

Research Article

Parenting stress and marital satisfaction among parents of children with neurodevelopmental disorders: Moderating role of resilience

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ABSTRACT

Background: Parenting stress is an important factor that affects the marital satisfaction of parents of children with Neurodevelopmental disorders. When parents are faced with a challenging situation, such as having a child with a neuro-developmental disability, resilience facilitates a more positive coping style and improves marital satisfaction.

Objective: to investigate the relationship between parenting children with neurodevelopment disorders, stress and marital satisfaction among parents while moderating the role of resilience.

Methodology: The cross-sectional analytical study was conducted n=300 parents of children with ADHD, an intellectual disability, and autism. Purposive sampling was employed to get a sample from RHS Rehabilitation Centre Islamabad from December 2021 to April 2022. The mothers (n=150) and fathers (n=150) were selected with the age range of 25 to 50 years. Parenting stress was measured using the Parental Stress Scale after translating it in Urdu. To determine the Resilience, the Urdu version of the Connor-Davidson Resilience scale was used. Whereas marital satisfaction was determined using an Urdu-translated version of the Dyadic Adjustment Scale.

Results: A negative correlation was revealed in the findings between parenting stress and marital satisfaction ($p < 0.05$). Moderation analysis demonstrated a significant effect of resilience on the relationship between parenting stress and marital satisfaction ($R^2 = 0.70$, $B = 0.002$, $\beta = -0.71$, $p < 0.05$).

Conclusion: In conclusion, it was found that high stress experienced by parents of children with neurodevelopmental disorders has a negative impact on their marital satisfaction. Both their marriage and parental lives were affected equally. For both fathers and mothers, resilience can be a useful tool in resolving marital problems.

Keywords: marital satisfaction; neurodevelopmental disorders; parenting stress; resilience.

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INTRODUCTION

Intellectual Disability, Autism Spectrum Disorder, ADHD, and other similar disorders are included in the category of neurodevelopmental disorders that begin during the developmental stage [1].

Parents of special needs children often face stress in trying to manage their child's behavior. Parental stress is a complex emotion that arises from feeling burdened by one's role and the responsibilities that come with it [2]. Stress is associated with a negative psychological response [3]. Researchers have studied the psychosocial effects of caring for autistic children in a population and have found high levels of stress in parents of autistic children [4]. Taking care of or parenting children with autism, intellectual disability, and ADHD can be particularly stressful and challenging in areas of the world where support systems are lacking [5]. The child's unpredictable and improper behavior, emotional difficulties, the severity of the disorder's symptoms, as well as financial worries are all causes of stress for parents of children with special needs [6-9]. Therefore, both mothers and fathers often struggle under the burden of parenting a child with special needs, which may lead to a variety of family problems, as well as marital issues and other concerns. Resilience is the process of adjusting and adapting well in the face of danger, tragedy, adversity, trauma, or other difficult circumstances [10]. Resilience may help parents of children with Neurodevelopmental disorders to handle as well as to overcome their stress and burdens [11] as indicated by research, nurturing a child with disabilities such as ADHD, Intellectual Disability, and Autism can be extremely overwhelming, burdensome, and unsettling for the entire family [12]. Therefore, marital dissatisfaction can occur in the relationship between the parents since raising a child with a neuro-disability generally is burdensome, traumatic, alienating, and frustrating. Thus parents often face additional challenges in handling daily activities, resulting in a decreased level of mental health. The outcomes may appear in the form of depression, anxiety, stress, guilt, social and marital problems and increased mental health issues combined with the feelings of hopelessness [13, 14]. Parents of children with subject disorders face additional economic stress in most of the cases. This is due to the need for additional medical expenses, specialized services, and possibly special schools. The parents thus may feel burdened by their responsibilities, and marital dissatisfaction will be a consequence of such burden [15].

In families having children with neurodevelopmental delays the literature also suggests a connection between parenting stress,

child behavior issues, and decreased marital satisfaction [16]. The parents of such children are at an increased risk of experiencing psychological stress [17] and are prone to physical and mental health issues due to prolonged stress [18, 19].

In the West, significant research work has been done regarding the issue of parenting stress and marital satisfaction in families with children's developmental disorders. However, in Pakistan, only a few studies have been focused on this topic, where these studies also are centred on mothers, with little attention given to fathers. So, the key objective of the current research is to establish a relationship amongst special children with developmental disorders, the associated parenting stress and marital satisfaction, while further investigating the moderating role of resilience among both parents.

METHODOLOGY

Cross-sectional analytical research was done after approval from the ethical board of Fatima Jinnah Women University Rawalpindi (Ref:FJWU/BHS/2020/033). The data was collected from RHS Rehabilitation Centre Islamabad after approval from Ethical Committee (RHS/EC/08-12-2021-05) from December 2021 to April 2022. The study included a total of n=300 parents of special children, comprising n=100 parents of children with autism spectrum disorder (ASD), n=100 parents of children with attention deficit hyperactivity disorder (ADHD), and n=100 parents of children with intellectual disability (ID). The study included both genders, with n=150 samples from each sex with their ages ranging from 25 to 50 years. The background information on participants was gathered using a self-structured demographic questionnaire.

Parenting stress was measured in the study using an Urdu-translated Parental Stress Scale, whereas, with a reliability coefficient of 0.8 the scale consisted of 19 items, indicating a valid measurement. Items 1-8 and 17-18 were reverse scored, while items 9-16 and 19 were scored on a response category ranging from "Strongly Disagree" (scored 1) to "Strongly Agree" (scored 5). The 8 positive items were reversed scored to ensure consistency, resulting in a score range of 18-95. Greater scores on the scale indicated more parenting stress, while lower scores indicated less stress [20].

The Urdu translated Connor Davidson Resilience Scale (CD-RISC) 25 was utilized to measure the level of resilience of the research participants and was found to be reliable (with a coefficient of 0.88) and valid. The full range of scores for the CD-RISC-25 ranged from 0-100, with greater scores indicating greater resilience [11].

For the current study, the Dyadic Adjustment Scale (DAS) was used post Urdu translation and was found reliable with a score of 0.89 and valid. It comprises 27 items, which are divided into four factorial components of adjustment, which consist of Affection Expression, Dyadic Consensus, Dyadic Satisfaction, and Dyadic Cohesion. It is a 6-points rating scale, with score ranging from 1-131. A score of 63 was used as the cut-off for the DAS. Higher scores on this scale indicate greater marital satisfaction, while lower scores indicate marital dissatisfaction[21].

Before collecting data, the study obtained written consent from the participants, including both fathers and mothers of children with developmental disorders. The participants were provided with translated questionnaires and basic instructions on how to complete them. They were asked to read each question carefully and mark their responses according to their preferences. The confidentiality of all information was assured.

The analysis collected was done with parameters including percentage, mean, frequency, and standard deviation. The statistical association between variables was established using the Pearson correlation coefficient. To determine the regulating role of Resilience on parenting stress and marital satisfaction a Hierarchical regression analysis was employed. SPSS version 21 was used for data analysis.

RESULTS

A total of n=150 participants were female, while the remaining 150 were male in the study. Most participants were between the ages of 20 and 50 years. Table 1 presents the frequency distribution, mean, and standard deviation of the clinically diagnosed child, marital status, family system, parents' age, gender of the special child, and special child's age. (Table 1)

Table 1: Demographic Characteristics of Sample (N=300)

Demographics	Frequency (%)	Mean	S.D
Clinical Diagnosis (Special Child) Autism Spectrum Disorder	100 (100%)		
ADHD	100 (100%)		
Father Age		33.31	9.57
Mother Age		30.9	7.93
Gender of Special Child			
Boys	190 (65%)		
Girls	110 (35%)		
Age of Special child		7.61	3.67
House of Parents			
Self	182 (77.8%)		
Rent	118 (22.2%)		
Parents Education			
Illiterate	2 (2.0%)		
Primary	17 (17.0%)		
Middle	11 (11.0%)		
Secondary	19 (19.0%)		
HSSC	24 (24.0%)		
Graduate	25 (25.0%)		
Postgraduate	2 (2.0%)		
Family System of Parents			
Nuclear	160 (75.5%)		
Joint	140 (24.5.1%)		
Responsible of Household Expenditures			
Fathers	203 (78%)		
Mothers	87 (20%)		
Both	10 (2%)		
Special Children Count			
from 1-3	12 (11.1%)		
from 4-6	288 (88.9%)		
Child Mental Disorder Severity			
Mild-Disorder	75 (20.8%)		
Moderate-Disorder	156 (65.2%)		
Severe-Disorder	69 (14.0%)		

The results depict that, parenting stress and resilience have moderately negative correlation ($p < 0.05$). A weak negative connection between marital satisfaction and parenting stress ($p < 0.05$)

was also observed. Parenting Stress and Dyadic Adjustment subscales also have a ($p < 0.05$) moderately negative connection. (Table 2)

Table 2: Correlation between different scales and their sub-scales amongst Parents of Children with Neuro-developmental Conditions (N=300)

Variable	1	2	3	4	5	6	7
Parental Stress Scale	-	-.27**	-.79**	-.43**	-.84***	-.53**	-.65**
CDRISC	-	-	.53**	.23**	.57**	.68**	.55**
Dyadic Adjustment Scale	-	-	-	.69**	.93***	.74**	.75**
Dyadic Satisfaction subscale 1	-	-	-	-	.47**	.31**	.32**
Dyadic Consensus Subscale 2	-	-	-	-	-	.63**	.79**
Dyadic Cohesion Subscale 3	-	-	-	-	-	-	.56**
Affectional Expression Subscale 4	-	-	-	-	-	-	-

Note: CDRISC = Connor Davidson Resilience Scale,

* $p < 0.05$ (two tailed), ** $p < 0.01$ (two tailed), *** $p < 0.001$ (two-tailed)

Hierarchical regression was utilized to assess the moderating role of resilience between marital satisfaction and parenting stress. Parenting stress was examined, the first block of hierarchical regression analysis shows statistical significance ($p < 0.05$). Furthermore, the value of R^2 (0.29) linked to the regression model suggests stress accounts for 29% of variation in marital satisfaction while parenting, which implies that 71% of the variation in marital satisfaction is not being explained by parenting stress alone. Analysis of hierarchical regression results from second block analysis also showed statistically significance ($p < 0.05$). Consequently, the value of R^2 change (0.31) associated with the regression model suggests that

31% of variation in marital satisfaction is a consequence of resilience. This indicates that resilience is not the sole indicator for majority i.e., 69% of the cases. Statistically significance of ($p < 0.05$) was shown post analysis of the third block hierarchical. The R^2 change value of 0.70 connected with the regression model suggests a 70% variation in marital satisfaction linked to the interaction between resilience and parenting stress. This again suggests that 30% of the cases interaction term in its own does not explain variation in marital satisfaction. In step 3, the interaction of parenting stress and resilience was found to be a significant moderator for marital satisfaction ($R^2 = 0.70, B = 0.002, \beta = -0.71, p < 0.05$). (Table 3)

Table 3: Moderating Role of Resilience between Marital Satisfaction and Parenting Stress, (N=300)

Variable	β	95% CI (β)		SE	B	R^2	ΔR^2
		LL	UL				
Step 1							
Constant	37.60	34.54	40.66	1.55			
Parenting Stress	-1.22**	-2.03	-.41	.41	-.17**	.29	.29**
Step 2							
Constant	37.31	33.49	41.13	1.94			
Parenting Stress	-1.28**	-2.03	-.14	.41	-.17**	.31	.39**
Resilience	-.07*	-.47	.61	.27	-.01**		
Step 3							
Constant	130.97	123.45	138.49	3.82			
Parenting Stress	-1.75**	-2.21	-1.30	.23	-.24**	.702	.646***
Resilience	-.23*	-.55	.07	.15	-.04**		
Parenting Stress *Resilience	.002	-.17	.29	.41	-.71***		

Note CI = Confidence interval, SE = Standard Error, B=Unstandardized Beta Coefficient, UL= Upper Limit, LL = Lower Limit, β = Standardized Regression Coefficient, R^2 =Coeff. of determination, ΔR^2 =Change of Coeff. of determination.

* $p < 0.05$ (two-tailed) ** $p < 0.01$ (two-tailed) *** $p < 0.001$ (two-tailed)

DISCUSSION

Parents of children with neuro-developmental disorders participated in the research to determine relationship between parenting stress and marital satisfaction, as well as to analyse the moderating effect of resilience.

The results of the current study revealed a negative correlation between resilience in parents of children with neuro-developmental disorders and

parenting stress. This outcome is coherent with the previous research showing a negative correlation between resilience among parents of subject children and stress [22]. The conclusion was strengthened by the fact that parents of children with special needs in society often experience a great deal of stress along with managing issues such as clothing, bathing, and schooling for their children. Additionally, these parents often must handle other responsibilities as well. Education expenses for special needs children can also be very high, making

it difficult for parents, especially those from lower-class families, to afford them. In some cases, parents may have two or three children with special needs, which can create even more challenges. Therefore, parents of special needs children are often less resilient [23].

The current study indicates that, there is an inverse relationship between marital satisfaction and parenting stress among parents of children with developmental disorders. This result is supported by previous research that suggests marital quality has been negatively impacted by parenting stress [24]. The findings of the current study also suggest a negative correlation between parental stress, child behaviour issues, and poor marital quality among parents of children with developmental delays [17]. Similar research was carried out and findings showed poor levels of marital satisfaction among parents of children with autism [25]. The current findings confirm that Resilience significantly modifies the association between marital satisfaction and parenting stress.

The result of the study was supported that Resilience moderates the relationship between emotionally exhausting situation and psychological health [26]. Another study conducted by Li et al supports the study, they explored that Resilience moderated the relationship amongst infertility related stress and fertility quality of life [27]. Resilience is the mental strength enabling individuals in managing stressful situations. It is believed by psychologists that resilient individuals are better equipped in rebuilding their lives after a catastrophe and handling adversity. Such individuals can use their abilities, powers to manage in recovering from various issues and challenges, like medical emergencies, divorce, financial problems, illness, job loss, natural disasters, or the death of a loved one. Such Resilient people face life's problems head-on rather than dropping into depression or resorting to damaging coping tactics. This does not imply that such individuals experience less anxiety, misery, or sorrow over others; rather, they deal with these issues in ways that nurture growth and progress. In many cases, such individuals may arise as more resistant than earlier. Resilience empowers individuals in overcoming adversity, confronting hardships, and moving on with their lives [28]. Therefore, the connection between marital satisfaction and parenting stress is moderated by Resilience.

One of the drawbacks of the study was parents' reluctance to share information about their children. This was particularly true for parents who were uneducated and had difficulty understanding basic translations in Urdu. As a result, the researcher had to complete several questionnaires for parents.

CONCLUSIONS

The data suggests that children with neuro-developmental disorders have parents who experience high levels of anxiety, negatively affecting their marital satisfaction, as well as their childrearing ability. Developing resilience can be helpful in addressing marital problems in such challenging life situations. The present study also emphasizes the importance of future intervention studies aimed at managing disruptive behaviour in children with special needs at home, which can alleviate stress for parents.

DECLARATIONS & STATEMENTS

Author's Contribution

BI: substantial contributions to the conception and design of the study.

BI and RP: acquisition of data for the study.

RP and GN: interpretation of data for the study.

NN and MNK: analysis of the data for the study.

NN and ZA: drafted the work.

BI and RP: revised it critically for important intellectual content.

BI, RP, GN, NN, MNK and ZA: final approval of the version to be published and agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved. All authors contributed to the article and approved the submitted version.

Ethical Statement

The Study was done after the approval from ethical review committee of Fatima Jinnah Women University, Rawalpindi (Ref:FJWU/BHS/2020/033 as well as from the RHS Rehabilitation Centre Islamabad (RHS/EC/08-12-2021-05).

Consent Statement

The written Informed consent was obtained from all participants involved in the study.

Data Availability Statement

The data presented in this study are available on request from the corresponding author.

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Funding Sources

None to declare.

Conflicts of Interest

The authors declare no conflict of interest.

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