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From perceived maternal narcissism to anger expression: the role of borderline personality traits

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ABSTRACT

Aims: Although the interpersonal challenges linked to narcissism are well recognized, their expressions in the context of parent-child relationships remain understudied. This study aimed to explore the relationships between perceived maternal narcissism (PMN), traits of borderline personality disorder (BPD), and anger, as well as the mediating effect of BPD on the relationship between PMN and anger.

Methods: The Perceived Maternal Narcissism Scale (PMNS), the Borderline Personality Questionnaire (BPQ), and the State-Trait Anger Expression Inventory (STAXI) self-report scales were administered to a non-clinical sample of 434 adults in Turkiye. Data analysis was performed using IBM SPSS 27, along with Process Macro 4.2.

Results: The findings reveal significant correlations among PMN, BPD, and anger. PMN is a strong predictor of trait anger and anger-in and anger-out styles of expression, and BPD mediates each of these relationships.

Conclusion: These results align with the broader literature on parent-child relationships, adverse childhood experiences, personality disorders, and emotional expressions, significantly contributing to the existing research by revealing PMN's direct influence on anger and identifying BPD as a key mediator.

Keywords: Perceived maternal narcissism, borderline personality traits, trait anger, anger expression styles, mediation analysis

INTRODUCTION

Perceived Maternal Narcissism (PMN) denotes an individual's perception of his or her mother as a non-empathic figure who seeks external validation, exercises control, and provides conditional love throughout the developmental trajectory. This perception arises from internal maternal representations established due to the child's exposure to a caregiving relationship that fails to satisfy his or her developmental needs. According to Kohut's psychology of the self, a narcissistic parent's deficiency in providing adequate 'mirroring' inhibits the child from cultivating a coherent and stable sense of self.[1] Within Kernberg's object relations theory, the narcissistic parent regards the child merely as an object, leading to the internalization of divided object representations through cycles of idealization and devaluation.[2] In this framework, PMN correlates with both vulnerability concerning self-worth and emotional challenges in self-regulation within interpersonal relationships. Clinical and empirical evidence corroborates the notion that themes of narcissistic mothering contribute to the emergence of critical inner dialogue and heighten expectations of abandonment.[3,4]

Research indicates that PMN contributes to increased levels of anxiety and depression among individuals, with this impact occurring indirectly through mechanisms of self-criticism;[4] the mediating role of self-object needs in the relationship between PMN, attachment styles, and narcissism;[5] that PMN and depression play significant roles in the development of fragile narcissistic personality traits;[6] that fragile narcissism is linked to adjustment problems in children, a relationship mediated by the mother's perception of the child as "difficult";[3] that the scapegoating mechanism has been identified as an explanatory factor for the indirect pathway between PMN and various forms of psychopathology;[7] that PMN exerts a negative influence on self-openness within romantic relationships, a factor associated with rejection sensitivity,[8] and individuals who grow up with narcissistic parents tend to base their self-esteem on external success and approval.[9]

Psychoanalytic theory, which emphasizes an individual's internal conflicts based on Freud's structural model, has developed over time with object relations theories that focus on early relational experiences and internal object representations. Theorists such as Klein, Fairbairn, and Winnicott have argued that early relationships with primary caregivers are essential in shaping self and object representations.[10] Kernberg, on the other hand, expanded the object relations framework to explain the structural basis of personality disorders. He proposed that borderline personality organization exists between neurotic and psychotic levels, and that the inability to integrate positive and negative representations of self and others is a

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fundamental mechanism underlying borderline personality organization.[2] Within this framework, an inconsistent and unempathetic relationship with the perceived narcissistic mother figure can lead to polarized internalized self and object representations, thereby damaging the child's sense of identity. This unintegrated pattern of internal representations is one of the core psychodynamic structures of borderline personality organization. Therefore, PMN is connected not only to difficulties in emotional regulation but also to the developmental processes that contribute to borderline personality organization and associated personality disorders.

Borderline personality disorder (BPD) is classified by the DSM-5 as a personality disorder characterized by features such as mood instability, impulsive behaviors, intense fear of abandonment, identity confusion, recurrent suicidal behavior, and dissociative symptoms.[11] Within the framework of psychodynamic theory, BPD represents a personality disorder that manifests at the level of borderline personality organization. Kernberg defines borderline personality organization as an inability to integrate self and object representations, a frequent reliance on primitive defenses, and a structure in which reality testing is partially impaired.[2] Because good and bad object representations cannot be integrated in the inner world of the individual at this level of personality organization, polar cycles such as excessive idealization and intense devaluation arise in interpersonal relationships, leading to disruptions in self-continuity and chaotic emotional and interpersonal experiences.

In the etiology of BPD, factors such as emotional neglect, physical and psychological abuse, and insecure attachment patterns during early childhood represent significant risk elements.[12] These early traumatic experiences may result in impairments in emotional regulation abilities, leading to dissociative symptoms, intense expressions of anger, and self-harming behaviors.[13,14] Concurrently, the internalization of negative self-representations and chronic shame within these individuals obstructs the formation of identity integrity, thus contributing to inconsistent self-experiences.[15] In the context of BPD, avoidance or clinging behaviors frequently manifest in romantic relationships due to challenges in establishing trust, heightened emotional sensitivity, and a profound fear of abandonment.[16] Moreover, intense emotional reactivity alongside impulsive actions, including substance use, self-harm, and hazardous sexual behaviors, significantly diminishes the individual's quality of life.[17]

In the context of BPD, which is characterized by significant difficulties in the regulation of anger, issues pertaining to anger control manifest at both behavioral and cognitive-neurobiological levels.[18] Individuals diagnosed with BPD may frequently encounter intense, sudden, and uncontrolled episodes of anger. Anger rumination, a prevalent cognitive pattern observed in BPD, may predispose these individuals to experience feelings of anger with greater intensity and for extended periods, while also promoting aggressive behaviors.[19] The impairments in functional connectivity among the amygdala, insula, and prefrontal cortex within individuals with BPD contribute to heightened emotional arousal and reduced regulatory control, thereby complicating the process of anger regulation.[20]

Anger, as a fundamental emotion that emerges when an individual perceives a sense of grievance or is obstructed, is articulated with varying frequencies and modalities contingent upon the individual's prior experiences, personality traits, and contextual factors. These modes of expression are evident in three dimensions: the suppression and inward focus of anger (anger-in), the outward verbal or behavioral expression of anger (anger-out), and the management of anger through increased awareness (anger-control).[21,22] Research indicates that a tendency toward anger-in is linked to depression, anxiety, and somatization, while a tendency for anger-out is associated with aggression, interpersonal conflict, and maladaptive behaviors.[23] Notable relationships exist between the dimensions of anger expression and demographic factors such as gender, education level, and employment status.[24] Additionally, genetic factors significantly influence anger expression styles,[25] and inconsistent parental behavior during early childhood can lead to aggressive anger tendencies.[26] Anger-in is connected with depression, anxiety, and physical complaints, while anger-out is related to aggression, relationship difficulties, and social conflicts.[21,22] For those lacking effective emotional regulation skills, expressing anger can result in manipulative, destructive, or self-harming behaviors.[14]

It is important to highlight that no empirical research has been found on the connections between PMN, BPD, and anger. This study aims to explore the associations among PMN, BPD, and anger expression styles, including the possible mediating role of BPD in the relationship between PMN and anger.

METHODS

Ethical Approval

Before the study commenced, ethical approval was obtained from the Doğuş University Ethics Committee (Date: 31.05.2024, Decision No: 2024/73). All procedures were carried out in accordance with the ethical rules and the principles of the Declaration of Helsinki.

Research Design and Sample Selection

This cross-sectional study was conducted between 10.05.2024 and 01.10.2024 with 434 non-clinical volunteer participants living in Turkiye, selected by simple random sampling. Individuals aged between 18 and 55 and literate were included in the study. Informed consent forms and questionnaires were distributed online via Google Forms, and data collection was carried out through various online platforms.

Consent to Participate

Informed consent was duly obtained from all participants involved in the study.

Study Procedure

The sociodemographic data form, the Perceived Maternal Narcissism Scale (PMNS), the Borderline Personality Questionnaire (BPQ), and the State-Trait Anger Expression Inventory (STAXI) were compiled as sequential questions, uploaded to Google Forms and subsequently shared with the participants.

Data Collection Tools

The Sociodemographic Data Form: This form, created by the researcher, includes questions regarding participants' gender, age, education, income, marital status, relationship status, and duration of the relationship.

The Perceived Maternal Narcissism Scale (PMNS): This 32-item scale, developed by Alpay,[27] consists of five subdimensions. It aims to assess how the child perceives the narcissistic characteristics of the mother during childhood from the child's perspective. Cronbach's alpha values were calculated as .92 for the overall scale and .89, .85, .85, .89, and .73 for the lack of empathy, grandiosity, criticism-accusation, control-manipulation, and parentification-exploitation subscales.[27]

The Borderline Personality Questionnaire (BPQ): This scale was developed by Poreh et al.[28] for evaluating borderline personality traits based on DSM-IV criteria. The internal consistency coefficient of the scale was found to be 0.94. The reliability values of the subscales were identified as 0.69 for impulsivity, .76 for affective instability, .78 for abandonment, .80 for unstable relationships, .79 for self-image, .81 for suicidal/self-injurious behavior, .77 for feelings of emptiness, .87 for intense anger, and .73 for quasi-psychotic states. In the Turkish adaptation of the scale, the internal consistency was assessed to be .89, while the Cronbach alpha values for the sub-dimensions were established as 0.50, 0.77, 0.40, 0.68, 0.72, 0.48, 0.73, 0.74, and 0.62, respectively.[29]

The State-Trait Anger Expression Inventory (STAXI): This instrument, developed by Spielberger and colleagues,[21] is a 34-item, four-point Likert-type scale. The first 10 items measure "trait anger", while the subsequent questions evaluate anger expression styles encompassing three sub-dimensions: "anger-in", "anger-out", and "anger-control". The scale was adapted into Turkish by Özer.[22] Cronbach's alpha values ranged from .67 to .92 for trait anger, .58 to .76 for anger-in, .69 to .91 for anger-out, and .80 to .90 for anger-control.[22]

Statistical Analysis

Data analysis was conducted using IBM SPSS 27, along with the process macro 4.2 and model 4 plug-in. Statistical tests included assessments of descriptive and frequency analyses, normality tests, and Pearson correlation analysis to determine the relationships between the PMNS, BPQ, and STAXI. Additionally, the Bootstrap method was employed to examine the mediating variable. All statistical tests were carried out with a 95% confidence interval, and significance was determined at $p<.05$.

RESULTS

The study involved 434 participants aged 18 to 55. Among the participants, 195 (44.9%) were female and 239 (55.1%) were male; 131 (30.2%) were aged 18 to 25, 205 (47.2%) were aged 26 to 40, and 98 (22.6%) were aged 41 to 55. Regarding monthly income levels, 23.5% of the participants reported low income, 62.0% reported medium income, and 14.5% reported high income. In terms of educational status, 18.0% graduated from high school, 52.3% hold bachelor's or associate's degrees, and 29.7% have master's or doctorate degrees. Concerning marital status, 63.6% of the participants were single, while 36.4% were married. Regarding relationship status, 47.7% stated that they had a relationship, whereas 15.9% indicated they did not. The relationship duration was found to be 0-12 months for 3.2%, 1-3 years for 9.7%, 3-5 years for 22.8%, and 5 years or more for 12.0%. The sociodemographic characteristics of the participants are presented in Table 1.

Table 1. Sociodemographic characteristics of participants

		n	%
Gender	Female	195	44.9
	Male	239	55.1
Age	18-25	131	30.2
	26-40	205	47.2
	41-55	98	22.6
Monthly income	Low	102	23.5
	Middle	269	62.0
	High	63	14.5
Education status	High school graduate	78	18.0
	Bachelor's degree	227	52.3
	Master's/PhD degree	129	29.7
Marital status	Single	276	63.6
	Married	158	36.4
Relationship status	In a relationship	207	47.7
	No relationship	69	15.9
Relationship duration	0-12 months	14	3.2
	1- 3 years	42	9.7
	3-5 years	99	22.8
	Over 5 years	52	12.0
Total		434	100.0

Before conducting the correlation and mediation analyses, preliminary tests were performed to assess the descriptive statistics and normality assumptions for the study variables. As presented in Table 2, the mean scores for the PMNS, BPQ, and STAXI were X=54.96 (SD=17.26), X=22.07 (SD=15.54), and X=24.61 (SD=7.87). The internal consistency (α) values for the variables ranged between 0.71 and 0.95, confirming that the scales are reliable.[30] Additionally, when skewness and kurtosis coefficients were examined to determine the appropriateness of the scales for normal distribution, it was found that all scales fell within the range of ±2; thus, the normality assumption was met.[31]

As illustrated in Table 3, a significant relationship was observed between trait anger and PMNS ($r=.32$, $p<.01$), encompassing all sub-dimensions of PMNS. Furthermore, a significant correlation was observed between trait anger and BPQ ($r=.25$, $p<.01$), including all sub-dimensions of BPQ. Additional correlations include: between anger-in and PMNS ($r=.37$, $p<.01$) as well as all sub-dimensions of PMNS; between anger-in and BPQ ($r=.38$, $p<.01$) alongside all sub-dimensions of BPQ; between anger-out and PMNS ($r=.32$, $p<.01$) along with all sub-dimensions of PMNS; between anger-out and BPQ ($r=.30$, $p<.01$) covering all sub-dimensions of BPQ; and

Table 2. Descriptive statistics and reliabilities of PMNS, BPQ, and STAXI

	n	Min	Max	X	SD	Kurtosis	Skewness	(α)
PMNS	434	32	117	54.96	17.26	1.21	1.26	0.95
The lack of empathy	434	7	28	13.01	5.08	0.14	0.92	0.92
Grandiosity	434	6	21	9.14	3.56	1.76	1.52	0.82
Criticism-accusation	434	8	28	12.11	4.67	1.75	1.50	0.89
Control-manipulation	434	6	24	11.82	4.15	0.15	0.85	0.85
Parentification-exploitation	434	5	20	8.86	2.86	0.82	0.92	0.74
BPQ	434	0	67	22.07	15.54	-0.29	0.74	0.95
Impulsivity	434	0	9	2.29	2.21	0.03	0.99	0.77
Affective instability	434	0	10	3.50	2.62	-0.76	0.55	0.77
Abandonment	434	0	9	2.95	2.19	-0.56	0.60	0.71
Unstable relationships	434	0	8	2.28	2.26	-0.35	0.89	0.79
Self-image	434	0	9	2.19	2.15	-0.07	0.95	0.77
Suicidal/self-injurious behavior	434	0	7	1.97	1.91	-0.33	0.84	0.73
Feelings of emptiness	434	0	10	2.84	2.32	0.04	0.88	0.73
Intense anger	434	0	9	2.11	2.11	-0.16	0.86	0.72
Quasi-psychotic states	434	0	7	1.94	1.89	0.06	1.08	0.78
STAXI trait anger	434	10	40	24.61	7.87	-0.75	0.13	0.89
Anger-in	434	8	32	18.97	6.02	-0.69	0.03	0.83
Anger-out	434	8	32	18.22	6.30	-0.77	0.28	0.88
Anger-control	434	8	32	21.41	5.92	-0.65	-0.22	0.84

PMNS: The Perceived Maternal Narcissism Scale, BPQ: The Borderline Personality Questionnaire, STAXI: The State-Trait Anger Expression Inventory, Min: Minimum, Max: Maximum, SD: Standard deviation

Table 3. Correlations of PMNS, BPQ, and STAXI

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1-STAXI Trait anger	1																			
2-Anger-in	.64**	1																		
3-Anger-out	.82**	.69**	1																	
4-Anger-control	-.43**	-.38**	-.43**	1																
5-PMNS	.32**	.37**	.32**	-.23**	1															
6-The lack of empathy	.26**	.34**	.26**	-.16**	.86**	1														
7-Grandiosity	.27**	.30**	.28**	-.23**	.90**	.71**	1													
8-Criticism-accusation	.27**	.35**	.28**	-.20**	.93**	.81**	.81**	1												
9-Control-manipulation	.25**	.29**	.23**	-.21**	.79**	.52**	.65**	.66**	1											
10-Parentification-exploitation	.31**	.30**	.30**	-.20**	.72**	.46**	.64**	.57**	.54**	1										
11-BPQ	.25**	.38**	.30**	-.10*	.48**	.55**	.39**	.48**	.30**	.26**	1									
12-Impulsivity	.17**	.28**	.21**	-.08	.36**	.41**	.29**	.36**	.23**	.19**	.80**	1								
13-Affective instability	.17**	.29**	.20**	-.07	.43**	.45**	.35**	.43**	.27**	.26**	.79**	.60**	1							
14-Abandonment	.15**	.26**	.16**	-.04	.33**	.41**	.26**	.35**	.17**	.12*	.79**	.59**	.62**	1						
15-Unstable relationships	.25**	.33**	.29**	-.07	.36**	.42**	.29**	.36**	.23**	.17**	.83**	.58**	.58**	.60**	1					
16-Self-image	.12*	.27**	.16**	.01	.35**	.42**	.27**	.35**	.19**	.15**	.80**	.57**	.56**	.62**	.68**	1				
17- Suicidal/self-injurious behavior	.31**	.34**	.36**	-.10*	.36**	.40**	.28**	.34**	.22**	.21**	.77**	.59**	.56**	.53**	.73**	.53**	1			
18- Feelings of emptiness	.20**	.27**	.24**	-.08	.38**	.43**	.32**	.35**	.22**	.21**	.84**	.62**	.54**	.60**	.67**	.62**	.63**	1		
19-Intense anger	.26**	.36**	.27**	-.12*	.43**	.46**	.36**	.41**	.29**	.25**	.82**	.65**	.58**	.58**	.59**	.61**	.54**	.67**	1	
20- Quasi-psychotic states	.17**	.28**	.24**	-.16**	.45**	.46**	.37**	.43**	.31**	.28**	.67**	.45**	.45**	.41**	.46**	.45**	.42**	.57**	.62**	1

**p<0.01, *p<0.05 Used: Pearson correlation test, PMNS: The Perceived Maternal Narcissism Scale, BPQ: The Borderline Personality Questionnaire, STAXI: The State-Trait Anger Expression Inventory

between PMNS and BPQ (r=.48, p<.01) and all sub-dimensions of both scales. Additionally, a negative correlation was found between anger-control and PMNS (r=-.23, p<.01), as well as all sub-dimensions of PMNS, and between anger-control and BPQ (r=-.10, p<.05) and the sub-dimensions of suicidal/self-injurious behavior (r=-.10, p<.05), intense anger (r=-.12, p<.05), and quasi-psychotic states (r=-.16, p<.01) within BPQ.

As demonstrated in Table 4, the analysis of the effect of the independent variable on the mediating variable revealed that PMNS significantly predicted BPQ in a positive direction [β=.48, 95% CI (.36, .51)]. Additionally, upon analyzing the effect of the mediating variable on the dependent variable, it was found that BPQ predicted trait anger [β=.25, 95% CI (.08, .17)], anger-in [β=.38, 95% CI (.11, .18)], and anger-out [β=.30, 95% CI (.08, .16)] at a significant level.

Table 4. The mediating role of BPQ in the relationship between PMNS and STAXI

						%95 CI	
	B	SE	β	t	p	LL	UL
PMNS →BPQ	0.44	0.04	0.48	11.51	0.000*	0.36	0.51
BPQ →Trait anger	0.13	0.02	0.25	5.39	0.000*	0.08	0.17
BPQ →Anger-in	0.15	0.02	0.38	8.44	0.000*	0.11	0.18
BPQ → Anger-out	0.12	0.02	0.30	6.50	0.000*	0.08	0.16
Total effect (c1)	0.14	0.02	0.32	6.97	0.000*	0.10	0.19
Direct effect (c1)	0.12	0.02	0.26	4.94	0.000*	0.07	0.16
Indirect effect (c1)	0.02	0.01				0.01	0.05
Total effect (c2)	0.13	0.02	0.37	8.40	0.000*	0.10	0.16
Direct effect (c2)	0.09	0.02	0.25	5.07	0.000*	0.05	0.12
Indirect effect (c2)	0.04	0.01				0.03	0.06
Total effect (c3)	0.12	0.02	0.32	6.93	0.000*	0.08	0.15
Direct effect (c3)	0.08	0.02	0.22	4.36	0.000*	0.04	0.12
Indirect effect (c3)	0.03	0.01				0.02	0.05

*p<.05 Test used: Process Macro 4.2, PMNS: The Perceived Maternal Narcissism Scale, BPQ: The Borderline Personality Questionnaire, STAXI: The State-Trait Anger Expression Inventory, CI: Confidence interval, SE: Standard error

As presented in Figure, according to the total effect (c1) analysis, which measures the impact of the independent variable on the dependent variable, PMNS was found to significantly predict trait anger [β=.32, 95% CI (.10, .19)]. When BPQ was incorporated into this model as a mediating variable, a reduction in the β value of the independent variable PMNS was observed, leading to the conclusion that the direct effect was significant [β=.26, 95% CI (.07, .16)]. In the bootstrap analyses for the indirect effect, it was determined that the mediation did not include a zero (0) value within the 95% confidence interval, and the indirect effect [β=.06, 95% CI (.01, .05)] was statistically significant. The total effect (c2) analysis, which also evaluates the independent variable's impact on the dependent variable, found that PMNS significantly predicts anger-in [β=.37, 95% CI (.10, .16)]. With BPQ incorporated as a mediating variable, the β value for PMNS decreased, indicating a significant direct effect [β=.25, 95% CI (.05, .12)]. Bootstrap analyses for the indirect effect confirmed that the mediation did not include a zero (0) value in the 95% confidence interval, showing a statistically significant indirect effect [β=.12, 95% CI (.03, .06)]. According to the total effect (c3) analysis, PMNS was found to significantly predict anger-out [β=.32, 95% CI (.08, .15)]. The addition of BPQ as a mediating variable resulted in a reduction of the β value for PMNS, confirming a significant direct effect [β=.22, 95% CI (.04, .12)]. In the bootstrap analyses for the indirect effect, it was determined that the mediation did not encompass a zero (0) value within the 95% confidence interval, and the indirect effect [β=.10, 95% CI (.02, .05)] was statistically significant. Only those variables for which the mediation analysis yielded significant results were incorporated into the model; consequently, the variable anger-control was excluded from consideration.

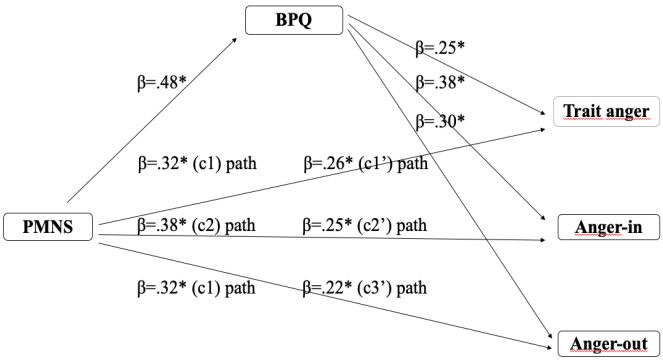

Figure. The mediating role of BPQ in the relationship between PMNS and STAXI

BPQ: The Borderline Personality Questionnaire, PMNS: The Perceived Maternal Narcissism Scale, STAXI: The State-Trait Anger Expression Inventory

DISCUSSION

This study presents findings from research conducted with 434 participants aged 18 to 55. The participants were assessed for sociodemographic characteristics, including gender, age, education, income, marital status, relationship status, and relationship duration. The PMNS, BPQ, and STAXI instruments were used to examine the relationships between PMN, BPD traits, and anger.

Significant correlations were observed between PMNS and all of its sub-dimensions as well as STAXI, including trait anger, anger-in, anger-out, and anger-control. In the literature, no studies exist that examine the correlation between PMN and anger. However, studies indicate that PMN predicts self-criticism, depression, and anxiety;[4] mothers' punitive reactions predict higher trait anger[32] and general narcissistic traits such as entitlement and authority have positive relationships with anger.[33]

PMNS was also found to correlate with BPQ, including all sub-dimensions of both scales. Currently, there are no studies in the literature that directly measure the relationship between PMN and BPD. However, several studies address the broader connections between dysfunctional maternal behaviors and BPD. For instance, a combination of maternal inconsistency and over-involvement predicts BPD;[34] significant relationships exist between maternal rejection or inadequate care and BPD characteristics;[35,36] low maternal care combined with

high overprotection emerged as risk factors;[37] and emotional invalidation in childhood mediated the link between BPD traits and romantic dysfunction.[38] Studies have also found that perceived maternal rejection, particularly when combined with maternal Cluster B characteristics, shows a significant association with the severity of BPD in adolescents,[39] that childhood emotional and sexual abuse reveals specific correlations with BPD criteria,[40] and individuals diagnosed with BPD are inclined to perceive a higher degree of parental rejection during their childhood.[41] Therefore, empirical studies show that negative maternal interactions are linked to BPD. Nonetheless, the current study provides initial evidence supporting the relationship between PMN and BPD, highlighting dimensions of PMN such as a lack of empathy, grandiosity, criticism-accusation, control-manipulation, and parentification-exploitation. This finding is in alignment with existing literature concerning the correlation between dysfunctional or adverse maternal behaviors and BPD.

It was also found that there is a correlation between BPQ, including all its sub-dimensions, and STAXI, along with the dimensions of trait anger, anger-in, and anger-out. In addition, a low negative correlation was found between the BPQ and only the suicidal/self-injurious behavior, intense anger, and quasi-psychotic states subscales of the BPQ and anger-control. Existing literature indicates a strong relationship between BPD and the experience of anger. Studies using behavioral and self-report measures demonstrate multilevel associations. For instance, there are significant differences between trait anger and anger expression styles in individuals with BPD compared to those without it,[42] BPD symptoms predict anger through relationship satisfaction,[43] emotion dysregulation and trait anger sequentially mediate the relationship between BPD and aggression,[44] and BPD symptoms increase the risk of aggression through anger reactivity to perceived rejection.[45] Anger rumination mediates the relationship between emotional dysregulation and aggression in BPD[46] as well as the connection between childhood emotional vulnerability and BPD symptom severity.[47] Anger suppression also emerges as a significant mediator between attachment styles and BPD traits.[48] Neuroimaging studies further support the links between BPD and anger, particularly noting that BPD patients exhibit more prolonged anger reactions compared to controls[49] and demonstrate a significant frustration-induced increase in anger.[50]

The present study also found that PMNS significantly predicted BPQ in a positive direction. Additionally, BPQ significantly predicted trait anger, anger-in, and anger-out, while PMNS also significantly predicted these variables, with BPQ serving as a mediator in each of these relationships. Although no study addresses PMN, BPD, and anger together, some research indicates that maternal BPD symptoms, for example, affect infant emotion regulation difficulties through maternal emotional dysfunction,[51] strengthen the connection between maternal-reported infant anger and punitive/minimizing emotion socialization,[52] and are linked to infant anger expressions[53] and diminished psychosocial functioning among adolescents.[54] Although the existing literature contains findings on the effects of mother-child relationships on personality traits and emotional expressions, this study's finding, which shows the mediating effect of BPD in the relationship between PMN and anger, reveals the relationships between these variables directly for the first time. It also contributes to the literature on parent-child relationships, personality disorders, and emotional regulation in this context.

Limitations

Despite its contributions, this study possesses some limitations. Firstly, relying solely on self-report scales for data collection is the primary limitation of the study. In the future, evaluating the relationships between these variables through clinical observations and tests will be beneficial. Another limitation is that the entire sample consists of non-clinical participants, which may restrict the applicability of the study's findings to clinical populations. It would be useful to replicate future studies with parents clinically diagnosed with narcissistic personality disorder (NPD) and their children diagnosed with BPD.

CONCLUSION

This study examined the relationships between PMN, traits of BPD, and anger. The findings reveal that significant correlations exist among PMN, BPD, and anger, with PMN acting as a strong predictor of trait anger as well as anger-in and anger-out styles of expression. Furthermore, the study highlights the mediating influence of BPD traits within this context. Although no previous studies in the literature directly address these variables together, these results are consistent with the broader body of research concerning parent-child relationships, adverse childhood experiences, personality disorders, and emotional expressions. In this regard, this study, which reveals the direct influence of PMN on anger and identifies BPD as a key mediator, contributes substantially to the existing literature.

ETHICAL DECLARATIONS

Ethics Committee Approval

The study was carried out with the permission of the Doğuş University Ethics Committee (Date: 31.05.2024, Decision No: 63097).

Informed Consent

All patients signed and free and informed consent form.

Referee Evaluation Process

Externally peer-reviewed.

Conflict of Interest Statement

The authors have no conflicts of interest to declare.

Financial Disclosure

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Author Contributions

All of the authors declare that they have all participated in the design, execution, and analysis of the paper, and that they have approved the final version.

REFERENCES

1. Kohut H. The analysis of the self: a systematic approach to the psychoanalytic treatment of narcissistic personality disorders. New York: International Universities Press; 1971.
2. Kernberg O. Borderline conditions and pathological narcissism. New York: Jason Aronson; 1975.
3. Estlein R, Gewirtz-Meydan A, Finzi-Dottan R. Maternal narcissism and child maladjustment: a dyadic study. *Curr Psychol.* 2024;43:34705-34716. doi:10.1007/s12144-024-06993-4
4. Alpay EH, Aydın A. Growing up with a narcissistic mother: mediating role of self-criticism in the relationship of maternal narcissistic traits with depression and anxiety. *Curr Approaches Psychiatry.* 2024;16(Suppl 1):87-97. doi:10.18863/pgy.1402000
5. Dündar B. The relationship between narcissism, perceived maternal narcissism, selfobject needs and attachment [master's thesis]. İzmir: İzmir University of Economics; 2022.
6. Türker Ö. The role of perceived maternal narcissism and depression on the later development of narcissistic personality organization [master's thesis]. İstanbul: Bilgi Üniversitesi; 2018.
7. Vignando M, Bizumic B. Parental narcissism and scapegoating. *J Psychol.* 2023;157(2):121-141. doi:10.1080/00223980.2022.2148088
8. Faraji H, Bilğiş C, Darçın Z. The mediator role of rejection sensitivity between perceived maternal narcissism and self-disclosure in romantic relationship. *Turk Psychol Couns Guid J.* 2024;14(72):37-47. doi:10.17066/tpdrd.1237523_3
9. Bach BN. The impact of parental narcissistic traits on self-esteem in adulthood [master's thesis]. Northampton (MA): Smith College; 2014. https://scholarworks.smith.edu/theses/845
10. Greenberg JR, Mitchell SA. Object relations in psychoanalytic theory. Cambridge, MA: Harvard University Press; 1983.
11. American Psychiatric Association. Diagnostic and statistical manual of mental disorders. 5th ed. Arlington, VA: American Psychiatric Publishing; 2013.
12. Schulze A, Cloos L, Zdravkovic M, et al. On the interplay of borderline personality features, childhood trauma severity, attachment types, and social support. *Borderline Personal Disord Emot Dysregul.* 2022;9:35. doi:10.1186/s40479-022-00206-9
13. Zanarini MC, Frankenburg FR, Reich DB, Marino MF, Haynes MC, Gunderson JG. Violence in the lives of adult borderline patients. *J Nerv Ment Dis.* 1999;187(2):65-71. doi:10.1097/00005053-199902000-00001
14. Reffi AN, Boykin DM, Orcutt HK. Examining pathways of childhood maltreatment and emotional dysregulation using self-compassion. *J Aggress Maltreat Trauma.* 2018;28(10):1269-1285. doi:10.1080/10926771.2018.1485810
15. Fonagy P, Luyten P, Bateman A. Translation: mentalizing as treatment target in borderline personality disorder. *Personal Disord.* 2015;6(4):380-392. doi:10.1037/per0000113
16. Lazarus SA, Cheavens JS. An examination of social network quality and composition in women with and without borderline personality disorder. *Personal Disord.* 2017;8(4):340-348. doi:10.1037/per0000201. PMID: 27347686
17. Torgersen S, Kringlen E, Cramer V. The prevalence of personality disorders in a community sample. *Arch Gen Psychiatry.* 2001;58(6):590-596. doi:10.1001/archpsyc.58.6.590
18. Carpenter RW, Trull TJ. Components of emotion dysregulation in borderline personality disorder: a review. *Curr Psychiatry Rep.* 2013;15(1):335. doi:10.1007/s11920-012-0335-2
19. Martino F, Caselli G, Berardi D, et al. Anger rumination and aggressive behaviour in borderline personality disorder. *Personal Ment Health.* 2015;9(4):277-287. doi:10.1002/pmh.1310
20. Mitolo M, D'Adda F, Evangelisti S, et al. Emotion dysregulation, impulsivity and anger rumination in borderline personality disorder: the role of amygdala and insula. *Eur Arch Psychiatry Clin Neurosci.* 2024;274(1):109-116. doi:10.1007/s00406-023-01597-8
21. Spielberger CD, Jacobs G, Russell S, Crane RS. Assessment of anger: the State-Trait Anger Scale. In: Butcher JN, Spielberger CD, eds. *Adv Personal Asses.* Vol 2. Hillsdale (NJ): Lawrence Erlbaum Associates; 1983:159-187.
22. Özer AK. Sürekli öfke ve öfke ifade tarzı ölçekleri: ön çalışma. *Türk Psikol Derg.* 1994;9(31):26-35.
23. Howells K, Day A. Readiness for anger management: clinical and theoretical issues. *Clin Psychol Rev.* 2003;23(2):319-337. doi:10.1016/s0272-7358(02)00228-3
24. Bal CG, Gül N, Tumurbağa M. Sürekli öfke ve öfke ifade tarzının demografik özelliklerle ilişkisi. *Kahramanmaraş Sütçü İmam Üniv İİBF Derg.* 2019;9(2):63-72.
25. Guo Y, Zhang H, Gao J, et al. Study of genes associated with the 'anger-in' and 'anger-out' emotions of humans using a rat model. *Exp Ther Med.* 2015;9(4):1448-1454. doi:10.3892/etm.2015.2246
26. Novaco RW, Taylor JL. Anger and assaultiveness of male forensic patients with developmental disabilities: Links to volatile parents. *Aggress Behav.* 2008;34(4):380-393. doi:10.1002/ab.20254
27. Alpay E. Anneden algılanan narsisistik özellikler ile psikopatoloji arasındaki ilişkide kendini eleştirinin aracı rolü incelenmesi [unpublished doctoral dissertation]. Mersin: Mersin Üniversitesi; 2020.
28. Poreh AM, Rawlings D, Claridge G, et al. The BPQ: a scale for the assessment of borderline personality based on DSM-IV criteria. *J Pers Disord.* 2006;20(3):247-260. doi:10.1521/pedi.2006.20.3.247
29. Ceylan V, Kose S, Akin E, Turkcapar MH. Normative data and factorial structure of the Turkish version of the Borderline Personality Questionnaire (Turkish BPQ). *Psychiatry Clin Psychopharmacol.* 2017;27(2):143-151. doi:10.1080/24750573.2017.1298422
30. Fitzner K. Reliability and validity: a quick review. *Diabetes Educ.* 2007;33(5):775-776, 780. doi:10.1177/0145721707308172
31. Hahs-Vaughn DL, Lomax RG. Statistical concepts-a second course. 5th ed. Routledge; 2020.
32. Perry NB, Cavanaugh AM, Dunbar AS, Leerkes EM. Maternal punitive reactions to children's negative emotions and young adult anger: the effect of gender and emotional closeness. *Marriage Fam Rev.* 2015;51(3):229-245. doi:10.1080/01494929.2015.1031421
33. Witte TH, Callahan KL, Perez-Lopez M. Narcissism and anger: an exploration of underlying correlates. *Psychol Rep.* 2002;90(3):871-875. doi:10.2466/pr0.2002.90.3.871
34. Bezirganian S, Cohen P, Brook JS. The impact of mother-child interaction on the development of borderline personality disorder. *Am J Psychiatry.* 1993;150:1836-1842. doi:10.1176/ajp.150.12.1836
35. Russ E, Heim A, Westen D. Parental bonding and personality pathology assessed by clinician report. *J Pers Disord.* 2003;17(6):522-536. doi:10.1521/pedi.17.6.522.25351
36. Nickell AD, Waudby CJ, Trull TJ. Attachment, parental bonding and borderline personality disorder features in young adults. *J Pers Disord.* 2002;16(2):148-159. doi:10.1521/pedi.16.2.148.22544
37. Boucher MÈ, Pugliese J, Allard-Chapais C, et al. Parent-child relationship associated with the development of borderline personality disorder: a systematic review. *Personal Ment Health.* 2017;11(4):229-255. doi:10.1002/pmh.1385
38. Selby EA, Braithwaite SR, Joiner TE, Fincham FD. Features of borderline personality disorder, perceived childhood emotional invalidation, and dysfunction within current romantic relationships. *J Family Psychol.* 2008;22(6):885-893. doi:10.1037/a0013673
39. Schuppert HM, Albers CJ, Minderaa RB, Emmelkamp PM, Nauta MH. Severity of borderline personality symptoms in adolescence: Relationship with maternal parenting stress, maternal psychopathology, and rearing styles. *J Pers Disord.* 2015;29(3):289-302. doi:10.1521/pedi_2104_28_155
40. Hernandez A, Arntz A, Gaviria AM, Labad A, Gutiérrez-Zotes JA. Relationships between childhood maltreatment, parenting style, and borderline personality disorder criteria. *J Pers Disord.* 2012;26(5):727-736. doi:10.1521/pedi.2012.26.5.727
41. Rohner RP, Brothers SA. Perceived parental rejection, psychological maladjustment, and borderline personality disorder. *J Emotion Abuse.* 1999;1(4):81-95. doi:10.1300/j135v01n04_05
42. Akpınar F. Borderline kişilik bozukluğu olan bireylerin öfke tarzları ve saldırganlık davranışı üzerine bir inceleme [master's thesis]. İstanbul: Maltepe Üniversitesi; 2010.
43. Kuhlken K, Robertson C, Benson J, Nelson-Gray R. The interaction of borderline personality disorder symptoms and relationship satisfaction in predicting affect. *Personal Disord.* 2014;5(1):20-25. doi:10.1037/per0000013
44. Mancke F, Herpertz SC, Kleindienst N, Bertsch K. Emotion dysregulation and trait anger sequentially mediate the association between borderline personality disorder and aggression. *J Pers Disord.* 2017;31(2):256-272. doi:10.1521/pedi_2016_30_247

45. Scott LN, Wright AGC, Beeney JE, Lazarus SA, Pilkonis PA, Stepp SD. Borderline personality disorder symptoms and aggression: a within-person process model. *J Abnorm Psychol*. 2017;126(4):429-440. doi:10.1037/abn0000272
46. Oliva A, Ferracini SM, Amoia R, et al. The association between anger rumination and emotional dysregulation in borderline personality disorder: a review. *J Affect Disord*. 2023;338:546-553. doi:10.1016/j.jad.2023.06.036
47. Sauer-Zavala SE, Geiger PJ, Baer RA. The effect of anger rumination in the relationship between borderline personality disorder symptoms and precursors. *J Pers Disord*. 2013;27(4):465-472. doi:10.1521/pedi_2013_27_098
48. Messina I, Spataro P, Sorella S, Grecucci A. "Holding in anger" as a mediator in the relationship between attachment orientations and borderline personality features. *Brain Sci*. 2023;13(6):878. doi:10.3390/brainsci13060878
49. Jacob GA, Guenzler C, Zimmermann S, et al. Time course of anger and other emotions in women with borderline personality disorder: a preliminary study. *J Behav Ther Exp Psychiatry*. 2008;39(3):391-402. doi:10.1016/j.jbtep.2007.10.009
50. Bertsch K, Back S, Flechsenhar A, et al. Don't make me angry: frustration-induced anger and its link to aggression in women with borderline personality disorder. *Front Psychiatry*. 2021;12:695062. doi:10.3389/fpsyt.2021.695062
51. Gratz KL, Kiel EJ, Latzman RD, Elkin TD, Moore SA, Tull MT. Emotion: empirical contribution: maternal borderline personality pathology and infant emotion regulation: examining the influence of maternal emotion-related difficulties and infant attachment. *J Personal Disorders*. 2014;28(1):52-69. doi:10.1521/pedi.2014.28.1.52
52. Kiel EJ, Viana AG, Tull MT, Gratz KL. Emotion socialization strategies of mothers with borderline personality disorder symptoms: the role of maternal emotion regulation and interactions with infant temperament. *J Personal Disorders*. 2017;31(3):399-416. doi:10.1521/pedi_2016_30_256
53. Whalen DJ, Kiel EJ, Tull MT, Latzman RD, Gratz KL. Maternal borderline personality disorder symptoms and convergence between observed and reported infant negative emotional expressions. *Personal Disorders Theory Research Treat*. 2015;6(3):229-238. doi:10.1037/per0000116
54. Herr NR, Hammen C, Brennan PA. Maternal borderline personality disorder symptoms and adolescent psychosocial functioning. *J Pers Disord*. 2008;22(5):451-465. doi:10.1521/pedi.2008.22.5.451