



## Perceived Stress and Anxiety among Parents of Children with Autism: A Quantitative Study of a Pakistani Cohort

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### ABSTRACT

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There is limited research on about the perceived stress and anxiety in children with autism's parents, particularly in Pakistan. This study therefore aims to find the association between perceived stress and anxiety among parents of children with autism. Using a cross-sectional correlational design, data were collected from 204 parents (113 mothers and 91 fathers) of kids with autism. The average age of participants was 37.78 (SD=9.61). The findings show a significant association between perceived stress and anxiety. Additionally, mothers reported significantly higher perceived stress and anxiety compared to fathers. Implications comprises practical steps i.e. raising awareness, encouraging peer support, advocating for public support for parents of kids with autism, promoting therapy, and offering effective strategies for managing the challenges.

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## 1. Introduction

Autism can be described as a neurodevelopmental disorder that comprised lack of communication and repetitive patterns of thought and behavior, often with a strong preference for routine (Brown et al., 2024). Research indicates that autism not only disrupts the daily functioning and routines of children but also significantly impacts the psychological well-being of their caregivers, contributing to higher stress and anxiety (Estes et al., 2013). Additionally, studies reveal that caregivers of kids with autism frequently report symptoms of adverse wellbeing (Al-Saadi, 2024; Bonis, 2016; Falk, Norris, & Quinn, 2014). Perceived stress means an individual's subjective appraisal of an on-going situation (although the situation might not be that much stressful), is closely related to anxiety. Anxiety is characterized by feelings of tension, worry, maladaptive thoughts, restlessness, and unease. Elevated levels of perceived stress and anxiety are commonly observed among caregivers of kids with autism, often due to the demanding behaviors associated with the condition (Althiabi, 2021; Cohen, Kamarck, & Mermelstein, 1983; Drogomyretska, Fox, & Colbert, 2020; Lee, 2012). Numerous studies highlight the decline in wellbeing experienced by a parent looking after kids with autism. For instance, a Malaysian study involving 227 caregivers of kids with autism found elevated levels of perceived stress, attributed to factors such as living far from mental health facilities and limited access to required facilities (Nik Adib et al., 2019). Similarly, a study comparing 39 caregivers of children with autism to 45 caregivers of normal functioning children revealed significantly elevated stress and depression (Sipowicz et al., 2022). Further research indicates that a parent of a kid with autism reports greater stress and poorer well-being compared to those raising typically developing children (Costa, Steffgen, & Ferring, 2017). In the Saudi Arabia, parents of special children found to experience elevated anxiety, and stress than those of typically developing children (Almansour et al., 2013). Supervising a child with ASD presents difficult challenges, including managing behavioral difficulties, navigating service accessibility, and coping with societal stigma, all of which contribute to significant emotional and physical

strain. This stress negatively impacts a parent’s mental health and family dynamics (Tehee, Honan, & Hevey, 2009). Both mothers and fathers report higher stress levels than caregivers of typically developing children, though the stressors differ by gender. Fathers, for example, are particularly affected by the severity of their child’s symptoms (Rivard et al., 2014), while mothers often experience heightened stress due to their predominant caregiving responsibilities (Tehee, Honan, & Hevey, 2009). Social support, has shown a vital role in reducing stress, proving more effective than external support systems (Yesilkaya & Magallón-Neri, 2024). While there is substantial literature on parental distress in families of children with autism, few studies have been conducted in Pakistan. To address this gap and provide insights for parents, this study aims to explore the relationship between perceived stress and anxiety in parents of children with autism.

### 1.1. Hypothesis

1. Perceived stress is likely to associate significantly and positively to anxiety in parents of kids with autism.
2. Significant mean differences are expected between kids with autism's parents regarding perceived stress and anxiety.

## 2. Method

### 2.1. Research Design

The study used a cross-sectional correlational research design.

### 2.2. Sampling Technique

A purposive sampling technique was employed to collect data from 204 children with autism’s parents.

### 2.3. Inclusion Criteria

The participants must be raising at least one child under the age of 18 who has been diagnosed with autism by a reputable special needs children’s hospital or institute, and the parents must possess at least an intermediate level of education.

### 2.4. Instruments

#### 2.4.1. Perceived Stress Scale

It is a 10-item scale uses a Likert (0-4), with reliability ranging between 0.84 to 0.91 (Cohen, Kamarck, & Mermelstein, 1983).

#### 2.4.2. Beck Anxiety Inventory Second Edition

The BAI-II consists of 21 items uses Likert scale (0-3). It demonstrates high reliability (0.92) and strong internal consistency (0.89) (Beck et al., 1988).

#### 2.4.3. Ethical Consideration

The study adhered to the APA 7 ethical code of conduct. First, permission was sought from the department for data collection. Subsequently, the author was contacted to obtain permission to use the questionnaire in the study. Upon receiving the author’s permission, the questionnaire was combined with a demographic questionnaire and consent form. The participants were approached through purposive sampling via visits to different special needs children’s institutes. The confidentiality of all participants was maintained, and written consent was obtained from each participant. They completed the questionnaires in about 20 minutes and were thanked for their involvement.

## 3. Results

**Table 1: Characteristics of the Participants (N=204)**

Characteristics	F	%	M	SD
Age			37.78	9.61
Parents of Children with Autism				
Father	91	45		
Mother	113	55		
Qualification				
Intermediate	89	44		
Bachelor	62	30		

Master	28	14
PhD	25	12

The demographic characteristic of the participants depicts mean age of 37.78 and standard deviation of 9.61. Moreover, among parents of children with mostly mother 113(55%) participated in the study followed by minority father 91 (45%). The qualification categories depicts 89(44%) participants got intermediate qualification, followed by 62 (30%) bachelor qualified then master 28(14%) and lastly 25 (12%) PhD qualified.

**Table 2: Correlational Analysis (N=204)**

Variables	1	2
1. Percieved Stress	-	.77**
2. Anxiety		-

Note. \*\* $p < .01$

There is a significant positive association between stress and anxiety among the participants.

**Table 3: Mean differences between Children with Autism’s Parents (N=204)**

	Fathers(n=91)		Mothers(n=113)		t(214)	P	Cohen’s d
	M	SD	M	SD			
Percieved Stress	15.23	6.15	17.29	5.62	-2.49	.01	0.34
Anxiety	26.21	13.68	32	12.71	-3.12	.002	0.43

Note. \* $p < .05$

The mothers of children with autism scored significantly higher than their counterparts, the fathers of children with autism.

#### 4. Discussion

There is a limited studies conducted between the association of percieved stress and anxiety among parents of children with autism in Pakistan. Therefore, this study is conducted to fill that gap. Correlational analysis confirmed the first hypothesis of the study, as perceived stress was significantly related to anxiety. The result of this study is congruent with the result of a previous study conducted in Malaysia, in which higher stress symptoms were reported among mothers of children with autism (Musa & Shafiee, 2007). Previous and recent studies have depicted the association between stress and anxiety among parents of children with autism. The reasons behind the stress and anxiety among parents, according to the literature, include the constant need for supervision, dealing with a child’s consistent impulsive and hyperactive behavior, emotional burnout from being a constant observer, lack of support systems, and lack of guidance and counseling-seeking behavior (Agyekum, 2018; Akande, 2024; Kütük et al., 2021; Mansour, 2021; Merkaj, Kika, & Simaku, 2013; Rezendes & Scarpa, 2011; Schieve et al., 2007). The cultural reason for psychological distress among parents of children with autism could be the study’s setting in Pakistan, where people have a lack of awareness and often judge parents for their children’s behaviors rather than providing emotional support.

The mean differences analysis confirmed the hypothesis, as mothers scored significantly higher on both variables (perceived stress and anxiety) than their counterpart fathers of children with autism. The study result is consistent with the result of a previous study, which showed that mothers of children with autism perceive more stress than fathers due to mostly supervising the child (Moes et al., 1992). Mothers of kids with autism reported higher psychological distress than fathers of children with autism (Olsson & Hwang, 2001) . Women experience higher stress as primary caregivers, facing challenges like child behavior, societal pressure, and isolation, especially in cultures like Pakistan. Limited mental health understanding and judgment over neurodevelopmental disorders worsen mothers' distress. Fathers, often sole providers, spend less time at home, reducing their exposure to such pressures. Cultural norms and lack of support deepen mothers' psychological struggles.

##### 4.1. Limitations and Recommendations

The study has several constraints. First, the small cohort limits generalizability to all parents of autistic children in Pakistan; a larger sample is recommended. Second, the cross-sectional design restricts insight into variable changes over time; longitudinal studies are advised. Third, the imbalance between mother and father samples affects results; equal representation is suggested for more accurate findings. Fourth, the uneven distribution of

parents' qualifications hindered ANOVA analysis; balanced categories are recommended for thorough statistical outcomes.

## 4.2. Implications

The study highlights the need for various interventions, including awareness programs by mental health professionals through seminars, workshops, and webinars, as autism spectrum disorder is poorly understood in Pakistan. These programs should target not only effected parents but also general public to build a stronger support network. Parents should be encouraged to seek professional mental health support and psychotherapy to address their challenges. They also need guidance on managing their children's behaviour effectively, as children with autism are not to blame for their developmental differences. Techniques like structured routines, visual cues, and consistent reinforcement of positive behaviors can help. The government should establish more special education institutes, as public options are scarce and private ones costly. Effective policies are needed to support children with neurodevelopmental disorders and their parents, along with programs to foster their wellbeing.

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