

PARENTAL CHALLENGES: MENTAL HEALTH OUTCOMES AMONG PARENTS OF CHILDREN WITH INTELLECTUAL DISABILITIES

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Abstract

The relationship between parental mental health outcomes, specifically stress, anxiety, and depression, has been widely examined in international research; however, limited evidence exists within the Pakistani context, particularly among parents of children with intellectual disabilities. The present study aimed to address this gap by exploring the relationships between stress, anxiety, and depression and examining the mediating role of anxiety. Using a cross-sectional correlational design, data were collected through purposive sampling from 180 parents (mothers and fathers) of children under 18 years diagnosed with intellectual disabilities. The Depression, Anxiety, and Stress Scale (DASS-21) was administered, and analyses were conducted using IBM SPSS version 26. Results revealed significant positive associations among stress, anxiety, and depression, with anxiety partially mediating the relationship between stress and depression. The findings highlight the need for parental counseling, mental health support programs, and affordable special education facilities to improve family well-being.

Keywords: Depression, stress, anxiety, parents, children, intellectual disabilities.

Introduction

An intellectual disability is characterized by limitations in mental abilities that affect intelligence, learning, and everyday life skills. The signs and symptoms of intellectual disability include delayed learning, difficulty communicating, challenges in understanding social norms, impaired working memory, weak performance in practical tasks, limited reasoning and logical thinking, difficulty in problem-solving, and challenges in planning and decision-making. Individuals with intellectual disabilities may also struggle with daily tasks such as dressing, using the washroom, or managing personal care (Saini et al., 2025; Salpekar, 2025). Additionally, some individuals may exhibit impaired motor and fine motor skills, and children may experience frequent tantrums (Raghav & Varshney, 2025; Schalock et al., 2021).

Parenting children with intellectual disabilities has been found to have significant impacts not only on the children but also on their parents, often resulting in detrimental mental health outcomes such as elevated stress, anxiety, and depression (Park & Lee, 2022; Olson & Hwan, 2001). These psychological outcomes can be defined as follows: stress refers to a state of mental pressure or tension arising from environmental challenges or inadequate coping strategies (Hajam et al., 2022); anxiety is characterized by feelings of uneasiness, agitation, or fear in response to perceived threats or uncertainty (Merkouris et al., 2024); and depression is a persistent state of sadness accompanied by loss of interest, low motivation, impaired decision-making, and disturbed sleep or appetite (Xu et al., 2025).

Research across different countries has documented high levels of psychological distress among parents of children with intellectual disabilities. In India, a study of 99 parents found that 94% of mothers and 66.7% of fathers reported symptoms of anxiety or depression, with mothers being more affected due to caregiving burden and lack of family support (Sharma et al., 2021). Another Indian study reported that parents of children with moderate to profound intellectual disabilities experienced higher stress and anxiety compared to those of children with mild disabilities, with mothers showing greater distress (Chouhan et al., 2016). Similarly, research from Malawi revealed that psychological distress among parents was strongly linked to low socioeconomic status, perceived caregiving burden, and limited psychological support (Masulani-Mwale et al., 2018). A recent study from Pakistan also found a significant association among stress, anxiety, and depression in caregivers of children with intellectual disabilities, emphasizing the urgent need for awareness and intervention programs (Zaka et al., 2025). However, such studies remain rare in the Pakistani context, particularly among parents of children with intellectual or developmental disorders.

Rationale of the Study

Despite the global attention given to the mental health of parents raising children with intellectual disabilities, there is limited empirical research in Pakistan and other low-income countries where awareness of intellectual disabilities remains minimal. Cultural stigma, lack of institutional support, and inadequate mental health services further exacerbate the psychological burden on these parents. Therefore, the present study was conducted to fill this research gap by exploring the relationship between stress, anxiety, and depression among parents of children with intellectual disabilities. The findings aim to contribute to the existing literature and provide practical implications to support parental mental health and promote social awareness.

Hypotheses

H₁: There will be a significant positive relationship between stress, anxiety, and depression among parents of children with intellectual disabilities.

H₂: Anxiety will significantly mediate the relationship between stress (independent variable) and depression (dependent variable) among parents of children with intellectual disabilities.

Methodology

Research Design

The study employed a cross-sectional correlational design to examine the relationships among anxiety, depression, and stress among parents of children with intellectual disabilities.

Participants and Sampling

Data were collected through purposive sampling from 180 parents of children with intellectual disabilities. The inclusion criteria required that each participant be the primary caregiver of at least one child diagnosed with an intellectual disability who was enrolled in a recognized special education institute. The child had to be under 18 years of age, and parents were required to have at least an intermediate level of education.

Instruments

The **Depression, Anxiety, and Stress Scale (DASS-21)**, developed by Lovibond and Lovibond (1995), was used to assess depression, anxiety, and stress. The scale consists of 21 items rated on a four-point Likert scale ranging from 0 ("Did not apply to me") to 3 ("Applied to me most of the time"). The DASS-21 has shown strong internal consistency, with Cronbach's alpha coefficients of 0.88 for depression, 0.82 for anxiety, and 0.90 for stress. Higher scores indicate greater psychological distress.

Procedure and Ethical Considerations

Ethical considerations followed the APA (7th edition) Code of Conduct. Permission to use the questionnaire was obtained from both the relevant department and the original author. Informed consent was obtained from all participants, and confidentiality was strictly maintained. Participants were informed that their participation was voluntary and that they could withdraw from the study at any time without penalty. Each participant completed the questionnaire in approximately 15 minutes, and their cooperation was highly appreciated.

Data Analysis

Data were analysed using IBM SPSS Statistics version 26. Descriptive and inferential statistical analyses were conducted to examine the relationships among the study variables and to test the mediation model.

Results

Table 1

Sociodemographic Characteristics of Participants

Characteristics	Frequency	Percentage	Mean	SD
Age			37.62	9.42
Parents of Children with ID				
Father	53	29		
Mother	127	71		
Socioeconomic Status				
Lower Class	95	53		
Middle Class	58	32		

Upper Class	27	15
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Note. N=180, *SD*= Standard Deviation

The sociodemographic characteristics of parents of children with intellectual disabilities are presented in Table 1. The mean age of the participants was 37.62 years (*SD* = 9.42), indicating that most respondents were in their middle adulthood. Regarding parental role, mothers comprised the majority of the sample (71%), while fathers accounted for 29%, suggesting that mothers were more actively involved in the study. In terms of socioeconomic status, 53% of the participants belonged to the lower class, 32% to the middle class, and 15% to the upper class, reflecting that more than half of the parents came from economically disadvantaged backgrounds. Overall, these findings illustrate a predominantly middle-aged, lower socioeconomic group of parents, with a higher proportion of mothers participating in the research.

Table 2

Correlational Analysis between Study Variables

Variables	1	2	3
1. Depression	-	.97**	.57**
2. Anxiety		-	.53**
3. Stress			-

Note. N=180 ***p* < .01

The results presented in Table 2 show the intercorrelations among depression, anxiety, and stress among parents of children with intellectual disabilities. A significant positive relationship was found between depression and anxiety (*r* = .97, *p* < .01), between depression and stress (*r* = .57, *p* < .01), and between anxiety and stress (*r* = .53, *p* < .01).

Table 3

Mediation Analysis

					Consequences			
		Anxiety (M)			Depression (Y)			
Antecedents		β	<i>SE</i>	<i>p</i>		β	<i>SE</i>	<i>p</i>
Stress (X)	a	.52***	.06	<.001	c'	.07***	.02	<.001
Anxiety (M)	-				b	.94***	.02	<.001
Constant	I	5.79***	.86	<.001	I	-.44	.27	.11

Discussion

The present study aimed to examine the relationship between depression, anxiety, and stress among parents of children with intellectual disabilities. The first hypothesis proposed a significant positive association between depression, anxiety, and stress among parents of children with intellectual disabilities. The correlational analysis supported this hypothesis, revealing strong positive relationships among these variables. This finding is consistent with a recent study conducted in Pakistan that found depression, anxiety, and stress to be significantly interrelated among male and female caregivers of children with intellectual disabilities (Mustafa et al., 2025).

The observed psychological distress among parents may be attributed to factors such as low socioeconomic status, the high burden of caregiving, and a lack of psychological and social support. Furthermore, in the sociocultural context of Pakistan, where mental health stigma remains widespread and awareness of neurodevelopmental disorders is limited, parents often face social judgment and isolation. These societal pressures, coupled with the emotional demands of caregiving, may intensify stress and exacerbate anxiety and depressive symptoms.

The second hypothesis suggested that anxiety mediates the relationship between stress and depression among parents of children with intellectual disabilities. This hypothesis was confirmed using Hayes Process Macro 4.2 (Model 4), which revealed that anxiety significantly and partially mediated the effect of stress on depression. The direct effect of stress on depression remained significant, indicating that while anxiety explains part of this relationship, other psychological or environmental factors also play a role. These findings are consistent with the study by Mustafa et al. (2025), which identified the mediating role of anxiety symptoms between stress and depression among caregivers of children with intellectual disabilities.

The partial mediation observed in the current study can be explained by the nature of chronic caregiving stress, which may independently contribute to depressive symptoms through mechanisms such as emotional exhaustion, role overload, and perceived helplessness. At the same time, chronic stress can heighten anxiety levels, which in turn foster depressive thoughts and feelings. Thus, anxiety acts as a psychological pathway linking stress and depression but does not fully account for the relationship, suggesting that other mediators—such as coping strategies, social support, or resilience—may also influence this association.

Limitations and Recommendations

Despite its contributions, this study has several limitations. First, the relatively small sample size limits the generalizability of the findings to all parents of children with intellectual disabilities in Pakistan. Future studies should include larger and more diverse samples to enhance representativeness. Second, the cross-sectional design restricts the ability to determine causality or observe changes in psychological well-being over time. Longitudinal studies are recommended to examine how parental stress, anxiety, and depression evolve as children grow older. Third, the uneven distribution of participants across socioeconomic strata limited the feasibility of conducting independent-sample *t*-tests or subgroup analyses. Future studies should address this imbalance to allow for more nuanced statistical comparisons.

Implications

The findings emphasize the need for integrated psychological and social interventions for parents of children with intellectual disabilities. Mental health professionals should conduct workshops and awareness sessions on stress management, emotional regulation, and coping skills. Community-based initiatives involving both parents of children with and without disabilities can reduce stigma and promote inclusion. Encouraging parents to seek counselling

or join support groups may enhance resilience and caregiving capacity. Psychoeducation should highlight that intellectual disability is a developmental difference, not a parental fault. Teaching structured routines, visual aids, and reinforcement strategies can support children's functioning and reduce parental stress. At the policy level, affordable special education and mental health services are crucial to improving family well-being.

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