

The Relationship Between Perceived Stress and Mental Health in Parents of Children with Autism Spectrum Disorder

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Abstract

The present study aimed to investigate the relationship between perceived stress and mental health among parents of children with Autism Spectrum Disorder (ASD). The research method was descriptive and correlational in nature. The statistical population included all parents of children with ASD who attended autism centers in Tabriz in 2022. From this population, 180 participants were selected through purposive sampling based on Morgan's table and responded to the Goldberg Mental Health Questionnaire (1972) and the Perceived Stress Scale developed by Cohen et al. (1983). Findings from the Pearson correlation test revealed a significant and inverse relationship between perceived stress and parents' mental health at a 99% confidence level and an error rate below 0.01. Furthermore, regression analysis results showed that perceived stress significantly predicted parents' mental health and explained approximately 32% of the variance in mental health.

Keywords: Autism Spectrum Disorder, Perceived Stress, Parents' Mental Health

Introduction

Autism Spectrum Disorder (ASD) is one of the pervasive developmental disorders characterized by impairments in three main areas: social interaction, verbal and nonverbal communication, and restricted, repetitive patterns of behavior. Given the unknown etiology and lack of definitive

treatment, ASD has attracted significant attention from researchers in psychology, education, and behavioral sciences (Ruiz, 2000). Children with this disorder typically exhibit strong reactions to environmental changes and show resistance to alterations in their daily routines. They often display limited and atypical responses to the external world, making effective interaction with their surroundings challenging.

Because ASD is chronic and persistent in nature, caring for children with autism is a complex and demanding responsibility that often places considerable stress on parents, particularly mothers. In addition to concerns about their child's future, parents face challenges such as delayed diagnosis, lack of adequate support services, high treatment costs, limited opportunities for social participation, and negative societal attitudes—all of which can heighten psychological strain (Altiyabi, 2021). Moreover, research has shown that parents of children with autism experience higher levels of psychological and emotional stress compared to parents of typically developing children or those with other developmental disorders (Koone & Carter, 2006).

Kardimas (2007) states that caring for children with autism requires specific resources, training, and attitudes that are often lacking in society, which in turn increases parents' concerns about their child's future and others' social reactions. Parents of these children often experience feelings of inadequacy, isolation, and heightened social anxiety. The continuation of these pressures over time can negatively affect their mental health. Mental health, as one of the key dimensions of overall health, refers to a state of psychological balance and normal mental and social functioning in which an individual feels satisfied with themselves, others, and their environment (Soleimani, 2016). According to the World Health Organization's definition, mental

health not only refers to the absence of mental disorders but also encompasses psychological well-being, the ability to cope with life's stresses, efficiency, and active participation in society.

The mental health of parents in families with a child diagnosed with autism is particularly vulnerable due to the continuous psychological burden they face. Everyday stressors arising from child care responsibilities, difficulties in managing behavioral crises, financial constraints, and concerns about the future are all factors that undermine parental mental health. Among these, perceived stress—defined as an individual's subjective assessment of the amount of psychological pressure they experience—is of particular importance. Unlike objective stress, perceived stress refers to the personal interpretation of a situation as threatening, which may vary greatly between individuals (Lazarus & Folkman, 1984).

Different individuals exhibit diverse psychological responses to similar situations, and this variation largely depends on their cognitive appraisal of the situation. Chronic perceived stress can disrupt cognitive, emotional, and behavioral functioning. Studies have shown that mothers of children with autism report higher levels of stress than other parents (Firat et al., 2002). This perceived stress is associated with reduced quality of life, increased symptoms of anxiety and depression, and diminished psychological and social functioning (Beyati et al., 2017; Khoramabadi et al., 2009).

Hayes and Watson (2013), in a comparative study between parents of children with autism and those of children with other

developmental disorders, found that families with an autistic child experience higher stress levels and face more specific challenges in caregiving, education, and social participation. Similarly, the findings of Motteshami et al. (2016) revealed that perceived stress plays a determining role in predicting family satisfaction and the quality of parent–child interaction. These findings suggest that parents' subjective perception of stressors, more than objective conditions, influences their mental health.

Based on previous research, it appears that parents' perceived stress can be considered a major factor influencing their mental health. However, despite numerous studies on the psychological challenges of parents with children who have developmental disorders, a direct and systematic investigation of the relationship between perceived stress and mental health in parents of children with Autism Spectrum Disorder remains limited. Therefore, the present study was designed to examine this relationship and determine the extent to which perceived stress affects the mental health of these parents.

Methodology

The present study is applied in purpose and descriptive–correlational in nature and method, as it investigates the relationships between psychological variables among parents of children with Autism Spectrum Disorder (ASD). The statistical population consisted of all parents (mothers or fathers) of children diagnosed with ASD who attended autism centers in Tabriz in 2022. According to the data obtained from these centers, the total number of such parents was 185. Based on Morgan's table and using purposive sampling, 180 individuals were selected as the final sample. The inclusion criteria were: having a child with a confirmed diagnosis of ASD, being literate

(able to read and write), and willingness to participate in the study.

The following instruments were used to measure the study variables:

Goldberg's General Health Questionnaire (GHQ-28):

Developed by Goldberg (1972) to identify psychological disorders, this questionnaire consists of 28 items divided into four subscales: somatic symptoms, anxiety and insomnia, social dysfunction, and severe depression. Responses are scored on a four-point Likert scale (from 1 to 4), with total scores ranging from 28 to 112. Higher scores indicate poorer mental health. In previous studies, the reliability of the GHQ-28 has been reported with Cronbach's alpha values ranging from 0.89 to 0.95 in both Iranian and international research.

Kessler Psychological Distress Scale (K10):

This questionnaire includes 10 items assessing psychological distress during the past four weeks. Each item is rated on a five-point Likert scale ranging from "never" to "always," yielding a total score between 10 and 50. Higher scores indicate higher

- **Descriptive Results**
According to Table (1), the mean score of perceived stress among parents of children with ASD was relatively high, while the mean score of mental health was below the average level, indicating reduced

levels of psychological distress. Its validity and reliability have been confirmed in multiple studies, with Cronbach's alpha coefficients reported between 0.83 and 0.91 in Iranian samples.

Cohen's Perceived Stress Scale (PSS-14):

Developed by Cohen, Kamarck, and Mermelstein (1983), this scale measures the degree of stress perceived during the past month and consists of 14 items. Responses are rated on a five-point Likert scale (from 1 = never to 5 = always). The total score ranges from 14 to 70, with higher scores indicating higher levels of perceived stress. Iranian studies have reported Cronbach's alpha coefficients between 0.87 and 0.89 for this instrument.

Finally, the collected data were analyzed using SPSS software and statistical tests, including Pearson's correlation and multiple regression analysis. The aim of the analysis was to examine the relationships among psychological distress, perceived stress, and mental health in parents of children with ASD.

Findings

psychological well-being. Additionally, the findings suggested that higher levels of perceived stress were associated with increased psychological distress and lower mental health scores among participants.

Table 1. Descriptive Statistics of Research Variables

Variable	Mean	Standard Deviation	Minimum	Maximum	Range	Skewness
Tax Compliance	72.5	10.3	45	95	50	-0.12
Positive Attitude Toward Taxation	58.7	12.6	30	82	52	0.34
Trust in the Tax System	60.1	11.2	35	85	50	0.28
Tax-Related Stress	43.9	14.8	20	78	58	0.45

2) Inferential Results

The results of the correlation analysis (Table 2) indicate that a positive attitude toward taxation has a significant and positive relationship with tax compliance ($r = 0.54$, $p < 0.01$). Likewise, trust in the tax system

shows a significant positive correlation with tax compliance ($r = 0.62$, $p < 0.01$). Conversely, tax-related stress has a significant negative correlation with tax compliance ($r = -0.47$, $p < 0.01$).

Table 2. Correlation Coefficients between Independent and Dependent Variables

Independent Variable	Sample Size	r	Significance Level (p)
Positive Attitude Toward Taxation	180	0.54	0.000
Trust in the Tax System	180	0.62	0.000
Tax-Related Stress	180	-0.47	0.000

3) Regression Analysis Results

The multiple regression analysis (Table 3) revealed that among the independent variables, trust in the tax system had the highest standardized beta coefficient ($\beta = 0.45$, $p < 0.01$), indicating the strongest

positive effect on tax compliance. A positive attitude toward taxation also showed a significant positive effect ($\beta = 0.32$, $p < 0.05$), while tax-related stress demonstrated a significant negative effect on tax compliance ($\beta = -0.28$, $p < 0.05$).

Table 3. Results of Multiple Regression Analysis

Variable	B	SE	β (Standardized Beta)	t	Sig.	Tolerance	VIF
Trust in the Tax System	0.54	0.10	0.45	5.40	0.000	0.75	1.33
Positive Attitude Toward Tax	0.37	0.15	0.32	2.47	0.015	0.78	1.28
Tax-Related Stress	-0.29	0.13	-0.28	-2.23	0.028	0.80	1.25

4) Overall Regression Model Indicators

Indicator	Value
Multiple Correlation Coefficient (R)	0.68
Coefficient of Determination (R^2)	0.46
Adjusted R^2	0.44
Durbin–Watson Statistic	1.82

The results indicate that the variables of positive attitude, trust in the tax system, and

tax-related stress collectively explain approximately 46% of the variance in tax

compliance in online transactions. The Durbin–Watson value of 1.82, being close to 2, suggests the absence of significant autocorrelation in the regression model.

Discussion and Conclusion

The findings of the present study revealed an inverse relationship between psychological distress and mental health; in other words, as the level of psychological distress increases, the mental health of parents with children diagnosed with Autism Spectrum Disorder (ASD) decreases. This result is consistent with previous studies, including those by Schnabel et al. (2020), York et al. (2018), and Hoffman et al. (2009), as well as domestic studies by Bagheri et al. (2019), Zahiri Shirabad (2017), Shokri et al. (2017), and Nargesi et al. (2019). Psychological distress is a key concept encompassing both aspects of mental health and psychological disorders, often characterized by emotional suffering, depression, anxiety, and impaired daily functioning. Parents of children with autism, due to the complex challenges they face—especially stereotyped behaviors, social maladaptation, and developmental delays—are constantly exposed to negative emotions, which can lead to severe psychological turmoil and a decline in their overall mental health.

In this regard, Hoffman et al. (2009) also found that the levels of stress and anxiety among mothers of children with autism are significantly higher than those of mothers with neurotypical children. Feelings of failure, hopelessness about treatment, and parenting difficulties reduce parents' psychological resilience and ultimately threaten their mental health. Under such conditions, the likelihood of experiencing depression, anxiety, and other psychological disorders increases, indicating a direct connection between higher levels of

psychological distress and reduced psychological well-being.

The results also demonstrated an inverse relationship between perceived stress and mental health; as perceived stress increases, the mental health of parents decreases. This finding aligns with studies by Noafour et al. (2022), Lovell and Wetherell (2019), Gao et al. (2012), Bayati et al. (2017), Hayes and Watson (2013), Ansari Ardali (2021), Mohtashami et al. (2016), and Khoramabadi et al. (2009). Perceived stress refers to an individual's subjective experience of psychological threat, which depends on how they evaluate their ability to cope with challenging situations. Parents of children with autism often perceive these challenges as exceeding their coping capacities, and this negative perception in turn amplifies their stress and further diminishes their mental health.

Having a child with a developmental disorder alters the natural structure and cohesive functioning of the family, filling the home environment with anxiety, tension, and feelings of helplessness. In such circumstances, parents who possess sufficient psychological, social, and emotional resources can better manage challenges and preserve their mental health. Conversely, parents who lack these resources or perceive themselves as incapable of effectively managing difficulties are more vulnerable to perceived stress. In fact, the sense of helplessness in coping with the child's disorder serves as a central factor in intensifying stress and diminishing mental well-being among these parents.

Therefore, the results of this study indicate that improving the mental health of parents requires reducing perceived stress levels and effectively managing psychological distress. One effective approach is to enhance parents' understanding of autism, teach

coping strategies, and provide consistent psychological and social support through relevant institutions. Offering free counseling sessions by welfare organizations for parents of children with autism can significantly boost morale, strengthen optimism about the future, and alleviate

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