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## **RESEARCH ARTICLE**

# Frustration and Psychological Well-Being in Parents of Children with Neurodevelopmental Disorders

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**Abstract:** Parents of children with neurodevelopmental disorders often experience heightened levels of frustration and psychological distress due to the unique challenges associated with caregiving. This study examines the relationship between frustration and psychological well-being among parents of children with neurodevelopmental disorders, addressing a gap in the literature. A cross-sectional correlational design was employed, with purposive sampling of 384 parents. The study utilized two questionnaires to measure the variables: the 28-item Frustration Discomfort Scale and the 18-item Psychological Well-Being Scale. Results revealed a significant negative relationship between frustration and psychological well-being, indicating that higher levels of frustration are associated with lower psychological well-being. Regression analysis further confirmed the negative impact of frustration on psychological well-being among parents of children with neurodevelopmental disorder. The study provides useful implications for parents and encourages further research in this area.

**Keywords:** Frustration, Psychological Wellbeing, Neurodevelopmental Disorders, Parents, Children

## Introduction

Neurodevelopmental disorders (NDDs) impair brain function, affecting cognition, behavior, and learning (Salminen et al., 2025). These include autism, ADHD, and intellectual disabilities (Ismail & Shapiro, 2019). Parents of children with NDDs experience elevated stress, anxiety, and depression, particularly in low-resource settings (Fatima et al., 2025; Zahid et al., 2025). Comparative studies show parents of children with autism and ADHD report higher stress than those with typically developing children (Craig et al., 2016), with maternal distress is often higher (Zahid et al., 2025). In Pakistan, ADHD caregivers demonstrated strong correlations between stress, anxiety, and depression (Tareen et al., 2025).

Psychological well-being encompasses emotional health, self-acceptance, and personal growth (Adler et al., 2017; Ruzmatova, 2023). Frustration—stemming from the Latin frustrā (in vain)—describes distress when expectations do not align with reality (Parker, 2018). COVID-19 exacerbated challenges for families with NDD (neurodevelopmental disorders). Italian parents (N = 1,472) reported increased child behavioral issues (p < .001) and parental stress, though resilience factors like family cohesion helped mitigate these effects (Montirosso et al., 2021). Studies have shown that when a child is diagnosed with a neurodevelopmental disorder, parents often experience frustration—especially when it is their first child with NDD (Currie & Szabo, 2020; Miller et al., 2018).

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Neurodevelopmental profiles vary significantly, with autism spectrum disorder showing cognitive advantages over ADHD and specific learning disorders on standardized assessments (Operto et al., 2021). Caregivers face three primary challenges: behavioral/health concerns, routine disruptions, and need for structured support (Shorey et al., 2021). Telehealth emerged as critical, though underutilized for less-studied NDDs. Expressed emotion correlates strongly with caregiver stress and child functioning (Balachandran & Bhuvaneswari, 2024). Bangladeshi caregivers (N=906) identified diagnosis disclosure (B=4.22, p<.001) and future planning as key stressors, with women (B=5.09, p<.001) and less-educated individuals most affected (Haque et al., 2022).

There is considerable literature regarding the mental health distress of parents of children with neurodevelopmental disorders. However, such studies are rare in the developing country of Pakistan, where awareness is limited—specifically, psychological well-being and mental health problems are rarely studied among caregivers of children with neurodevelopmental disorders. Therefore, the aim of this study is to examine the association between frustration and psychological well-being among caregivers of children with neurodevelopmental disorders in Pakistan, to fill this gap and provide useful implications for societal welfare.

## **Hypotheses**

- 1. Frustration is likely to be negatively and significantly associated with psychological well-being among caregivers of children with neurodevelopmental disorders in Pakistan.
- 2. Frustration is likely to negatively and significantly affect the psychological well-being of caregivers of children with neurodevelopmental disorders in Pakistan.

#### Method

A correlational research design was employed to examine the relationship between psychological wellbeing and frustration among parents of children with neurodevelopmental disorders (NDDs) diagnosed at certified government or private special needs institutions. The study utilized snowball sampling to recruit participants (N=384) from Pakistan, including both genders. Inclusion criteria required parents to have intermediate-level education and care for children under 18 years old with clinically diagnosed NDDs. Psychological wellbeing was assessed using Ryff and Keyes' (1995) 18-item scale (1-7 Likert scale, a=.87-.93), while frustration was measured with Harrington's (2005) 28-item Frustration Discomfort Scale (1-5 Likert scale, a=.84-.94). The study followed APA 7 ethical guidelines. Permission was obtained from the institution and scale authors prior to data collection. Participants provided informed consent before completing demographic and study questionnaires. The consent form clearly stated that participation was voluntary, participants could withdraw at any time without consequences, and no psychological or physical harm would occur. No such incidents were reported. Participants completed the questionnaires within 10-20 minutes and were thanked for their participation. Data were entered into SPSS version 27 for analysis.

**Results Table 1**Characteristics of Participants (N=384)

f	%	M	SD	
		43.52	11.18	
100	26			
284	74			
65	17			
136	35			
183	48			
	284 65 136	100 26 284 74 65 17 136 35	43.52 100 26 284 74 65 17 136 35	43.52 11.18  100 26 284 74  65 17 136 35

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

Table 1 shows that there are 100 male participants (26%) and 284 female participants (74%). The mean age of the participants is 43.52 years, with a standard deviation of 11.18. Participants from the lower class make up 183 (48%) of the sample. Those from the middle-class account for 136 (35%), followed by a minority of upper-class participants 65 (17%).

**Table 2** *Relationship of Frustration and Psychological Well-being (N= 384)* 

Variables	1	2
1.Frustrtaion	-	25**
2.PW		-

Note. \*\*p<.01, PW= Psychological Wellbeing

The above table depicts significant negative relationship between frustration and psychological wellbeing.

**Table 3** *Regression Analysis (N=384)* 

Variables	В	SE	β	R	R <sup>2</sup>	95% CI	
						LL	UL
				.25	.06		
Constant	97.80	6.31				85.39	110.21
Frustration	42	.08	25			58	26

Note. \*\*\*P<.001

The above table depicts frustration as predictor of outcome psychological wellbeing. Frustration significantly and negatively predicts psychological wellbeing ( $\beta$ =-.25\*\*\*, R<sup>2</sup>=.06, F= 26.15) and its accounts for 6% variance in psychological wellbeing.

## **Discussion**

There is substantial literature related to the mental health problems of parents of children with neurodevelopmental disorders. However, the specific exploration of frustration and psychological well-being among these parents has rarely been explored, particularly in Pakistan. Therefore, the objective of this study is to fill this literature gap and provide implications.

The first hypothesis of the study states that there is likely to be a negative and significant association between frustration and psychological well-being among parents of children with neurodevelopmental disorders. The correlational analysis of the study strongly supported this assumption. The results of our study align with previous research, which indicates that among Pakistani parents of children with autism, perceived stress and anxiety are reported to be high (Zahid et al., 2025). Another study found that among parents of children with ADHD, depression, anxiety, and stress were significantly associated with one another (Tareen et al., 2025). Our study is also consistent with another study, which shows that as symptoms of neurodevelopmental disorders in children increase, so does parental psychological distress and poor well-being. This study reported a significant negative association between psychological distress and well-being among parents of children with neurodevelopmental disorders (Diaz et al., 2021). The significant negative association between frustration and psychological well-being could be due to a lack of awareness on how to cope with a child with neurodevelopmental disorders and financial problems that exacerbate such frustration, as most of the participants in our study were from lower socioeconomic classes.

The second hypothesis of the study states that frustration significantly and negatively predicts psychological well-being among parents of children with neurodevelopmental disorders, and certain

assumptions of the study were confirmed by regression analysis. Recent and previous studies align with the results of this study, i.e., among caregivers of individuals with mental disorders, frustration and poor psychological well-being are prevalent due to the challenging and dependent behavior of individuals with mental disorders (Fatima et al., 2025; Motenko, 1989; Riley-McHugh et al., 2016). The significant negative prediction of psychological well-being by frustration among parents of children with neurodevelopmental disorders could be attributed to chronic stress caused by the child's challenging and dependent behavior, lack of societal support, and frustration arising from the child's inability to meet developmental milestones. Thus, frustration negatively predicts psychological well-being among parents. The study was conducted in Pakistan, where people have limited knowledge of neurodevelopmental disorders, and facilities are scarce. Additionally, cultural stigma against individuals with mental disorders is high, which may also contribute to frustration among parents and negatively predict their psychological well-being.

## **Limitations and Recommendations**

The first limitation of the study is its use of a cross-sectional correlational design, which may not be as effective as a longitudinal research design that measures participants' responses over time. Therefore, future studies should adopt a longitudinal design. The second limitation is that while the study included individuals with an intermediate level of education who could complete the questionnaire, it did not included demographics such as bachelor's, master's, and PhD levels specifically. Future studies should consider including these categories. The third limitation is the imbalance between socioeconomic categories—lower, middle, and upper class. Future research should aim for a more balanced distribution to allow for meaningful analysis of mean differences. Additionally, future studies should define the criteria for categorizing participants into these socioeconomic classes, referencing relevant literature for categorization.

## **Implications**

The study emphasizes the need for various interventions to address the lack of understanding of neurodevelopmental disorders in Pakistan. Mental health professionals should conduct awareness programs, including seminars, workshops, and webinars, targeting both parents of children with neurodevelopmental disorders and the general public. These programs can help create a stronger support network. Parents should be encouraged to seek professional mental health support and psychotherapy to address challenges and be given strategies to manage their children's behavior. Techniques like structured routines, visual cues, and positive reinforcement can be effective. Additionally, there is a need for more affordable special education institutes, as public options are limited and private ones expensive. The government should also introduce policies and programs to support children with neurodevelopmental disorders and their families, promoting their overall well-being.

## References

- Adler, A., Unanue, W., Osin, E., Ricard, M., Alkire, S., & Seligman, M. (2017). Psychological wellbeing. *Happiness*, 118.
- Balachandran, K. P., & Bhuvaneswari, M. (2024). Expressed emotion in families of children with neurodevelopmental disorders: A mixed-method approach. *Annals of Neurosciences, 31*(2), 105–114. <a href="https://doi.org/10.1177/09727531231181014">https://doi.org/10.1177/09727531231181014</a>
- Craig, F., Operto, F. F., De Giacomo, A., Margari, L., Frolli, A., Conson, M., Ivagnes, S., Monaco, M., & Margari, F. (2016). Parenting stress among parents of children with Neurodevelopmental Disorders. *Psychiatry Research*, 242, 121–129. <a href="https://doi.org/10.1016/j.psychres.2016.05.016">https://doi.org/10.1016/j.psychres.2016.05.016</a>
- Currie, G., & Szabo, J. (2020). Social isolation and exclusion: the parents' experience of caring for children with rare neurodevelopmental disorders. *International Journal of Qualitative Studies on Health and Well-Being*, *15*(1), 1725362. <a href="https://doi.org/10.1080/17482631.2020.1725362">https://doi.org/10.1080/17482631.2020.1725362</a>
- Davidsson, M., Ringström, F., Hagberg, B., Gillberg, C., & Billstedt, E. (2025). Adverse childhood experiences in children with neurodevelopmental disorders and their parents. *Nordic Journal of Psychiatry*, 1–9. https://doi.org/10.1080/08039488.2025.2469737
- Diaz, A. M., Tully, L., Masi, A., Lin, P.-I., Efron, D., Woolfenden, S., & Eapen, V. (2021). A cross-sectional examination of the association between parental distress and the well-being of children with neurodevelopmental disorders during the COVID-19 pandemic. *In Research Square*. https://doi.org/10.21203/rs.3.rs-821990/v1
- Fatima, S., Sajjad, M., Salman, F., & Sarfraz, S. (2025). Mental Health Outcomes in Parents of Children with Autism: Implications for Practice and Policy. *Pakistan Journal of Humanities and Social Sciences*, *13*(1), 77-82. <a href="https://doi.org/10.52131/pihss.2025.v13i1.2637">https://doi.org/10.52131/pihss.2025.v13i1.2637</a>
- Haque, M. A., Salwa, M., Sultana, S., Tasnim, A., Towhid, M. I. I., Karim, M. R., & Abdullah Al Mamun, M. (2022). Parenting stress among caregivers of children with neurodevelopmental disorders: a cross-sectional study in Bangladesh. *Journal of Intellectual Disabilities*, 26(2), 407-419. <a href="https://doi.org/10.1177/17446295211002355">https://doi.org/10.1177/17446295211002355</a>
- Harrington, N. (2005). The Frustration Discomfort Scale: development and psychometric properties. *Clinical Psychology & Psychotherapy*, *12*(5), 374–387. <a href="https://doi.org/10.1002/cpp.465">https://doi.org/10.1002/cpp.465</a>
- Miller, A. R., Gardiner, E., & Harding, L. (2018). Behavioural and emotional concerns reported by parents of children attending a neurodevelopmental diagnostic centre. *Child: care, health and development, 44*(5), 711-720. <a href="https://doi.org/10.1111/cch.12594">https://doi.org/10.1111/cch.12594</a>
- Montirosso, R., Mascheroni, E., Guida, E., Piazza, C., Sali, M. E., Molteni, M., & Reni, G. (2021). Stress symptoms and resilience factors in children with neurodevelopmental disabilities and their parents during the COVID-19 pandemic. *Health Psychology: Official Journal of the Division of Health Psychology, American Psychological Association*, 40(7), 428–438. <a href="https://doi.org/10.1037/hea0000966">https://doi.org/10.1037/hea0000966</a>
- Motenko, A. K. (1989). The frustrations, gratifications, and well-being of dementia caregivers. *The Gerontologist*, 29(2), 166–172. https://doi.org/10.1093/geront/29.2.166
- Operto, F. F., Smirni, D., Scuoppo, C., Padovano, C., Vivenzio, V., Quatrosi, G., Carotenuto, M., Precenzano, F., & Pastorino, G. M. G. (2021). Neuropsychological profile, emotional/behavioral problems, and parental stress in children with neurodevelopmental disorders. *Brain Sciences*, *11*(5), 584. https://doi.org/10.3390/brainsci11050584
- Parker, S. (2018). Frustration. *Energy Engineering*, *115*(6), 5-6. https://doi.org/10.1080/01998595.2018.12027898

- Riley-McHugh, D., Hepburn Brown, C., & Lindo, J. (2016). Schizophrenia: its psychological effects on family caregivers. *International Journal of Advanced Nursing Studies*, *5*(1), 96. <a href="https://doi.org/10.14419/ijans.v5i1.5565">https://doi.org/10.14419/ijans.v5i1.5565</a>
- Ruzmatova, N. S. (2023). PSYCHOLOGICAL ASPECTS OF HUMAN WELL-BEING. *Academic Research in Educational Sciences*, 1037–1039.
- Ryff, C. D., & Keyes, C. L. M. (1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology*, 69(4), 719–727. <a href="https://doi.org/10.1037/0022-3514.69.4.719">https://doi.org/10.1037/0022-3514.69.4.719</a>
- Salminen, J., Laasanen, M., Leinonen, L., Karukivi, M., Vornanen, R., Alin, M., & Kyttälä, M. (2024). Professional collaboration for children and adolescents with neurodevelopmental disorders: a scoping review. European Journal of Special Needs Education, 1–19. https://doi.org/10.1080/08856257.2024.2314422
- Shorey, S., Lau, L. S. T., Tan, J. X., Ng, E. D., & Aishworiya, R. (2021). Families with children with neurodevelopmental disorders during COVID-19: A scoping review. *Journal of Pediatric Psychology*, 46(5), 514–525. <a href="https://doi.org/10.1093/jpepsy/jsab029">https://doi.org/10.1093/jpepsy/jsab029</a>
- Tareen, N., Mustafa, M. G., Zahid, A., Yaseen, M., Sarfraz, S., & Nasir, Z. (2025). Mental health problems in parents of children with adhd: A quantitative comparative study. *Insights-Journal of Health and Rehabilitation*, *3*(3 (Health&Allied)), 577–584. https://doi.org/10.71000/fctk0p75
- Zahid, A., Batool, S., Arif, M. B., & Mustafa, S. (2025). Perceived Stress and Anxiety among Parents of Children with Autism: A Quantitative Study of a Pakistani Cohort. *Pakistan Journal of Humanities and Social Sciences*, 13(1), 83–87. https://doi.org/10.52131/pjhss.2025.v13i1.2638