c_2' →	−.234*** (.023)	−.278, −.189
M × W				b_2 →	−.032ns (.023)	−.78, .014
X × W				c_3' →	−.069* (.032)	−.131, −.006
		$R^2 = .163$			$R^2 = .363$	
	$F(1, 321) = 71.339$, $p < .001$			$F(5, 317) = 35.849$, $p < .001$		

Note: *$p < .05$, **$p < .01$, ***$p < .001$, ns: non-significant.

3.2.2. Introjective Moderated Mediation

As previously mentioned, we also tested the effect of self-esteem on the relationship between detached attachment and depression via self-critical vulnerability to depressive symptoms. Self-esteem was found to significantly moderate the effect of self-critical vulnerability on MDD (Interaction M × W coefficient = −.080, SE (HC4) = .025, t = −3.229, $p < .01$), but not the effect of detached attachment on MDD (Interaction X × W coefficient = −.032, SE (HC4) = .026, t = −1.236, ns). The interaction of the b path explains 2.3% while the interaction of the direct effect explains .3% of the variance of depressive symptoms. Higher self-critical vulnerability was associated with higher depressive symptoms, B = .063, SE (HC4) = .022, t = 2.946, $p < .01$ (Table 4). The 95% bootstrap confidence interval for the index of moderated mediation, −.030 (SE = .010), did not include zero (−.053 to −.012) and provides direct evidence of moderation of the indirect effect of detached attachment by self-esteem. As zero is not within the CI, it is indicated a significant moderating effect of self-esteem on the indirect effect, via self-critical vulnerability, on depressive symptoms. The indirect effects are significantly different from each other, as displayed in the significant index of moderated mediation. The conditional indirect effect was strongest in those with low self-esteem (1 SD below the mean; effect = .047, SE = .013, 95% CI = .023; .075) and mean self-esteem (effect = .023, SE = .008, 95% CI = .008; .040) and, not significantly, lowest in those high in self-esteem (1 SD above the mean, effect = .001, SE = .010, 95% CI = −.021; .017). Hence, we have a significant indirect effect for only two values of the moderator, 1 SD below and the mean but not 1 SD above.

Table 4. Unstandardized OLS regression coefficients with confidence intervals estimating detached attachment, self-critical vulnerability, self-esteem, and depressive symptoms.

	Self-Critical Vulnerability (M)			Depression (Y)		
	Path	Coeff. (SE)	95% CI	Path	Coeff. (SE)	95% CI
Detached Attachment (X)	a_1 →	.368*** (.064)	.243, .493	c_1' →	.050* (.024)	.004, .097
Self-Critical Vulnerability (M)				b_1 →	.063** (.022)	.021, .106
Self-Esteem (W)				c_2' →	−.201*** (.025)	−.249, −.153
M × W				b_2 →	−.080** (.025)	−.129, −.031
X × W				c_3'→	−.032ns (.026)	−.083, .019
		$R^2 = .100$			$R^2 = .381$	
	$F(1, 321) = 33.344$, $p < .001$			$F(5, 317) = 38.109$, $p < .001$		

Note: *$p < .05$, **$p < .01$, ***$p < .001$, ns: non-significant.

4. Discussion

The aim of the present study was to examine whether the insecure adult attachment style is mediated by the matching vulnerability disposition as it relates to MDD, through the interaction with self-esteem. The hypotheses were partly corroborated.

Firstly, the results lend support to the predictions that dependency would mediate the relation between preoccupied attachment and MDD and that self-criticism would mediate the association between detached attachment and MDD. This finding is in agreement with previous research (Cantazaro & Wei, 2010; Dunkley et al., 2012; Zuroff & Fitzpatrick, 1995). It is also consistent with the results obtained by Dagnino et al. (2017) and McBride et al. (2006) who reported that the association between the dimensions of insecure attachment and MDD were fully or partially mediated by self-criticism. Similarly, Ko et al. (2019) demonstrated that adverse parenting is linked to perfectionism via insecure attachment. Therefore, it seems that preoccupied individuals develop a dependent tendency so as to avoid loss or abandonment, while detached people's negative relationships with their harsh parents, perpetuating their negative self-image, maintain and worsen the depressive symptoms.

Additionally, we found that the indirect effect of detached attachment on depressive symptoms through self-critical vulnerability depends on self-esteem. However, this did not apply to dependency, because the effect of preoccupied attachment on depressive symptoms through dependent vulnerability did not significantly depend on self-esteem. Specifically, on the one hand, it may be postulated that persons with depression, who have experienced relations with rejecting attachment figures, when characterized by a sense of unworthiness and non-compliance with their own expectations and standards, may feel incompetent and become more vulnerable to developing MDD. Thus, the connection between attachment fear of closeness, setting excessive standards, and depressive symptoms aggravates when self-esteem decreases. It seems that a person with depression experiencing the parent as careless or harsh and critical, begins to view oneself as vulnerable, weak and ineffective, feels helpless and loses the sense of independence and individuality.

On the other hand, dependent vulnerability mediated the association between preoccupied attachment and MDD regardless of participants' levels of self-esteem. That is, self-esteem only moderated considerably the mediation effect between preoccupied attachment and depression. One possible explanation as to why self-esteem significantly moderated only the association between detached attachment, self-critical vulnerability, and MDD is that individuals with self-critical characteristics engage in self-scrutiny and they are afraid of being disapproved of and criticized (Zuroff & Fitzpatrick, 1995). Furthermore, according to De La Ronde and Swann (1993) it is possible that people with low self-esteem behave in ways that estrange them from their environment. On the contrary, people with dependent disposition may tend to solicit others' favorable reactions when they feel threatened of possible rejection or separation and enact behaviors that please the significant others. It seems that seeking out interpersonal relationships to satisfy the need for positive regard does not necessarily entail a negative self-regard. Similarly, Koroly (2017) found that attachment anxiety was linked with lower self-esteem and greater depressive symptoms, whereas desire for closeness was not re-

lated with self-esteem in romantic relationships and did not mediate the link between attachment, self-esteem and MDD in friendships.

5. Conclusion

This study suffers from several limitations. It examined the associations between personality, attachment, and MDD, without taking into account of the heterogeneity of the sample and various clinical variables, that is, we did not assess the age at onset of the disorder and the age of diagnosis and we did not consider whether the patients were in their first or additional episode. We only controlled for confounding variables, for instance, co-occurrence with other psychiatric disorders, earlier hospitalizations, and prior or current psychotherapy and medication treatment. In addition, we did not include a control group. Further, the naturalistic nature of this study and its cross-sectional design do not enable us to generalize the findings and to differentiate the etiological direction of these relationships, since different paths between these factors could be expected and explored, for instance the one connecting self-esteem and MDD (Orth et al., 2009). Therefore, no conclusions about causal relationships are appropriate. Finally, we used self-report questionnaires which may inflate associations due to shared variance.

Despite the limitations, the results of this study are potentially relevant for clinical interventions, because various studies have supported the predictive value of the dependent and the self-critical profiles. It has been indicated that psychotherapeutic techniques, suited to these vulnerability dimensions, have positive effects on the treatment procedure (Meganck et al., 2017). For example, individuals with dependent characteristics have been reported to respond better to brief treatment, while patients, who tend to criticize themselves, have shown greater dropout rates (De La Parra et al., 2017). Moreover, directive interventions have been found to soothe depressive symptomatology in patients with dependent attributes, while explorative interventions seem to help patients with self-critical tendencies (Blatt, 2013). Clinicians can also help people firstly realize how the two insecure attachment patterns contribute to their depressive experiences and secondly modify their ineffective coping strategies (Wei et al., 2006). Other studies (Cha, 2016; Moroz & Dunkley, 2015) have shown that self-esteem, as a consequence of insecure attachment, may be a crucial point in the intervention, since it can provide the basis for understanding the way patients with MDD view themselves and interact with others. Likewise, a recent meta-analysis (Cortés-García et al., 2020) supported the need to target the psychological mechanisms, such as the negative self-representation, in treating depression. Consequently, our paper may assist in the establishment of more effective treatment on the ground that it entails intermediate mechanisms between attachment and MDD upon which comparatively little is known.

With respect to future directions, continued research studying the interplay of the attachment strategies, vulnerability traits, and self-esteem with patients with MDD as well as community sample will expand our theoretical and clinical

knowledge base. Future research should also investigate the interchange among these variables adding more variables, such as stressful events, and using other designs. Longitudinal data collection is required in order to further clarify the causal relationships between the implicating factors and provide the basis for the detection of people at risk of MDD and for the development of intervention strategies. In that way, we can use the treatment that corresponds with each type. Anyway, recent meta-analysis (Fu et al., 2021) highlighted the lack of evidence of factors concerning the onset and the underlying mechanisms of depression and proposed the use of improved assessment of factors and prospective designs. In conclusion, the present study shed light on the personality dimensions, in terms of a two developmental lines theoretical model, that intervene between insecure attachment experiences and depressive symptoms.

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Conflicts of Interest

The authors report there are no competing interests to declare.

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