



# Examination of the Role of Defense Mechanisms and Attachment Styles in Personality Disorder Beliefs among Nonclinical and Clinical Samples

## *Kişilik Bozukluğu İnançlarında Savunma Mekanizmaları ve Bağlanma Biçimlerinin Rolünün Klinik ve Klinik Olmayan Örneklerde İncelenmesi*

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### ABSTRACT

Attachment styles, defense mechanisms, and the underlying personality disorders' personality beliefs are considered to be closely related to psychopathology. The aim of this study is to compare the scores of attachment styles, defense mechanisms, and personality beliefs variables in a non-clinical group and a clinical group diagnosed with depression, obsessive-compulsive, and anxiety disorder and to examine the relationships between these variables. A total of 178 participated in the study, 59 of which were in the clinical group and 119 in the nonclinical group. The Personality Belief Questionnaire-Short Form (PBQ-SF), The Defense Style Questionnaire-40 (DSQ-40), and Relationship Scales Questionnaire (RSQ) were applied to the participants. Avoidant, dependent, passive-aggressive, obsessive-compulsive (OC), antisocial, schizoid, paranoid, and borderline personality belief scores were found to be higher in the clinical group, while mature defense scores were significantly higher in the nonclinical group. On the other hand, there was no difference between the two groups in terms of attachment styles. According to multiple linear regression analysis results, attachment styles and defense mechanisms predicted personality disorder beliefs in the range of 19.5% to 33.5% for the clinical group and 22.7% to 46.9% for the nonclinical group. In conclusion, the findings suggest that attachment styles and defense mechanisms may contribute to the understanding of the etiological causes of personality disorders and may be helpful in the treatment of personality disorders.

**Keywords:** Personality disorder beliefs, attachment styles, defenses mechanisms

### ÖZ

Bağlanma stilleri, savunma mekanizmaları ve kişilik bozukluklarının temelinde yatan kişilik inançlarının psikopatoloji ile yakından ilişkili olduğu düşünülmektedir. Bu çalışmanın amacı, depresyon, obsesif-kompulsif ve anksiyete bozukluğu tanısı almış bir klinik grup ve klinik olmayan bir grupta bağlanma stilleri, savunma mekanizmaları ve kişilik inançları değişkenleri puanlarının karşılaştırılması ve bu değişkenler arasındaki ilişkilerin incelenmesidir. Çalışmaya 59'u klinik gruptan, 119'u klinik olmayan gruptan olmak üzere toplam 178 kişi katılmıştır. Katılımcılara Kişilik İnanç Ölçeği-Kısa Form (KİÖ-KF), Savunma Biçimleri Testi-40 (SBT-40) ve İlişki Ölçekleri Anketi (İÖA) uygulanmıştır. Kaçınan, bağımlı, pasif-agresif, obsesif-kompulsif (OK), antisosyal, şizoid, paranoid ve borderline kişilik inanç puanları klinik grupta anlamlı düzeyde daha yüksek bulunmuşken olgun savunma puanlarının ise normal grupta anlamlı düzeyde yüksek olduğu görülmüştür. Öte yandan bağlanma stillerine göre iki grup arasında fark bulunmamıştır. Çoklu doğrusal regresyon analizi sonuçlarına göre bağlanma stilleri ve savunma mekanizmaları klinik grup için kişilik bozukluğu inançlarını %19,5 ile %33,5 ve klinik olmayan grup için %22,7 ile %46,9 oranında yordamıştır. Sonuç olarak bulgular, bağlanma stillerinin ve savunma mekanizmalarının kişilik bozukluklarının etiyolojik nedenlerinin anlaşılmasına katkıda bulunabileceğini ve kişilik bozukluklarının tedavi süreçlerinde yardımcı olabileceğini düşündürmektedir.

**Anahtar sözcükler:** Kişilik bozukluğu inançları, bağlanma stilleri, savunma mekanizmaları

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## Introduction

In the Theory of Attachment, Bowlby explains why newborn babies have a need to attach strongly with their caregivers (Bowlby 1988). The quality of the relationship between the child and the caregivers provides the child with information regarding his/her worthiness. According to Bowlby (1973), when the caregivers are not sufficiently available and/or caring, the result is the child feeling unsafe. Similarly with Bowlby, hundreds of studies reviewed by Mikulincer and Shaver (2007), the insecure attachment was related to a wide variety of mental disorders. Eng et al. (2001) made a study with 118 patients diagnosed with social anxiety. In this study, the group with the anxious attachment style reported more severe social anxiety symptoms, greater depression levels, and more low life satisfaction than the group with the secure attachment style. In Sümer et al.'s (2009) study, there were 104 participants, each diagnosed with one depression, panic disorder, and obsessive-compulsive disorder (OCD), and consisting of 77 participants who were considered "control group". The analysis results showed that all three clinical groups reported significantly higher levels of attachment anxiety than the control group. In another research, Vatan (2016) examined attachment, obsessive beliefs, and emotion regulation challenges in patients with obsessive-compulsive disorder by comparing a clinical group (101 people) and a control group (224 people). The researcher found that there was a significant difference between the two groups in terms of anxious attachment characteristics.

In fact, the literature search on the relationship between adult attachment styles and personality disorders indicates that there is a significant overlap between these two concepts and disorders such as depression, anxiety, panic, social anxiety and OCD (Mayer et al. 2001). Insecure attachment styles and personality disorders are alike in that they both encourage ineffective and inflexible coping mechanisms (Brennan and Shaver 1998). Widiger and Frances (1985) asserted that attachment styles are often seen as the central feature of PDs. Many researchers tied specific PDs to insecure attachment styles (Brennan and Shaver 1998, Levy et al. 2015). Although insecure attachment appears highly associated with personality pathology, the relationships between specific PDs and attachment patterns are not yet clear (Levy et al. 2015).

Beck and Ellis had been emphasized the role of core dysfunctional beliefs for patients with personality disorders. The core dysfunctional beliefs of patients with personality disorders have been hypothesized to be over-generalized, inflexible, imperative, and resistant to change. These dysfunctional beliefs were obtained by reviewing similarities across patients with the same personality disorders (Beck et al. 2015).

The PDs show a higher prevalence rate among people in contact with health-care services compared to the community (non-clinical) populations. Research shows that about one-fourth of patients in primary health care and 50% of psychiatric outpatients meet the criteria for the PDs (Beckwith et al. 2010). The many research examined the relationship between PDs and other mental disorders such as depression (Carlier et

al. 2014); anxiety (Carlier et al. 2014, Latas and Milovanović 2014); obsessive-compulsive disorder (Thamby and Khanna 2019), and somatoform disorders (Carier et al. 2014). High rates of comorbidity were reported mainly for personality disorders and mental disorders (Newton-Howes et al. 2010). Differential diagnosis of personality disorders is significant for the treatment to have a positive outcome. In other words, during the treatment of other mental disorders, it is clinically important to notice the presence of personality disorders because co-occurrence increases treatment resistance. Various meta-analysis studies have revealed comorbidity of personality disorders for depression, doubling the poor outcome from treatment compared to those without personality disorders (Beckwith et al. 2014).

Defense mechanisms are innate, involuntary, regulatory processes that enable individuals to reduce cognitive conflicts and maintain individuals' psychological stability in the face of internal and external stresses through changing perceived reality (Vaillant 1994). Defense mechanisms are generally considered as a psychodynamic concept. However, as Anna Freud (1989) stated, since the inner impulse impulses from the id emerge into consciousness and show themselves in the ego, defense mechanisms can also be evaluated with objective measurement tools. Main et al. (1985) claimed an insecurely attached person has negative perceptions related to others due to both his/her attachment style and the style's use of defense mechanisms such as denial, projection, and splitting. In a study, immature defense mechanism scores were found to be higher in patients with psychological disorders compared to the patients in the control group (Kennedy et al. 2001). In another study, positive correlations were found between problematic internet use and immature and autistic fantasy defenses (Laconi et al. 2017). In a study, in which depression and anxiety patients were compared with a control group, the researchers discovered that all of the patients, except for patients with social phobia, used more neurotic defense mechanisms than the control group (Blaya et al. 2006). In another study where patients with personality disorders and neurotic disorders were compared to a control group, only those with borderline personality disorder were found to use significantly more omnipotence, devaluation, splitting, denial, isolation, and projective identification defenses compared to those in the other groups (Sammallahti and Aalberg 1995). In a study examining the relationship between defense mechanisms and the personality disorders of borderline, schizotypal, antisocial, and narcissistic, it was found that immature defenses explained borderline personality disorder the most and schizotypal personality disorder the least (Perry et al. 2013). Furthermore two studies in Turkey confirmed the assertion that immature defenses are more commonly used by patients with certain personality disorders (Bilge 2018, Araci and Bilge 2021).

There are few studies that have investigated defense mechanisms and attachment together in relation to psychological disorders. In a study where attachment styles and defense mechanisms were examined as factors mediating the continuation of postpartum depression, anxious attachment style, and immature

defense mechanisms were found to be effective factors in the persistence of depression, at rates of 8.4% and 3.6% respectively (McMahon et al. 2005). In another study, defense mechanisms and attachment styles were examined in relation to homophobic attitudes found that Immature defenses were significantly and positively predictive, whereas neurotic defenses were significantly and negatively predictive. In addition, there was a significant difference between secure and fearful attachment styles in terms of homophobia levels (Ciocca et al. 2015).

According to Beck et al. (2015), personality beliefs are used frequently when explaining psychopathology as they are thought to be the basis of personality disorders. Similarly, attachment styles and defense mechanisms are also frequently used in explaining psychopathology. We believe that differentiation exists among personality beliefs, attachment styles, and defense mechanisms in individuals who are diagnosed with anxiety, depression, OCD who do not have such a diagnosis. This belief is based on the above literature, which shows that personality disorders are associated with disorders such as anxiety, depression, and OCD. Thus, by using both clinical and nonclinical groups in our study, we aimed to determine whether or not the clinical group had a disadvantage compared to the nonclinical group in terms of personality beliefs, defense mechanisms, and attachment styles. Thus, we developed three hypotheses. Firstly, we hypothesized that the clinical group diagnosed with depression, obsessive-compulsive disorder (OCD) or anxiety, and the nonclinical group will differentiate according to defense mechanisms, attachment styles, and personality beliefs. Secondly, we hypothesized that in both the clinical group and the nonclinical group, personality beliefs will be related to attachment styles and defense mechanisms. Finally, we hypothesized that both defense mechanisms and attachment styles can be used in predicting personality beliefs for both clinical, and nonclinical groups.

## Methods

This study is a relational survey study using the cross-sectional method, as well as an independent group comparison study.

### Participants and Procedure

The participants consisted of two groups. The first group of the participants, consisting of two groups, consisted of 59 patients with diagnosis anxiety, OCD or depression who were diagnosed by a psychiatrist in a psychiatric hospital and whose drug treatments were ongoing. The second group is a community sample consisting of 119 people who stated that they did not receive any psychiatric diagnosis, and the acquaintances of the researchers and their own acquaintances. The clinical group consisted of individuals who had applied to the Bakırköy Mazhar Osman Mental Health and Neurological Diseases Education and Research Hospital in Istanbul, Turkey. The community sample's (nonclinical group's) data was collected by researchers using the snowball method. Participants that were statistical outliers and provided data with more than 10% missing were excluded from the total number of participants. Table 1 displays the basic demographic properties of the sample population used in the study.

The ethical approval required for the study was taken from the Ethics Committee of Istanbul Bakırköy Mazhar Osman Mental Health and Neurological Diseases Education and Research Hospital and all the participants gave informed consents before participating in the study. The data collected from the nonclinical sample was collected using the self-reported paper-pencil method where participants were given a brief explanation of the study and then were asked to respond to the scales. The scales were applied to the participants in the clinical group in the outpatient clinic building under the supervision of the researchers.

## Measures

### *Demographic Information Questionnaire (DIQ)*

A form created by the researchers which includes the participants' age, level of education, income and whether or not they have a psychiatric diagnosis.

### *The Personality Belief Questionnaire (PBQ-SF)*

The PBQ is developed by Beck and Beck, then the PBQ-Short Form (SF) is created a 65 items shorter and more practical version, which was found to be more desirable for clinical and research purposes (Butler et al. 2007). The Turkish adaptation of PBQ-SF was carried out by Taymur et al. (2011). The scale includes avoidant, dependent, passive-aggressive, obsessive-compulsive, antisocial, narcissistic, histrionic, schizoid and paranoid personality disorder (PD) subscales. PBQ-SF was applied to a group of 232 university students between the ages of 18-29. While the total Cronbach Alpha reliability coefficient of the scale is 0.92, the reliability coefficients of the subscales range from 0.61 to 0.85. Then, it was conducted again the validity and reliability study by Bilge and Bilge (2019), and the scale is added the borderline subscale based on the study of Butler et al. (2002). In this study, the Cronbach's Alpha internal consistency coefficient values of the PBQ-SF subscales were found to be between .70 and .84, and the test-retest correlations were found to be between .77 and .90.

### *The Defense Style Questionnaire-40 (DSQ-40)*

A self-report instrument developed by Andrews et al. (1993) includes 40 items that measure 20 individual defensive functioning and three groups of defense mechanisms (mature, neurotic, and immature). The psychometric properties of the Turkish form of the defense style questionnaire were examined by Yılmaz et al. (2007). Internal consistency coefficients for mature, neurotic, and primitive forms of defense mechanisms were respectively determined as .70, .61, and .83. Furthermore, the item-total correlation coefficients were found to range from .49 to .66 for mature defenses; .42 to .63 for neurotic defenses, and .23 to .70 for immature defenses. This study was conducted with a total of 190 people, 105 of whom were healthy and 85 of whom were diagnosed with depression and obsessive-compulsive disorder, and it was determined that the healthy group and the diagnosed groups differed as they used the defense mechanisms.

**Table 1. Demographic information of participants**

<b>Gender</b>	<b>Nonclinical Group</b>		<b>Clinical Group</b>	
	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>
Female	73	61.3	42	71.1
Male	46	38.7	17	28.9
<b>Age</b>				
Range 18-24	47	39.8	12	20.3
Range 25-34	35	29.7	17	28.8
Range 35-44	22	18.6	12	20.3
Range 45-54	10	8.5	11	18.6
Range 55-64	5	3.4	7	11.9
<b>Education</b>				
Uneducated	1	0.8	3	10.3
Primary school	5	4.2	13	22.0
Middle school	14	11.8	12	20.3
High school	44	37.0	17	28.8
University degree and postgraduate	55	46.2	14	23.7
<b>Economic Status</b>				
Low	8	6.7	10	16.9
Middle	99	83.2	37	62.7
High	12	10.1	7	11.9

### **Relationship Scales Questionnaire (RSQ)**

The scale developed by Griffin and Bartholomew (1994), and the reliability study was conducted by Sümer and Güngör (1999). In the study, the test-retest correlation coefficient for the sub-dimensions was found to be between .49 and .61. In the scoring of the scale, items were collected for each sub-dimension and points are calculated by dividing it by the total number of items in the dimension. The internal consistency Cronbach Alpha coefficients of the subscales of the scale with 17 items range from .27 to .61. Consistent with the literature, opposing attachment styles are gathered in the same factor and it has been found that the construct validity is high.

### **Statistical Analysis**

Data analysis was conducted using IBM SPSS version 22 statistical analysis program. To meet the assumptions of univariate parametric analysis, statistical measures of normality, missing values, and outliers were examined. Pearson product-moment analysis for correlations between continuous variables (PD beliefs, defense mechanisms, and attachment styles), and independent samples t-test to evaluate the differences between the clinical group and the non-clinical group. Multiple linear regression analysis was applied to determine the predictive effect of the dependent variables of attachment styles and defense mechanisms, which are independent variables, of the PBQ-SF subscales.

## **RESULTS**

The data were first examined for statistical measures of normality, missing values, and outliers. Missing data was filled with mean scores. By calculating the Mahalanobis distance of the data, six participants' data were excluded from the analysis, because they were out of the desired range for the criteria. The normality of the quantitative data was checked using histograms and QQ plots and was found to be reasonably normal and met parametric data analysis. Durbin-Watson Diagnostics, collinearity diagnostics, the values of variance inflation factor (VIF), tolerance statistic (TOL), and influential points were checked to ensure that the data did not violate the assumptions of multiple linear regression analysis.

The made t-test analyses between the clinical group and the nonclinical group were presented in Table 2. Our findings show that there is a significant difference between the two groups in terms of personality beliefs, except for Narcissistic PD and Histrionic PD, secure, dismissing, preoccupied, and fearful attachment styles, immature, and neurotic defenses were observed. Statistically significant differences were in favor of the clinical group, while only mature defenses were in favor of the nonclinical group. The statistically significant differences between the groups were in terms of various PDs, and mature defenses. It observed were Avoidant ( $t=5.15, p<.001$ ), Dependent ( $t=4.95, p<.001$ ), Passive-Aggressive ( $t=3.48, p<.007$ ), OC ( $t=2.75, p<.007$ ), Antisocial ( $t=2.84, p<.021$ ), Schizoid ( $t=2.64,$

$p < .037$ ), Paranoid ( $t = 3.13$ ,  $p < .037$ ), Borderline ( $t = 5.84$ ,  $p < .001$ ), and Mature Defenses ( $t = -3.49$ ,  $p < .001$ ).

The relationship between personality beliefs, defense mechanisms, and attachment styles were examined separately in clinical and non-clinical groups. In the nonclinical group, PBQ-dependent ( $r = -.31$ ), histrionic ( $r = -.21$ ) and borderline ( $r = -.33$ ) subscales had negative and weakly significant relationships with secure attachment. Whereas in the clinical group, all of PBQ subscales had no significant correlation with secure attachment. Although there was weakly positive correlation between PBQ-antisocial ( $r = .21$ ) and schizoid ( $r = .29$ ) subscales and dismissing attachment in the nonclinical group, in the clinical group PBQ-avoidant ( $r = .41$ ), passive aggressive ( $r = .37$ ), OC ( $r = .31$ ), narcissistic ( $r = .41$ ) and schizoid ( $r = .49$ ) subscales were positively correlated rather closely to medium level. In the nonclinical group, dependent ( $r = -.28$ ), antisocial ( $r = .20$ ), narcissistic ( $r = .20$ ), histrionic ( $r = .34$ ) and borderline ( $r = .28$ ) subscales correlated with preoccupied attachment as negatively dependent. On the other hand, in the clinical group, preoccupied attachment was found to have a positive, weak and significant correlation between dependent ( $r = .39$ ) and borderline ( $r = .30$ ) subscales. In the nonclinical group, we found a positive relationships between fearful attachment and all PBQ subscales (respectively  $r = .42$ ;  $r = .31$ ;  $r = .31$ ,  $r = .27$ ,  $r = .33$ ,  $r = .37$ ,  $r = .30$ ;  $r = .42$ ;  $r = .30$ ;  $r = .37$ ). However, in the clinical group, we found no relationship between fearful attachment and PBQ subscales. In the nonclinical group, immature defenses were found to be positively correlated with PBQ subscales (respectively  $r = .57$ ;  $r = .50$ ;  $r = .58$ ;  $r = .48$ ;  $r = .53$ ;

$r = .31$ ;  $r = .50$ ;  $r = .58$ ;  $r = .51$ ;  $r = .41$ ), and likewise in the clinical group (respectively  $r = .48$ ;  $r = .37$ ;  $r = .43$ ;  $r = .38$ ;  $r = .46$ ;  $r = .46$ ;  $r = .44$ ;  $r = .45$ ;  $r = .44$ ;  $r = .41$ ). In the nonclinical group, except for the histrionic subscale, we found a weak and positive correlation between all subscales and neurotic defenses (respectively  $r = .32$ ;  $r = .25$ ;  $r = .33$ ;  $r = .32$ ;  $r = .21$ ;  $r = .50$ ;  $r = .25$ ;  $r = .24$ ;  $r = .30$ ). The clinical group had only weak correlations between the avoidant ( $r = .27$ ), passive aggressive ( $r = .29$ ) and OCD ( $r = .31$ ) subscales. While only the schizoid ( $r = .18$ ) subscale was weakly positively associated with mature defenses in the nonclinical group, PBQ-passive-aggressive ( $r = .28$ ), OC ( $r = .38$ ), antisocial ( $r = .32$ ) and narcissistic ( $r = .27$ ) subscales were positively correlated in the clinical group (Table 3).

Multiple linear regression analysis was performed to determine to what extent the dependent variable of the study, PD beliefs, was predicted by the independent variables, defense mechanisms, and attachment styles. Attachment styles (secure, dismiss, fearful, and preoccupied) and defense mechanisms (immature, neurotic, and mature) were included in the model together to determine the variables that predict PD beliefs since it was aimed to determine the combined effects of independent variables. The multiple linear regression analyses are summarized in Table 4. Overall, the results showed interacted in order to predict that attachment styles and immature, neurotic and mature defenses significantly. For PDs in the clinical group are results; PBQ avoidant (Immature defenses;  $R^2 = .227$ ,  $t = 3.31$ , Tol. [tolerance] = .907, VIF [variance inflation factor] = 1.102,  $p < .002$ . Dismissing attachment;  $R^2 = .079$ ,  $t = 2.53$ , Tol. = .907, VIF = 1.102,  $p < .014$ ); dependent (Preoccupied

**Table 2. Comparison of subscale scores for clinical group and nonclinical group**

All Subscales	Clinical Group (n=59)		Nonclinical Group (n=119)		t
	Mean	SD	Mean	SD	
PBQ-Avoidant,	17,93	4,99	13,91	4,87	<b>5.15***</b>
PBQ-Dependent	14,07	7,01	9,37	5,36	<b>4.95***</b>
PBQ-Passive-Aggressive	16,40	6,05	13,33	5,24	<b>3.48***</b>
PBQ-OC	16,24	6,18	13,92	4,79	<b>2.75***</b>
PBQ-Antisocial	13,22	6,67	10,54	5,55	<b>2.84**</b>
PBQ-Narcissistic	11,07	6,24	9,82	5,27	<b>1.39</b>
PBQ-Histrionic	8,95	5,94	7,50	5,00	<b>1.71</b>
PBQ-Borderline	14,58	7,05	9,20	5,0	<b>5.84***</b>
PBQ-Paranoid	14,68	7,24	11,61	5,87	<b>3.13**</b>
PBQ-Schizoid	15,61	6,63	13,34	4,65	<b>2.64**</b>
RSQ-Secure	19,64	5,66	20,61	4,67	<b>-1.20</b>
RSQ- Dismissing	24,41	6,96	22,61	6,29	<b>1.74</b>
RSQ-Preoccupied	15,63	5,11	15,76	4,24	<b>-.19</b>
RSQ-Fearful	17,53	5,58	16,00	5,59	<b>1.72</b>
Immature defenses	99,10	26,44	98,39	29,20	<b>.16</b>
Neurotic defenses	42,95	11,59	44,57	11,41	<b>-.89</b>
Mature defenses	38,93	13,21	45,61	11,37	<b>-3.49</b>

\*\* $p < 0.01$ , \*\*\* $p < 0.001$

attachment; R2=.149, t=3.47, Tol.=.993, VIF=1.007, p<.001. Immature defenses; R2=.123, t=3.64, Tol.=.934, VIF=1.070, p<.001. Mature defenses; R2=.061, t=-2.24, Tol.=.931, VIF=1.074, p<.029); passive aggressive (Immature defenses; R2=.182, t=2.84, Tol.=.907, VIF=1.102, p<.006. Dismissing attachment; R2=.061, t=2.12, Tol.=.907, VIF=1.102, p<.038); OCD (Mature defenses; R2=.227, t=3.51, Tol.=.935, VIF=1.069, p<.001. Immature defenses; R2=.073, t=2.42, Tol.=.935, VIF=1.069, p<.019); antisocial (Immature defenses; R2=.215, t=3.95, Tol.=1.000, VIF=1.000, p<.001); narcissistic (Immature defenses; R2=.189, t=2.87, Tol.=.907, VIF=1.102, p<.006. Dismissing attachment; R2=.082, t=2.52, Tol.=.907, VIF=1.102, p<.015); histrionic (Immature defenses; R2=.196, t=3.72, Tol.=1.000, VIF=1.000, p<.001); borderline (Immature defenses; R2=.205, t=4.80, Tol.=.934, VIF=1.070, p<.001. Preoccupied attachment; R2=.079, t=2.85, Tol.=.992, VIF=1.008, p<.006. Mature defenses; R2=.089, t=-2.83, Tol.=.931, VIF=1.075, p<.007. Secure attachment; R2=.049, t=-2.14, Tol.=.999, VIF=1.001, p<.037); paranoid (Immature defenses; R2=.195, t=3.72, Tol.=1.000, VIF=1.000, p<.001); and schizoid (Dismissing attachment; R2=.238, t=3.45, Tol.=.907, VIF=1.102, p<.006. Immature defenses; R2=.073, t=2.44, Tol.=.907, VIF=1.102, p<.015).

For PDs in the nonclinical group are results; PBQ avoidant (Immature defenses; R2=.328, t=5.76, Tol.=.750, VIF=1.334, p<.001. Fearful attachment; R2=.025, t=2.13, Tol.=.750, VIF=1.334, p<.035); dependent (Immature defenses; R2=.250, t=6.98, Tol.=.885, VIF=1.130, p<.001. Secure attachment;

R2=.081, t=-3.58, Tol.=.990, VIF=1.010, p<.001. Dismissing attachment; R2=.032, t=-2.42, Tol.=.882, VIF=1.134, p<.017); passive aggressive (Immature defenses; R2=.341, t=7.78, Tol.=1.000, VIF=1.000, p<.001); OCD (Immature defenses; R2=.227, t=5.87, Tol.=1.000, VIF=1.000, p<.001); antisocial (Immature defenses; R2=.285, t=6.83, Tol.=1.000, VIF=1.000, p<.001); narcissistic (Immature defenses; R2=.247, t=6.19, Tol.=1.000, VIF=1.000, p<.001); histrionic (Immature defenses; R2=.250, t=6.21, Tol.=.587, VIF=1.702, p<.001. Neurotic defenses; R2=.066, t=-3.24, Tol.=.620, VIF=1.614, p<.001. Preoccupied attachment; R2=.035, t=2.65, Tol.=.864, VIF=1.158, p<.0091. Secure attachment; R2=.023, t=-2.05, Tol.=.963, VIF=1.039, p<.043); borderline (Immature defenses; R2=.346, t=8.82, Tol.=.913, VIF=1.0960, p<.001. Secure attachment; R2=.094, t=-3.84, Tol.=.950, VIF=1.053, p<.001. Mature defenses; R2=.029, t=-2.50, Tol.=.878, VIF=1.139, p<.014); paranoid (Immature defenses; R2=.255, t=6.89, Tol.=.923, VIF=1.084, p<.001. Mature defenses; R2=.036, t=-2.43, Tol.=.923, VIF=1.084, p<.017); and schizoid (Immature defenses; R2=.167, t=2.90, Tol.=.739, VIF=1.353, p<.004. Fearful attachment; R2=.036, t=2.84, Tol.=.682, VIF=1.466, p<.00. R2=.029, t=2.09, Tol.=.908, VIF=1.101, p<.039).

### Discussion

The aim of this study was to investigate whether or not the clinical group and the nonclinical group showed any differences in terms of defense mechanisms, attachment styles, and personality

**Table 3. The correlations between personality beliefs, attachment styles and defense mechanisms in the clinical group and nonclinical group**

	a	b	c	d	e	f	g	h	i	j	1	2	3	4	5	6	7
a		<b>.61**</b>	<b>.56**</b>	<b>.65**</b>	<b>.55**</b>	<b>.56**</b>	<b>.50**</b>	<b>.66**</b>	<b>.62**</b>	<b>.50**</b>	-.17	.14	.10	<b>.42**</b>	<b>.57**</b>	<b>.32**</b>	.07
b	.53**		<b>.53**</b>	<b>.59**</b>	<b>.54**</b>	<b>.62**</b>	<b>.61**</b>	<b>.85**</b>	<b>.59**</b>	<b>.32**</b>	<b>-.31**</b>	-.03	<b>-.28**</b>	<b>.31**</b>	<b>.50**</b>	<b>.25**</b>	.01
c	.59**	.37**		<b>.50**</b>	<b>.65**</b>	<b>.57**</b>	<b>.50**</b>	<b>.61**</b>	<b>.66**</b>	<b>.52**</b>	-.06	.10	.13	<b>.31**</b>	<b>.58**</b>	<b>.33**</b>	.07
d	.56**	.35**	.52**		<b>.58**</b>	<b>.56**</b>	<b>.56**</b>	<b>.58**</b>	<b>.64**</b>	<b>.40**</b>	-.03	.10	.16	<b>.27**</b>	<b>.48**</b>	<b>.32**</b>	.07
e	.63**	.44**	.56**	.66**		<b>.67**</b>	<b>.65**</b>	<b>.69*</b>	<b>.73**</b>	<b>.45**</b>	-.09	<b>.21*</b>	<b>.20*</b>	<b>.33*</b>	<b>.53**</b>	<b>.21*</b>	.05
f	.61**	.29*	.61**	.61**	.75**		<b>.71**</b>	<b>.67**</b>	<b>.58**</b>	<b>.39**</b>	-.06	.16	<b>.20*</b>	<b>.37**</b>	<b>.31**</b>	<b>.50**</b>	.12
g	.36**	.44**	.41**	.39**	.60**	.64**		<b>.72**</b>	<b>.54**</b>	<b>.30**</b>	<b>-.21*</b>	.04	<b>.34**</b>	<b>.30**</b>	<b>.50**</b>	.09	-.06
h	.60**	.87**	.36**	.30*	.40**	.34**	.46**		<b>.73**</b>	<b>.44**</b>	<b>-.33**</b>	.07	<b>.28**</b>	<b>.42**</b>	<b>.58**</b>	<b>.25**</b>	-.06
i	.51**	.35**	.42**	.42**	.51**	.50**	.46**	.42**		.23	-.13	.11	.18	<b>.30**</b>	<b>.51**</b>	<b>.24**</b>	-.04
j	<b>.61**</b>	.16	<b>.42**</b>	<b>.38**</b>	<b>.54**</b>	<b>.52**</b>	<b>.35**</b>	<b>.53**</b>	<b>.42**</b>		.09	<b>.29**</b>	.01	<b>.37**</b>	<b>.41**</b>	<b>.30**</b>	<b>.18*</b>
1	-.04	-.12	.03	-.07	.05	.14	.03	-.23	-.09	-.02		.07	.05	<b>-.28**</b>	-.04	.12	<b>.20*</b>
2	<b>.41**</b>	-.02	<b>.37**</b>	<b>.31*</b>	.25	<b>.41**</b>	.04	.12	.04	<b>.49**</b>	-.02		-.06	.54**	.33**	.27**	.32**
3	.13	<b>.39**</b>	.09	.09	-.01	-.00	.14	<b>.30*</b>	.13	-.18	-.02	<b>-.28*</b>		.15	.36**	<b>.27**</b>	.02
4	.20	.18	.24	.21	.24	.17	.04	.21	.12	.19	-.18	<b>.45**</b>	.03		<b>.50**</b>	<b>.34**</b>	.16
5	<b>.48**</b>	<b>.37**</b>	<b>.43**</b>	<b>.38**</b>	<b>.46**</b>	<b>.46**</b>	<b>.44**</b>	<b>.45**</b>	<b>.44**</b>	<b>.41**</b>	.00	<b>.31*</b>	.05	<b>.42**</b>		.60**	.28**
6	.27	.23	<b>.29*</b>	<b>.31*</b>	.17	.22	.16	0.16	.23	.13	.17	.17	.20	.22	<b>.47**</b>		.46**
7	.22	-.12	<b>.28*</b>	<b>.38**</b>	<b>.32*</b>	<b>.27*</b>	.20	-.15	.11	.21	.02	.21	.08	.03	.25	<b>.37**</b>	

\*p<0.05, \*\*p<0.01. The rows represent the clinical group, the columns represent the nonclinical group.  
a. PBQ-Avoidant, b. PBQ-Dependent, c. PBQ-Passive-Aggressive, d. PBQ-OC, e. PBQ-Antisocial, f. PBQ- Narcissistic, g. PBQ-Histrionic, h. PBQ-Borderline i. PBQ-Paranoid, j. PBQ- Schizoid, 1. RSQ-Secure, 2. RSQ- Dismissing, 3. RSQ-Preoccupied, 4. RSQ-Fearful, 5. Immature Defenses, 6. Neurotic Defenses, 7. Mature Defenses.

**Table 4. Attachment styles and defense mechanisms in predicting personality disorder beliefs**

PDs	Nonclinical Group (n=119)																	
	Attachment Styles and Defense Mechanisms (β/SE values)					Attachment Styles and Defense Mechanisms (β/SE values)												
	1	2	3	4	5	6	7	F	ΔR <sup>2</sup>	1	2	3	4	5	6	7	F	ΔR <sup>2</sup>
<b>a</b>		.21/.08			.07/.02			12.37*	.306				.16/.08	.08/.01			31.68*	.353
<b>b</b>			.53/.15		.11/.03		-.14/.06	5.01*	.332					.10/.02			21.81*	.363
<b>c</b>		.08/.03			.23/.11			8.96*	.242					.11/.01			60.56*	.341
<b>d</b>					.07/.03		.19/.05	12.07*	.300					.08/.01			34.45*	.227
<b>e</b>					.12/.03			15.59*	.215					.10/.02			46.66*	.285
<b>f</b>		.27/.11			.08/.03			10.44*	.272					.09/.01			38.31*	.247
<b>g</b>					.10/.03			13.86*	.196				.25/.09	.10/.02			17.08*	.375
<b>h</b>		-.28/.13			.14/.03			9.83*	.421					.10/.01			33.81*	.469
<b>i</b>					.12/.03			13.85*	.195					.11/.02			23.86*	.291
<b>j</b>					.07/.03			12.66*	.311				.23/.08	.04/.02			11.60*	.232

\*p<0.001  
a. PBQ-Avoidant, b. PBQ-Dependent, c. PBQ-Passive-Aggressive, d. PBQ-OC, e. PBQ-Antisocial, f. PBQ-Narcissistic, g. PBQ-Histrionic, h. PBQ-Borderline, i. PBQ-Paranoid, j. PBQ-Schizoid, 1. RSQ-Secure, 2. RSQ-Dismissing, 3. RSQ-Preoccupied, 4. RSQ-Fearful, 5. Immature Defenses, 6. Neurotic Defenses, 7. Mature Defenses.

beliefs and to determine the level at which defense mechanisms and attachment styles predicting the personality beliefs. Firstly, the mean PD scores of the clinical group were higher than the nonclinical group in all PDs except for Histrionic and Narcissistic PDs. This result is consistent with previous studies that found a relationship between PDs and various mental disorders (Newton-Howes et al. 2006, Carlier et al. 2014, Latas and Milovanović 2014). While immature and neurotic defense mechanisms were found to not have a significant difference among both groups, the mature defense mechanisms were found to be significantly in favor of the nonclinical group. In the literature, unlike the results of the present study, it was found that immature defenses were seen to used more in the clinical group (Kennedy et al. 2001, Blaya et al. 2006). In terms of attachment styles, although the mean scores of the clinical group were higher than the nonclinical group in the insecure attachment styles, and the mean scores of the nonclinical were higher in the secure attachment style, there was not a significant difference between the two groups, and the results differed from the findings of other past studies in the literature (Heimberg et al. 2001, Sümer et al. 2009, Vatan 2016).

According to the results of the regression analysis, while immature defenses were predictive variables in both groups, in the nonclinical group neurotic defenses were predictive only in the histrionic subscale. In the clinical group the mature defenses were predictive as negatively in OCD, and as positively in borderline and dependent, whereas in the nonclinical group, only borderline and paranoid subscales were found to be negative predictors. While secure attachment was a negative predictor only in the borderline subscale in the clinical group, in the nonclinical group, it was a negative predictive variable for histrionic and borderline, and positive for schizoid. Dismissing attachment was the negative predictive variable only in the dependent subscale in the nonclinical group, whereas in the clinical group it was positive predictive variable for avoidant, passive-aggressive, narcissistic, and schizoid subscales. In the nonclinical group, the preoccupied attachment was the positive predictive only the histrionic subscale. However, in the clinical group, the preoccupied attachment was found to be predictive for the dependent, and borderline subscales. While the fearful attachment was not predictive in the clinical group, that was the positive predictive variable for avoidant, and schizoid subscales in the nonclinical group. Although the studies in the literature are generally similar to our study in the context of the more use of immature defenses by clinical groups (Kennedy et al. 2001), the fact that immature defenses predict PDs in the nonclinical group is not compatible with the literature. Regression analysis results firstly show that there are attachment and defense combinations that vary according to personality beliefs. Secondly, the results show that the nonclinical group simply using immature defenses extremely does not necessarily make the defenses pathological, because immature defenses were also used at a similar level in the nonclinical group. In the study, immature defenses and dismissing or preoccupied attachment combined make up the difference in favor of the clinical group in PDs. In the nonclinical group, although the attachment styles have an effect, it is seen that this effect is less compared to the clinical group.

Based on these results and the lack of a similar structure in both groups, it can be said that the clinical group tends to be more prone to certain attachment styles and defense mechanisms compared to the nonclinical group. The positive correlation between immature defenses and personality beliefs in both the clinical and nonclinical groups indicate that people use immature defenses, whether pathologically or not. Similarly, it can be said that dismissing attachment is the possible predictor of the clinical group, and therefore dismissing attachment can be considered as a distinguishing factor between the nonclinical group and the clinical group. These results were supported by that are numerous studies emphasizing the relationship between immature defenses and insecure (specifically dismissing attachment) attachment styles with psychopathology (Kennedy et al. 2001, Vatan 2016, Laconi et al. 2017).

Additionally, the fact that personality belief scores of individuals with depression, anxiety, and obsession-compulsion are also significantly higher proves that it is beneficial to evaluate individuals with these disorders for personality disorders. This finding is vital in showing that people with psychiatric disorders are at risk of also comorbid personality disorders having. Comorbidity studies are also considered to be effective in understanding the aforementioned importance (Newton-Howes et al. 2006, Beckwith et al. 2014).

Finally, while there were higher PD scores in the clinical group (except narcissism and histrionic), the absence of a significant difference in the use of defense mechanisms suggests that there may be other factors that make up the pathological structure that needs to be examined. However, based on this study, we can assert that dismissing attachment is a factor that can be evaluated etiologically because the dismissing attachment plays a predictive role in the clinical group. It is still a necessity to investigate the factors that make certain individuals more vulnerable to pathology than others if it is assumed that the process of defining psychopathologies has been completed to a great extent. As it is now seen that more in-depth examination of multi-factor etiological factors is more important. Although PBQ does not fully assess PDs, at least it is important in terms of can show the predisposition to PDs. This is where the fact that we used various disorders together in our study becomes a strength. Additionally, although attachment styles and defense mechanisms are concepts that are examined separately in terms of their relation to psychopathology, this study examined them together and showed that immature defense mechanisms and insecure attachment can form different combinations for various pathologies, especially in clinical groups. Therefore, these patterns can be supported by similar studies.

The most important aspect of this study is to examine the effects of attachment styles and defense mechanisms together, as they are considered as a risk for psychopathology, and the results showed that these two variables had a high predictive effect on psychopathological personality beliefs. However, repeating our study with a larger sample will provide more explanatory data on

this association. In our study, although there were three diagnostic groups with depression, anxiety, and OCD, these disorders were evaluated as a single group. Although these three disorders are accepted in the axis 1 diagnostic group, the structure of the study can be interpreted as a limitation. Another limitation was that although we tried to match the clinical and nonclinical groups in terms of their characteristics, two separate groups with identical characteristics could not be formed. Another limitation of our study was that because many variables were considered together that it was required a large number of statistical analyses. However, the combination of so many variables also mediates the development of a broader vision about the formation of a psychopathological structure.

## Conclusion

Lastly, this study showed that both dismissing attachments from insecure attachment styles and immature defense mechanisms were explanatory for psychopathology. Thus, our study is a study that led to important evidence for conducting multi-factor evaluations and understands psychopathology, and emphasizing the evaluation of individuals seeking treatment with axis 1 disorder in terms of PDs.

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