



The mediatory role of coping styles in the relationship between mindfulness in parenting and burnout in mothers of children with autism spectrum disorder

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■ MAIN POINTS

- As the level of mindfulness in parenting increases among mothers of children with autism spectrum disorder (ASD), depersonalization – one dimension of burnout – decreases and the sense of personal accomplishment – another dimension – increases, thereby reducing overall burnout.
- Helpless and submissive coping styles mediate the protective effect of mindfulness in parenting on depersonalization. Mindfulness has a protective effect against depersonalization by reducing negative coping styles.
- The absence of a substantial direct correlation between mindfulness in parenting and the emotional exhaustion dimension of burnout may be explained by mindfulness exerting its influence on different dimensions of burnout through distinct mechanisms.
- The positive effect of mindfulness in parenting on personal accomplishment is direct: it strengthens the parent's sense of competence rather than altering coping strategies.
- Targeting negative coping styles in parenting interventions may increase the effectiveness of mindfulness-based approaches in reducing parental burnout.

■ ABSTRACT

Aim: The purpose of this study was to examine the relationship between mindfulness in the mothers of children with autism spectrum disorder (ASD) and coping with stress styles and parental burnout, and to test the mediatory role of coping with stress styles.

Materials and Methods: The research was performed using a cross-sectional design. Seventy-one mothers of children with ASD were included in the study. The participants were administered the Mindfulness in Parenting Questionnaire, Ways of Coping Questionnaire, and Maslach Burnout Inventory. Relationships were examined using correlation analysis, and mediating effects were examined using the bootstrap method.

Results: Mindfulness in parenting exhibited a negative correlation with the burnout depersonalization subdimension ($r = -0.337, p = .008$) and a significant positive correlation with the personal accomplishment subdimension ($r = 0.548, p < .001$). Mediation analysis showed that the helpless approach ($b = -0.045, \text{BootSE} = 0.029, 95\% \text{BCa CI} [-0.117, -0.003]$) and submissive approach ($b = 0.031, \text{BootSE} = 0.018, 95\% \text{BCa CI} [0.002, 0.073]$) coping styles played a mediating role in the protective effect of mindfulness on depersonalization. However, coping styles did not have a statistically significant mediating role in the effects of mindfulness on emotional exhaustion or personal accomplishment.

Conclusion: The results suggest that mindfulness-based interventions may be effective in reducing burnout in mothers of children with ASD by targeting negative coping strategies. Therefore, integrating psychoeducational components into intervention programs to help mothers recognize nonfunctional coping styles is recommended.

Keywords: Autism spectrum disorder, Mindfulness in parenting, Parental burnout, Coping styles, Mediation analysis

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■ INTRODUCTION

The neurodevelopmental illness known as autism spectrum disorder (ASD) is typified by limited and repetitive behaviors as well as fundamental deficits in social communication [1].

Parents caring for children with ASD experience elevated psychological stress due to their children's intensive care needs and difficulties with communication and behavioral problems. Research has indicated that parents of ASD have notice-

ably higher levels of stress than parents of children with usual development [2]. Studies have also reported that the chronic stress experienced by the parents of ASD can lead to burnout in the long term [3].

Burnout has been defined as a three-dimensional structure resulting from chronic stress, its components being emotional exhaustion, depersonalization, and personal accomplishment [4]. Although burnout has traditionally been defined from an occupational perspective, the literature also considers it from a parental perspective, as parental burnout. The relevant literature largely focuses on burnout resulting from chronic stress specific to parenthood [3]. According to current research, mothers of children with ASD have higher levels of parental burnout than mothers of generally developing children [5,6]. In addition to stress levels in the context of parental burnout, how individuals cope with stress is also important. When an individual encounters a stressor, they evaluate its threat potential. If the event is perceived as exceeding the individual's resources, he will re-interpret it and endeavor to develop appropriate coping strategies [7]. Mindfulness affects cognitive evaluation in this process by allowing the individual to focus on current experiences in an open and non-judgmental manner, as well as permitting them to adopt more effective coping strategies [8].

Mindfulness is defined as focusing on the current situation with a non-judgmental and accepting approach [9]. Mindfulness in parenting involves understanding the child's needs in an empathetic manner, responding to behaviors with awareness, and adopting a more conscious presence in parent-child interactions [10]. Surprisingly, the number of studies examining the efficacy of mindfulness-based interventions aimed at preventing parental burnout is limited [11–13]. Parental stress and burnout can be decreased by mindfulness-based interventions aimed at parents who have kids with chronic illnesses, according to the findings of earlier research [11]. However, research on whether interventions aimed at increasing mindfulness have a direct or indirect effect on parental burnout is limited.

The term "coping" refers to behavioral and cognitive techniques used to balance internal and external demands on oneself when under pressure. Within the framework of the 'Mindful Coping Model' mindfulness suggests that individuals can regulate negative thoughts and emotions in a healthier manner and will adopt more adaptive coping strategies [7,14]. Studies involving health professionals and teachers have reported that mindfulness affects burnout via coping styles [15,16]. These findings suggest that mindfulness in parenting can indirectly affect burnout levels by shaping coping styles [11,17]. However, the psychological mechanisms underlying the positive impact of mindfulness, particularly the mediating role of coping styles within that relationship, have not been empirically investigated in mothers of children with ASD. Therefore, studies are needed to test this relational model in this special population. The aim of the current in-

vestigation is to close this gap in the literature.

Accordingly, this study aimed to examine the relationships among mindful parenting, coping styles, and dimensions of burnout in mothers of children with ASD. Additionally, we aimed to test whether coping styles statistically mediated these relationships.

■ MATERIALS AND METHODS

Study design and participants

The study used a cross-sectional design. The participants were mothers of children with ASD, aged 2-15, who presented to the child and adolescent psychiatry clinic and were identified using the consecutive sampling method. During the study period, all mothers and children who met the inclusion criteria and presented to the child and adolescent psychiatry clinic with an ASD diagnosis were assessed. Those who consented to participate were enrolled in the study. All participating children underwent DSM-5-TR-based psychiatric evaluations.

Exclusion criteria;

- The presence of any neurological, genetic, or metabolic disease in the participating children or siblings thereof,
- The presence of adults requiring care within the family,
- Children not living with their mothers,
- Mothers with severe psychiatric disorders who were unable to reliably complete the psychometric scales or who were receiving active treatment for these disorders were excluded from the study.

An analysis performed using G*Power 3.1 software revealed that the required minimum sample size was 55, based on a medium effect size ($f^2 = 0.15$), $\alpha = 0.05$, and 80% power. After applying the exclusion criteria, the study retained a sufficient sample size of 71 participants. The Alanya Alaaddin Keykubat University Clinical Research Ethics Committee approved the study (dated 26.03.2025; decision no. 06-03). Before the study started, the participants were informed of its purpose, and their verbal and written agreement was obtained.

Psychometric instruments

Data for the study were collected through face-to-face interviews with mothers when they presented at the clinic. The severity of the children's ASD was evaluated using the Childhood Autism Rating Scale (CARS). A sociodemographic data form, the Ways of Coping Questionnaire (WCQ), the Mindfulness in Parenting Questionnaire (MIPQ), and the Maslach Burnout Inventory (MBI) were administered to the children's mothers.

Childhood Autism Rating Scale: This behavioral scale was developed to evaluate the severity of symptoms in children with ASD [18]. Sucuoğlu et al. validated the scale's Turkish language version [19]. CARS consists of 15 domains; relationships to people, emotional response, adaptation to change,

imitation, body use, object use, taste, smell, and touch response, visual response, listening response, verbal communication, non-verbal communication, fear or nervousness, activity level, level and consistency of general impressions, and intellectual response. The disease's severity is indicated by the overall score [18].

Ways of Coping Questionnaire: The Ways of Coping Questionnaire (WCQ) was originally developed by Folkman and Lazarus. This questionnaire assesses coping styles. The Turkish short version of the scale, adapted and validated by Şahin and Durak, consists of 30 items rated on a 4-point Likert scale [20]. The scale includes five subscales: Self-Confident Approach (SCA), Optimistic Approach (OA), Seeking Social Support (SSS), Helpless Approach (HA), and Submissive Approach (SubA). There are no reverse-scored items. Higher total scores indicate a greater use of the relevant coping style [20].

Mindfulness in Parenting Questionnaire: McCaffrey et al. created this 28-item Likert-type measure to assess mindfulness in parent-child interactions [10]. Gördesli et al. translated it into Turkish, using 24 items and two subdimensions from the validity and reliability study [21]. There is no cut-off point for the MIPQ. The total scale score and sub-dimension scores are used to assess mindfulness levels. The total scale score was employed in the present study. Higher total scores indicate higher mindfulness levels.

Maslach Burnout Inventory: The Maslach Burnout Inventory (MBI) is a 22-item Likert-type scale developed to measure individuals' levels of burnout [4]. The Turkish validity and reliability study of the MBI was conducted by Ergin et al [22]. Emotional exhaustion (MBI-EE), depersonalization (MBI-DP), and personal accomplishment (MBI-PA) constitute its three subscales. Positive responses were found on the personal accomplishment subscale, whereas negative responses were found on the emotional exhaustion and depersonalization subscales. There is no cut-off point for the MBI.

Statistical analysis

Descriptive statistics were expressed as frequencies, percentages, means, standard deviations, medians, and Q1-Q3 values. The Kolmogorov-Smirnov test was applied to determine whether normality assumptions were violated. Skewness and kurtosis analysis was performed, with values between -2 and +2 being regarded as indicating normal distribution [23]. Correlations were determined using Pearson's correlation test when normality assumptions were not violated; otherwise, Spearman's correlation analysis was used. Following the theoretical framework and preliminary analyses, a model was established in which MBI sub-dimension scores were the outcome variable and MIPQ scores were the predictor. The mediating effects of WCQ sub-dimensions were then examined in that model. Child age, maternal age, education, and employment status were included as control variables in the

model. Bootstrapping, a non-parametric resampling procedure, is recommended for testing mediation that does not impose the normality assumption of the sample distribution [24]. The evaluation is robust to deviations from normality, and asymmetric confidence intervals were obtained by bootstrapping. The mediation analysis in this study was conducted using the PROCESS 4.2 beta in SPSS. The mediation models were tested using the bootstrap method. In these analyses, the mediation effect was considered statistically significant if no 0 value was present between the lower and upper limits of the 95% bias-corrected and accelerated confidence intervals (BCa CI) of the indirect effect (IE) obtained based on 5000 bootstrap sampling [25]. The analyses were conducted using IBM SPSS Statistics version 26.0 (Armonk, NY: IBM Corp.), and p-values below 0.05 were considered statistically significant.

RESULTS

Seventy-one participants were included in the research, of whom 76.1% were boys and 23.9% were girls. In terms of parental education, 40.8% of the mothers had an elementary-level education, and 59.2% had a high-school education or above. The majority of the participating mothers were employed (84.5%), while 15.5% were housewives. The detailed distribution of other demographic characteristics is presented in Table 1.

Descriptive statistics

Evaluation of MBI subscale scores across participants' sociodemographic variables revealed no significant differences in mean EE, PA, or DP scores by gender, maternal education, maternal employment status, paternal education, paternal employment status, monthly income, or family structure (Table 1).

The mean age of the children in the study was 7.06 ± 6.0 years (range: 2-16). Descriptive statistics were calculated for the scales applied. These were evaluated using the distributions of the results, skewness and kurtosis, and graphical methods (Table 2).

Correlation analyses

Correlation analysis was used to examine relationships among variables. Accordingly, the MIPQ exhibited significant positive correlations with the SCA ($r = 0.454, p < .001$) and OA ($r = 0.412, p = .001$) stress-coping styles, and a significant correlation with SubA ($r = -0.376, p = .003$). MIPQ also exhibited a significant negative correlation with the DP burnout subdimension ($r = -0.337, p = .008$), and a significant positive correlation with PA ($r = 0.548, p < .001$). Correlation analysis between coping with stress styles and burnout subdimensions revealed a significant negative correlation between the EE dimension and OA ($r = -0.358, p = 0.002$) and a significant positive correlation with HA ($r = 0.352, p = .003$). The PA dimension exhibited significant positive correlations with ($r =$

Table 1. A comparison of Maslach burnout inventory subscale score distributions according to sociodemographic variables.

	N	%	Emotional Exhaustion		Personal Accomplishment		Depersonalization	
			Mean±SD/ Median (Q1-Q3)	p	Mean±SD/ Median (Q1-Q3)	p	Mean±SD/ Median (Q1-Q3)	p
Gender								
Female	17	23.9	7 (5-10)	0.71 ^b	26 (24-28)	0.71 ^a	3 (2-5)	0.83 ^b
Male	54	76.1	6 (4-14)		25 (21.3-29)		3 (1-7)	
Maternal education								
Elementary	29	40.8	7 (4-11)	0.97 ^b	24 (21-28)	0.99 ^b	3 (1-7)	0.93 ^b
High school or above	42	59.2	6 (4-13)		24 (24-30)		3 (1-6)	
Maternal employment status								
Housewife	11	15.5	7 (4-14)	0.26 ^b	25 (22-29)	0.59 ^b	3 (1-7)	0.41 ^b
Working	60	84.5	5 (8-14)		25 (22-27)		1 (0.5-5)	
Paternal education								
Elementary	34	47.9	6 (4-10.8)	0.35 ^b	25.1±4.74	0.76 ^a	3 (0-6)	0.31 ^b
High school and above	37	52.1	8 (4-13)		25.4±4.22)		3 (1-7)	
Paternal employment status								
Not working	5	7.1	4 (4-8)	0.28 ^b	25 (25-29)	0.50 ^b	4 (3-4)	0.63 ^b
Working	65	92.1	7 (4-14)		26 (22-29)		3 (1-7)	
Monthly family income								
≤ MW	20	28.2	8.40±6.06	0.41 ^c	24.7±5.44	0.49 ^c	4.45±4.24	0.37 ^c
2-3 MW	44	62	8.43±5.43		25.2±4.09		3.75±3.10	
≥ 4 MW	7	9.8	6.14±6.28		27.1±3.48		2.71±4.64	
Family structure								
Nuclear	62	91.2	7 (4-12.8)	0.57 ^b	25.0±4.54	0.489 ^a	3 (1-7)	0.89 ^b
Extended	6	8.8	5 (3.5-8.25)		26.3±2.88		3 (2.25-3.75)	

^aStudent's t, ^bMann Whitney U, ^cKruskal Wallis, MW: Minimum wage.

Table 2. Descriptive statistics for ages and psychosocial scales.

		Mean±SD	Median (Q1-Q3)	Skewness	Kurtosis
Age (child)		7.06±6.00	6 (4.33-9.04)	-	-
Mother Age		36.91±8.95	36 (32-42)	-	-
Father Age		40.91±8.84	39 (36-45)	-	-
CARS		44.06±10,17	45 (35-53)	-	-
MIPQ		78.75±9.66	80 (72-85.3)	-0.483	-0.392
WCQ Subdimensions	SCA	23.93±2.88	24 (21.5-26)	-0.389	-0.415
	OA	16.10±2.49	16 (15-18)	-0.627	0.738
	HA	17.69±4.01	17 (15-20)	0.297	-0.076
	SubA	12.62±3.44	12 (10-15)	0.470	0.393
	SSS	11.89±1.92	12 (11-13)	-0.574	1.803
MBI Subdimensions	EE	8.20±5.65	7 (4-13)	0.596	-0.547
	PA	25.23±4.45	25 (22-29)	-0.325	-0.713
	DP	3.85±3.59	3 (1-6.5)	0.827	-0.110

MIPQ: Mindfulness in Parenting Questionnaire, WCQ: Ways of Coping Questionnaire, SCA: Self-Confident Approach, OA: Optimistic Approach, HA: Helpless Approach, SubA: Submissive Approach, SSS: Seeking Social Support, MBI: Maslach Burnout Inventory, EE: Emotional Exhaustion, DP: Depersonalization, PA: Personal Accomplishment.

0.382, p = .001) and OA (r = 0.377, p = .001), and significant negative correlations with HA (r = -0.249, p = .037) and SSS (r = -0.29, p = .014). The DP dimensions was powerfully negatively correlated with the OA and SCA coping with stress styles (r = -0.258, p = .03 and r = -0.465, p < .001, respectively). HA and DP showed a substantial positive correlation (r = 0.488, p < .001) (Table 3).

Mediation analyses

Mediation analyses were conducted in which MIPQ scores represented the predictor variable, MBI subdimensions represented the outcome variables, and coping-with-stress styles represented the mediator. Child age, maternal age, education, and employment status were included as control variables in the analysis.

Table 3. Correlations between mothers' parenting mindfulness, coping strategies, and burnout levels.

		MIPQ	SCA	OA	HA	SubA	SSS	EE	PA	DP
MIPQ		---								
WCQ	SCA	0.454***	---							
	OA	0.412**	0.627***	---						
	HA	-0.242	-0.252*	-0.337**	---					
	SubA	-0.376**	-0.141	-0.063	0.405***	---				
	SSS	0.033	0.209	0.167	0.025	-0.072	---			
MBI	EE	-0.211	-0.226	-0.358**	0.352**	0.210	-0.023	---		
	PA	0.548***	0.382**	0.377**	-0.249*	-0.290*	0.178	-0.190	---	
	DP	-0.337**	-0.258*	-0.465***	0.488***	0.067	0.010	0.640***	-0.294*	---

*p<0.05, **p<0.01, ***p<0.001. CARs: Childhood Autism Rating Scale, MIPQ: Mindfulness in Parenting Questionnaire, WCQ: Ways of Coping Questionnaire, SCA: Self-Confident Approach, OA: Optimistic Approach, HA: Helpless Approach, SubA: Submissive Approach, SSS: Seeking Social Support, MBI: Maslach Burnout Inventory, EE: Emotional Exhaustion, DP: Depersonalization, PA: Personal Accomplishment.

Table 4. The mediatory effects of coping with stress styles in the relationship between mindfulness in parenting and burnout.

Type	Predictor	Mediator	Outcome	b	SE	Bootstrap BC at 95% CI for indirect effect		p
						Lower	Upper	
Indirect	MIPQ	SCA	DP	0.011	0.031*	-0.045	0.078	-
	MIPQ	OA	DP	-0.038	0.031*	-0.111	0.011	-
	MIPQ	SSS	DP	-0.001	0.006*	-0.014	0.011	-
	MIPQ	HA	DP	-0.045	0.029*	-0.117	-0.003	-
	MIPQ	SubA	DP	0.031	0.018*	0.001	0.073	-
Direct	MIPQ	-	DP	-0.093	0.047	-0.188	0.002	0.06
Total	MIPQ	-	DP	-0.134	0.043	-0.220	-0.049	0.003
Indirect	MIPQ	SCA	EE	-0.042	0.070*	-0.217	0.061	-
	MIPQ	OA	EE	-0.063	0.075*	-0.245	0.048	-
	MIPQ	SSS	EE	0.001	0.014*	-0.031	0.028	-
	MIPQ	HA	EE	-0.053	0.041*	-0.149	0.005	-
	MIPQ	SubA	EE	-0.023	0.031*	-0.094	0.028	-
Direct	MIPQ	-	EE	-0.034	0.092	-0.151	0.218	0.71
Total	MIPQ	-	EE	-0.146	0.077	-0.301	-0.008	0.04
Indirect	MIPQ	SCA	PA	-0.001	0.046*	-0.078	0.107	-
	MIPQ	OA	PA	0.039	0.047*	-0.039	0.151	-
	MIPQ	SSS	PA	-0.001	0.011*	-0.016	0.030	-
	MIPQ	HA	PA	-0.003	0.022*	-0.044	0.048	-
	MIPQ	SubA	PA	0.005	0.025*	-0.040	0.066	-
Direct	MIPQ	-	PA	0.201	0.066	0.074	0.342	0.003
Total	MIPQ	-	PA	0.249	0.049	0.149	0.385	<0.001

BC, bias-corrected; CI, confidence interval; SE, standard error, LLCI = Lower Limit Confidence Interval, ULCI = Upper Limit Confidence Interval. MIPQ: Mindfulness in Parenting Questionnaire, WCQ: Ways of Coping Questionnaire, SCA: Self-Confident Approach, OA: Optimistic Approach, HA: Helpless Approach, SubA: Submissive Approach, SSS: Seeking Social Support, MBI: Maslach Burnout Inventory, EE: Emotional Exhaustion, DP: Depersonalization, PA: Personal Accomplishment.

* The standard error for the indirect effect was calculated with bootstrap (5000 repetitions). Bootstrapping (with 5000 samples) was used in all mediations at a 95% CI. The mediating effect is significant when the values between the lower and upper CI contain no zeroes. Raw coefficient (b) given for total, direct and indirect effects.

The total effect of the MIPQ burnout subdimension on depersonalization was significant (b = -0.134, p = .003). When coping styles were simultaneously included in the model, the direct effect of MIPQ on depersonalization was attenuated and no longer statistically significant (b = -0.093, p = .06), indicating an indirect-only mediation pattern. HA (b = -0.045, 95% CI [-0.117, -0.033]) and SubA (b = 0.031, 95% CI [0.002, 0.073]) stress coping styles exhibited significant mediating effects (Figure 1). Bootstrap analyses confirmed that these indirect effects were significant for HA (b= -0.045, BootSE = 0.029, 95% BCa CI [-0.117, -0.003]) and SubA (b = 0.031, BootSE = 0.018, 95% BCa CI [0.002, 0.073]) (Table 4). The model was statistically significant (F(10, 46) = 4.65, p < 0.001,

R² = 0.503).

Mediation analysis showed that MIPQ exerted a significant total effect on the burnout EE subdimension (b = -0.146, p = 0.04). When coping styles were added to the model, the direct effect remained insignificant (b = -0.034, p = 0.71), but the total indirect effect was significant (BootLLCI = -0.365, BootULCI = -0.065). Examination of specific indirect effects revealed that none of the individual coping styles exhibited a statistically significant mediating effect on their own. The model was significant overall (F(10, 46) = 2.54, p = 0.02, R² = 0.36) (Table 4).

MIPQ exhibited a significant total effect on the burnout PA

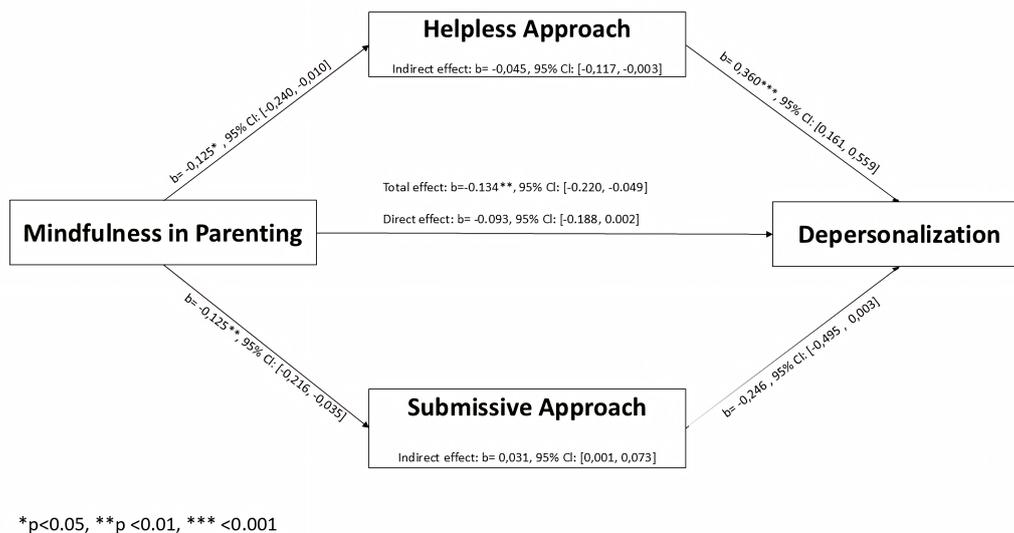


Figure 1. Direct and indirect effects of mindfulness in parenting on depersonalization.

subdimension ($b = 0.249$, $p < 0.001$). When coping styles were added to the model, the direct effect decreased but remained significant ($b = 0.201$, $p = 0.003$). The model was statistically significant overall ($F(10, 46) = 3.65$, $p = 0.001$, $R^2 = 0.442$). However, in the bootstrap analysis, no coping style exhibited a significant mediating effect. This shows that the effect of mindfulness in parenting on personal achievement is direct, but coping styles do not play a mediating role in this relationship (Table 4).

DISCUSSION

This study examined the relationship between mindfulness in parenting and burnout in mothers of children with ASD, and the mediating role of mothers' stress-coping styles. The findings showed significant relationships between mindfulness in parenting among mothers of children with ASD and the burnout subdimensions DP and PA, but no significant association with EE. In addition, analyses showed that HA and SubA mediated the negative effect of mindfulness in parenting on the depersonalization subdimension of burnout in parents. Styles of coping with stress did not mediate the effects of mindfulness in parenting on personal accomplishment and emotional exhaustion. The results of this study partially corroborate the first hypothesis, which states that mothers of children with ASD will experience less burnout as their mindfulness in parenting increases. They also partially support the second hypothesis that the coping styles of mothers with ASD mediate the relationship between burnout subdimensions and mindfulness in parenting. This study makes important contributions to the literature on factors affecting maternal burnout.

Research into burnout has generally focused on occupational contexts, and studies examining parental burnout that emerges alongside chronic stress specific to parenthood are

scarce. Anclair et al. found that parents of children with chronic illnesses who participated in a mindfulness program saw a significant reduction in stress and burnout [11]. Pausick et al. also investigated parents in a non-clinical sample and showed that mindfulness in parenting levels predicted parental burnout [26]. Consistent with earlier studies, mothers of children with ASD in this study experienced a decrease in the depersonalization subdimension of burnout as attentive parenting increased. Mindfulness in parenting enhances parents' ability to face moments of difficulty concerning their children (such as a child crisis) in a calmer and more non-judgmental manner, rather than in an automatic and reactive one [9]. This mechanism contributes to reducing depersonalization toward the child.

One significant conclusion of the study is that stress-coping strategies, such as helplessness and submissiveness, buffered the effect of mindful parenting on depersonalization, a subdimension of burnout. Our findings show that greater mindfulness leads parents to use helpless and submissive coping styles less, and that this reduction contributes to decreased depersonalization levels. Helplessness and submissiveness are negative coping styles [20]. It has been noted that these coping mechanisms act as a moderator in the relationship between preschool instructors' burnout and mindfulness [17]. The results of another study involving a non-clinical population showed that mindfulness was significantly associated with negative, rather than positive, coping styles [8]. From this perspective, mothers of children with ASD who have low mindfulness may be more likely to adopt a negative coping style in stressful situations.

The mediation analysis in this study showed that, while mindfulness in parenting had no effect on any mediating variable with respect to the emotional exhaustion subdimension of

burnout, it exhibited a negative total (protective) effect on emotional exhaustion. This apparent inconsistency may derive from the complexity of the mechanisms underlying this relationship. Previous research in the literature suggests that the protective effect of mindfulness-based parenting may be mediated by other psychological processes than the coping styles measured in this study [17,26,27]. Pausick et al. showed that the self-compassion and rumination type played a mediatory role in the effect of mindfulness on parental exhaustion [26]. Another study found that the association between burnout and mindfulness was mediated by perceived stress and sleep quality [27]. There is also research showing that emotional intelligence plays a mediating role in the effect of mindfulness on burnout [15,28]. In conclusion, the results of this study support the idea that mindfulness-based parenting can help mothers of children with ASD experience less emotional exhaustion, but they also point to the need for further research to better understand the fundamental psychological processes that underlie this effect.

One of the study's key conclusions is that mindfulness in the mothers of children with ASD has both a direct and a total effect on personal accomplishment, although coping styles play no mediating role. Parental self-efficacy reflects parents' awareness of themselves in the parent-child relationship [10]. Powerful maternal parental self-efficacy can reduce burnout in the mother by enhancing personal accomplishment [29]. Lippold et al. reported more positive parenting cognitions in parents with high mindfulness in parenting levels [30]. Another study reported that parental self-efficacy exerted a negative effect on parental burnout [31]. Similarly, a study of preschool teachers reported that participants with high self-efficacy exhibited lower occupational burnout [32]. Parents with high levels of mindfulness may be more likely to pause before reacting to children's behavior and to feel compassion for themselves, both of which may help them feel more competent in their roles [10]. From that perspective, the present finding shows that the effect of mindful parenting on increasing feelings of personal achievement functions directly through emotional awareness, acceptance, and non-judgmental attention processes. However, stress-coping do not contribute significantly to that relationship. Rather than altering coping strategies, mindful parenting may therefore support feelings of personal achievement by enabling parents to adopt a more accepting and non-judgmental perspective when coping with stressful situations.

From a clinical perspective, the present findings suggest that mindful parenting approaches may be meaningfully integrated into routine pediatric follow-up and family support services for children with ASD. The integration of brief mindfulness-based psychoeducational modules, emphasizing awareness, acceptance, and recognition of dysfunctional coping strategies, has the potential to assist mothers in reducing depersonalization-related burnout. Such interventions could be incorporated into multidisciplinary care models alongside

behavioral and developmental approaches, thereby supporting parental well-being as part of comprehensive ASD management strategies.

This research has some limitations. Specifically, because of its cross-sectional design, the associations between variables cannot be construed as causal. Furthermore, because the data were derived from participants' self-reports, there could be a response bias. Given the number of correlation analyses conducted, no formal correction for multiple comparisons was applied. This may have increased the risk of Type I error, and the findings should therefore be interpreted with caution. Because the study was restricted to mothers with ASD in a single facility, the findings may not be widely generalizable. Finally, the assessment of gender disparities in parental burnout was not possible because fathers were omitted.

■ CONCLUSION

Among mothers of children with ASD, higher levels of mindfulness in parenting were associated with lower levels of parental burnout, particularly in the depersonalization dimension. The findings further suggest that helpless and submissive coping styles statistically mediate this relationship. These results contribute to understanding the psychological mechanisms linking mindful parenting to burnout in this population and highlight coping styles as an important explanatory pathway for reducing burnout.

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Informed Consent: Before the study started, the participants were informed of its purpose, and their verbal and written agreement was obtained.

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