

**Maternal Stress, Psychological Well-Being, and Frustration Among Mothers of Children
With Autism Spectrum Disorder**

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ABSTRACT

The objective of the study was to examine the relationship of maternal stress with psychological well-being and frustration among mothers of children with autism spectrum disorder (ASD), addressing the cultural context of Pakistan and providing useful implications for mothers. A cross-sectional correlational research design and snowball sampling technique were used to collect data. Three measures were utilized: the Parental Stress Scale, the Psychological Well-being Scale, and the Frustration Discomfort Scale. It was hypothesized that maternal stress would be significantly negatively related to psychological well-being and significantly positively related to frustration among mothers of children with ASD, and that maternal stress would significantly predict lower psychological well-being and higher frustration. Results revealed a significant negative relationship between maternal stress and psychological well-being, and a significant positive relationship between maternal stress and frustration. Regression analysis further indicated that maternal stress significantly and negatively predicted psychological well-being while significantly and positively predicting frustration. The study provides comprehensive implications for mothers of children with autism and encourages further research in this area.

Keywords: *maternal stress, psychological well-being, frustration*

INTRODUCTION

Autism Spectrum Disorder (ASD), is a group of lifelong neurodevelopmental conditions characterized by a wide range of symptoms, making it a heterogeneous condition. This means that individuals with ASD may display different signs and varying levels of severity. Some symptoms of autism emerge early in life, with some parents noticing indicators in their children before the age of one. In infants 12 months or younger, these signs can include engaging in repetitive body movements, avoiding or not maintaining eye contact, failing to respond to their name, and experiencing delays or regression in language development. As children approach 24 months, additional symptoms may become evident, such as attempts at self-harm or self-isolation, intense focus on specific interests, difficulty communicating passions through gestures or words, and challenges in reciprocating during simple interactive activities (Liu et al., 2021; Tian et al., 2025).

Studies have depicted higher maternal stress, detrimental psychological well-being, and frustration among mothers of children with Autism Spectrum Disorder. Maternal stress has been defined as the physiological and behavioral responses that occur when acute or chronic psychosocial difficulties overwhelm the coping abilities that allow a woman to return to physiological homeostasis (Operto et al., 2021; Sabbagh & Choi, 2025). Psychological well-being refers to a physical state that is not defined solely by the absence of disease but also by lifestyle behaviors that ensure health, prevent avoidable diseases and conditions, and create a balanced state of body, mind, and spirit. It includes an individual's emotional health and overall functioning, encompassing positive social relationships, autonomy, environmental mastery, self-acceptance, a sense of purpose, and personal growth (Dhanabhakya & Sarath, 2023; Piñeiro-Cossio et al., 2021). Frustration refers to the feeling of being upset or annoyed as a result of being unable to change or achieve something (Fernández Ortega et al., 2024; Tabiś et al., 2021).

A recent study examined the effects of a stress management program on perceived stress, depressive symptoms, and quality of life among mothers of children with ASD. Using an informal pre- and post-test design, 55 mothers from special education schools in Pakistan (Lahore, Gujranwala, Gujrat, Lalamusa, Kharian, Jhelum) participated. Findings indicated significant reductions in maternal stress and improvements in well-being post-intervention (Kausar et al., 2025). Another study aimed to identify sources of parenting stress in mothers of children with ASD and examine its relationship with maternal psychological status, including depression and well-being. A descriptive correlational design was employed, with data collected via mailed questionnaires. Results indicated that children's behavioral symptoms were the primary source of stress. Higher maternal stress was associated with increased depressive symptoms and lower well-being, while child characteristics showed no significant relationship with parenting stress. These findings highlight the need for interventions supporting mothers in managing behavior and reducing stress to improve psychological well-being (Phetrasuwan & Shandor Miles, 2009).

Another study explored stress in mothers of children with ASD using the Questionnaire on Resources and Stress (Holroyd, 1987). It compared stress profiles across mothers from different cultural and geographic backgrounds, with children of varying ages and functioning levels. Findings revealed a consistent stress profile, with the highest stress in managing dependency, cognitive impairment, family limitations, and long-term care. These results emphasize the need for targeted interventions to reduce stress in families with autistic children (Koegel et al., 1992).

The study by AlTourah et al. (2020) aimed to evaluate stress among mothers of children with ASD compared to mothers of typically developing children. A case-control design recruited mothers from

psychiatric and rehabilitation centers in Bahrain, who completed the PSS-14 questionnaire. Results showed that mothers of children with ASD experienced higher stress than controls, particularly in groups two and three post-diagnosis. Early counseling and interventions were recommended to help mothers manage stress and improve well-being.

A previous study investigated parental stress and psychological well-being among parents of children with autism and their association with support system dimensions. A preliminary cross-sectional design randomly selected 52 parents attending psycho-education sessions at a Health Psychology Unit. Psychological well-being, parental stress, and support were measured using GHQ-28, PSI, and PSR. Results indicated that 53.8% of parents showed clinical disturbances in psychological well-being, with significant associations for gender and occupation. No other socio-demographic factors or dimensions of support system were linked to psychological well-being. The findings highlight the high prevalence of stress and psychological challenges among parents and the need to address contributing factors to reduce parental burden (Nikmat et al., 2008).

Another study examined the relationship between frustration and psychological well-being among 384 parents of children with neurodevelopmental disorders, using the Frustration Discomfort Scale and the Psychological Well-Being Scale in a cross-sectional correlational design. Results revealed a significant negative relationship: higher frustration was associated with lower psychological well-being. Regression analysis confirmed frustration's adverse impact, highlighting the need for supportive interventions for parents (Anwar et al., 2025).

However, such studies are limited regarding the psychological well-being of mothers of children with autism spectrum disorder (ASD). There is a need for a study that investigates the relationship of maternal stress with psychological well-being and frustration among mothers of children with ASD in a country like Pakistan, where awareness regarding autism is very limited. The core idea is to provide not only literature to academia but also to generate useful implications for practical interventions.

Hypotheses

1. Maternal stress will be significantly negatively related to psychological well-being and significantly positively related to frustration among mothers of children with autism spectrum disorder (ASD).
2. Maternal stress will have a significant negative effect on psychological well-being and a significant positive effect on frustration among mothers of children with autism spectrum disorder (ASD).

METHOD

A correlational research design was employed to examine the relationship between maternal stress, psychological well-being, and frustration among mothers of children with autism spectrum disorder (ASD). Snowball sampling was used to recruit participants ($N = 214$) from Pakistan, including only mothers of children with autism. The inclusion criteria required mothers to have at least an intermediate-level education and to be the primary caregivers of children under 18 years old with a clinically diagnosed ASD.

Maternal stress was measured using the 18-item Parental Stress Scale (Berry & Jones, 1995). Responses were recorded on a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree). The scale has

demonstrated excellent reliability, with a Cronbach's alpha of .92 in a recent study (Ramanandi et al., 2023). Psychological well-being was assessed using Ryff and Keyes' (1995) 18-item Psychological Well-Being Scale, rated on a 7-point Likert scale, with internal consistency ranging from $\alpha = .87$ to .93. Frustration was measured using Harrington's (2005) 28-item Frustration Discomfort Scale, rated on a 5-point Likert scale, with internal consistency ranging from $\alpha = .84$ to .94.

The study followed APA 7 ethical guidelines. Permission was obtained from the relevant institution and the scale authors prior to data collection. Informed consent was obtained from all participants before completing the demographic and study questionnaires. The consent form stated that participation was voluntary, participants could withdraw at any time without consequences, and no psychological or physical harm would occur. No adverse incidents were reported. Participants completed the questionnaires within 15–20 minutes and were thanked for their contribution. Confidentiality of participants was strictly maintained. Data were analyzed using IBM SPSS Statistics (Version 26).

RESULT

Table 1

Characteristics of Participants (N=214)

Characteristics	<i>f</i>	<i>%</i>	<i>M</i>	<i>SD</i>
Age			38.57	9
Educational Qualification				
Intermediate	70	33		
Bachelor	95	44		
Master	32	15		
PhD	17	8		
Socioeconomic Status				
Upper Class	110	51		
Middle Class	64	30		
Lower Class	40	19		

Note. *f*=Frequency, *%*= Percentage, *M*= Mean, *SD*= Standard Deviation.

The mean age of participants was 38.57 years ($M = 38.57$, $SD = 9$). Regarding educational qualification, most participants had a bachelor's degree ($n = 95$, 44%), followed by intermediate education ($n = 70$, 33%), a master's degree ($n = 32$, 15%), and a PhD ($n = 17$, 8%). In terms of socioeconomic status, the majority were from the upper class ($n = 110$, 51%), followed by the middle class ($n = 64$, 30%) and lower class ($n = 40$, 19%).

Table 2

Relationship of Maternal Stress, Frustration and Psychological Well-Being (N= 214)

Variables	1	2	3
1. Maternal Stress	-	-.25**	.74**
1. Frustration		-	-.26**
2. PW			-

Note. ** $p < .01$, PW= Psychological Well-Being

Maternal stress was significantly negatively correlated with frustration, $r = -.25$, $p < .01$, and significantly positively correlated with psychological well-being, $r = .74$, $p < .01$. Frustration was significantly negatively correlated with psychological well-being, $r = -.26$, $p < .01$. These findings suggest that higher maternal stress is associated with higher psychological well-being, whereas higher frustration is associated with lower psychological well-being.

Table 3

Regression Analysis (N=214)

Variables	B	SE	β	P	R^2	F	95% CI	
							LL	UL
					.06	14.38		
Constant	86.55	6.63		<.001			73.47	99.63
MS	-.49	.31	-.25	<.001			-.75	-.23

Note. *** $P < .001$, MS= Maternal Stress

A simple linear regression was conducted to examine whether maternal stress (MS) predicts psychological well-being. Results indicated that maternal stress significantly negatively predicted psychological well-being, $B = -0.49$, $SE = 0.31$, $\beta = -0.25$, $p < .001$, 95% CI [-0.75, -0.23]. The model was significant, $R^2 = 0.06$, $F(1, 212) = 14.38$, $p < .001$, indicating that maternal stress accounted for 6% of the variance in psychological well-being.

Table 4

Regression Analysis (N=214)

Variables	B	SE	β	P	R^2	F	95% CI	
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					<i>LL</i>	<i>UL</i>
				.55	265.73	
Constant	29.06	3.04	<.001		23.06	35.07
MS	.98	.06	.74	<.001	.86	1.09

Note. *** $P < .001$, MS= Maternal Stress

A simple linear regression was conducted to examine whether maternal stress (MS) predicts frustration. Results indicated that maternal stress significantly positively predicted frustration, $B = 0.98$, $SE = 0.06$, $\beta = 0.74$, $p < .001$, 95% CI [0.86, 1.09]. The model was significant, $R^2 = 0.55$, $F(1, 212) = 265.73$, $p < .001$, indicating that maternal stress accounted for 55% of the variance in frustration.

DISCUSSION

There is substantial literature regarding the relationship among stress, psychological well-being, and frustration in parents of children with neurodevelopmental disorders. However, limited studies have been conducted on parents of children with autism in Pakistan, particularly mothers. Therefore, this study investigated the relationship of maternal stress with psychological well-being and frustration among mothers of children with autism.

The first hypothesis of the study was supported, as the correlational analysis indicated a significant positive relationship between maternal stress and frustration, and a significant negative relationship between maternal stress and psychological well-being among mothers of children with autism spectrum disorder. A previous study aligns with these findings, indicating that maternal stress and psychological well-being, when analyzed in a national survey accounting for child, maternal, and family characteristics, revealed that mothers of children with ASD experienced greater stress and poorer well-being than those without (Zablotsky et al., 2013). Recent studies have also depicted higher distress, frustration, and poorer psychological well-being among mothers of children with neurodevelopmental disorders, consistent with the results of the present study (Anwar et al., 2025; Balachandran & Bhuvaneswari, 2025; Walkowiak & Domaradzki, 2025). These significant results may be due to mothers' consistent exposure to their children's problematic behaviors. In the cultural context of Pakistan, mothers are often housewives and spend most of their time with children. Additionally, low socioeconomic status, lack of facilities, and limited societal support in managing challenging child behavior further elevate stress and frustration while reducing well-being.

The second hypothesis of the study was also supported, as maternal stress positively and significantly predicted frustration, and negatively and significantly predicted psychological well-being among mothers of children with autism spectrum disorder. A previous study reported that parental stress in raising children with autism significantly reduced well-being and increased daily distress, whereas effective coping responses, such as emotional regulation and social support, buffered these negative effects (Pottie & Ingram, 2008). Similarly, a recent study found that higher frustration among parents of children with neurodevelopmental disorders significantly reduced psychological well-being, confirming a negative relationship in which increased frustration predicted lower well-being in caregiving contexts (Anwar et al., 2025). The regression results of the current study may be explained by the fact that higher stress reduces coping capacity, thereby heightening frustration and lowering psychological well-being. Furthermore, lack of support, societal stigma, and limited awareness may be factors that induce stress

among mothers of children with autism spectrum disorder, which subsequently heightens frustration and decreases well-being.

LIMITATIONS AND RECOMMENDATIONS

The first limitation of this study is the small sample size. Future studies should include a larger sample. The second limitation is the cross-sectional correlational design; longitudinal studies are recommended to better examine these relationships. Moreover, this study only included intermediate-qualified mothers, excluding those with lower qualifications. Future research should incorporate mothers with varying educational backgrounds and employ translated scales in Urdu. In addition, only limited demographics were assessed. Future studies should consider additional factors such as residential background (urban or rural), family structure (nuclear or joint), maternal employment status, single or separated/divorced mothers, among others.

Implications

The foremost implication of this study is the need for mental health awareness. In Pakistan, awareness of mental health—particularly concerning neurodevelopmental disorders—is limited. Children with such conditions are often stigmatized and labeled by society as being possessed by supernatural forces. Consequently, mothers are not provided with adequate support. Strengthening support systems through awareness campaigns and community workshops is essential. The government should also give greater attention to distressed mothers by establishing proper facilities for them. Additionally, mental health professionals need to spread awareness and encourage mothers to seek support from psychiatrists and psychologists. Equipping mothers with effective coping strategies will enable them to manage the challenges of caregiving more effectively.

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