International Journal of Science and Research (IJSR)
ISSN: 2319-7064
Impact Factor 2025: 7.089

Relationship Between Parenting Stress and Psychological Well-Being Among Mothers of Children Diagnosed with Neurodevelopmental Disorders

Pressy Catharine C A

M.Sc. Clinical Psychology, Semester Four, Department of Psychology, Center for Distant Education, JAIN (Deemed-to-be University)
Bangalore, India
Register Number 241MSCD00587

Abstract: ***Background: Mothers of young children with neurodevelopmental disorders may experience substantial parenting demands, but their recent positive mental well-being varies. Objective: To examine the association between parenting stress and psychological well-being among mothers of children aged 0–6 years diagnosed with neurodevelopmental disorders. Methods: This quantitative cross-sectional correlational study analyzed 85 mothers using the 18-item Parental Stress Scale (PSS-18) and the WHO-5 Well-Being Index. Descriptive statistics, Pearson correlation, and a Spearman sensitivity analysis were reported. Results: Mean PSS-18 was 67.55 (SD = 4.73), and mean WHO-5 transformed score was 64.85 (SD = 12.92). Parenting stress was negatively correlated with well-being (Pearson r = −0.675, 95% CI [−0.777, −0.540], p < .001). Spearman correlation was also negative (ρ = −0.634, p < .001). Conclusion: Greater reported parenting stress was associated with lower recent subjective well-being in this sample. The cross-sectional design does not establish causation. These findings underscore the relevance of attending to caregivers' psychological experiences alongside child-focused services.***

Keywords: parental stress scale; WHO-5; maternal well-being; neurodevelopmental disorders; early childhood; correlational study

1. Introduction

Parenting entails both rewarding experiences and sustained demands. When a young child has a neurodevelopmental disorder, families may also coordinate developmental assessments, intervention visits, communication supports, and daily routines. These circumstances differ substantially across families, and diagnosis alone cannot explain a mother's experience. The present investigation addresses parenting-related stress and positive psychological well-being as distinct, potentially related constructs.

Neurodevelopmental disorders comprise heterogeneous conditions involving developmental difficulties in domains such as communication, attention, social functioning, learning, and motor skills (American Psychiatric Association, 2022). During the first six years, parents may be navigating early identification and intervention alongside ordinary caregiving responsibilities.
Accessible services, household resources, and support networks may influence these experiences.
Parenting stress refers to perceived strain associated with the parenting role, rather than general life stress. Berry and Jones (1995) developed the 18-item Parental Stress Scale (PSS-18) to capture both rewarding and demanding aspects of parenthood. Positive items are reverse-scored so that higher total scores indicate greater parenting stress. This is a continuous self-report measure, not a clinical diagnosis.

Psychological well-being can refer to several dimensions of positive functioning. In this study, it is operationalized narrowly as recent subjective well-being assessed by the WHO-5, which asks about positive experiences during the preceding two weeks. The WHO-5 does not directly assess the six dimensions of Ryff's model, and it should not be treated as a psychiatric diagnostic interview (Topp et al., 2015).

Stress-appraisal theory suggests that demands are experienced in relation to perceived resources and coping opportunities (Lazarus & Folkman, 1984). Ecological perspectives likewise draw attention to family, service, and community environments (Bronfenbrenner, 1979). These frameworks provide possible interpretations, but the present study did not measure mediating or moderating mechanisms.

2. Background and Research

Rationale Previous work has examined parenting stress and caregiver functioning in families of children with autism and other developmental disabilities. Davis and Carter (2008) investigated stress among parents of toddlers with autism; Estes et al. (2009) examined parenting stress and psychological functioning in mothers of preschool children with autism and developmental delay. Hayes and Watson (2013) synthesized autism-related parenting- stress evidence, while Singer (2006) reviewed maternal depressive symptoms in developmental-disability caregiving. These studies are informative but differ in samples, instruments, and outcomes.

A focused analysis of PSS-18 scores and positive WHO-5 well-being in mothers of children aged 0–6 years can provide complementary evidence. Importantly, evidence on depressive symptoms, caregiver burden, or Parenting Stress Index subscales must not be presented as though it directly measures the two constructs used here.

Research Objectives and Hypothesis
The primary objective was to examine the direction and magnitude of the relationship between parenting stress and

WHO-5 psychological well-being among mothers of children aged 0–6 years diagnosed with neurodevelopmental disorders. Secondary objectives were to describe the distribution of PSS-18 and WHO-5 scores and to examine the robustness of the association using a rank-based correlation.

Research hypothesis (H1): Higher parenting stress is significantly associated with lower psychological wellbeing.
Null hypothesis (H0): No statistically significant relationship exists between parenting stress and psychological well-being.

3. Methods

Study design and participants A quantitative, nonexperimental, cross-sectional descriptive-correlational design was used. The analytic sample comprised 85 mothers of children aged 0–6 years diagnosed with neurodevelopmental disorders. The individual mother was the unit of analysis. The dissertation indicates that recruitment-site names, sampling method, recruitment dates, and diagnostic-verification procedures require confirmation against study records; they are therefore not asserted here.

Eligibility and recruitment reporting
The study concerned mothers able to participate in the approved questionnaire procedure and whose children met the approved age and neurodevelopmental-diagnosis criteria. The final journal submission should specify the actual eligibility verification, recruitment pathway, language of administration, consent process, site permissions, and ethics approval or exemption status. No unverified institutional or ethics details have been added to this article.

Measures
The original 18-item Parental Stress Scale (PSS-18; Berry & Jones, 1995) uses 1–5 response options. Items 1, 2, 5, 6, 7, 8, 17, and 18 are reverse-scored in the original item order; scored items are summed to produce a total from 18 to 90. Higher totals represent greater reported parenting stress. The WHO5 Well-Being Index contains five items scored 0–5 for the previous two weeks. Raw totals of 0–25 are multiplied by four to give transformed scores of 0–100; higher scores represent better subjective wellbeing.

4. Data Handling and Analysis

The dissertation reports analyses of 85 completed records. PSS-18 totals were calculated using the specified reverse-scoring procedure, and WHO-5 raw scores were transformed to the 0– 100 metric. Descriptive results included means, standard deviations, and observed score ranges. The primary association was assessed using Pearson's product–moment correlation, with Spearman's rank correlation reported as a sensitivity analysis. Two- sided statistical significance was evaluated at $\alpha = .05$; the dissertation provides a Fisher-z 95% confidence interval for Pearson's r.

The dissertation notes a missing displayed PSS total for participant P002, subsequently recomputed as 79 from the 18 item responses. This scoring correction and the underlying response data should be independently checked before external submission. The manuscript reports the final statistics shown in the dissertation's Chapters IV and V rather than the inconsistent preliminary abstract figures.

5. Results

Descriptive Statistics
The sample included 85 mothers. The mean PSS-18 score was 67.55 (SD = 4.73), with an observed range of 57– 79 and median 67.00. The mean transformed WHO-5 score was 64.85 (SD = 12.92). These scores describe the participating sample and do not justify classifying individual mothers as having a psychiatric condition.

Table 1: Primary scale summaries. Source: Dissertation Chapter IV. WHO-5 observed minimum and maximum are not inserted without verification.

Variable	N	Mean	SD	Observed range
PSS-18 total	85	67.55	4.73	57–79
WHO-5 transformed	85	64.85	12.92	[Confirm exact range from dataset]

Family composition
The dissertation reports 40 mothers from joint families (47.06%), 37 from nuclear families (43.53%), and 8 from single-parent families (9.41%). These figures are descriptive and do not establish differences in stress or well- being between family categories.

Primary association
Pearson correlation showed a statistically significant inverse association between parenting stress and subjective well-being ($r = -0.675$, 95% CI [−0.777, −0.540], two-sided $p = 1.36 \times 10^{-12}$). In practical terms, mothers ⁻ reporting higher PSS-18 scores tended to report lower WHO-5 scores. The null hypothesis of no linear association was rejected for this sample.

Table 2: Relationship between parenting stress and psychological well-being. Source: Dissertation Chapter IV. Values are reported with the more precise coefficients supplied in the chapter narrative.

Analysis	N	Coefficient	Two-sided p
Pearson correlation	85	$r = -0.675$	1.36×10^{-12}
Spearman correlation	85	$\rho = -0.634$	7.56×10^{-11}

Sensitivity Analysis
Spearman's rank correlation was also negative and statistically significant ($\rho = -0.634$, $p < .001$), indicating that the direction of the association persisted under a rank-based approach. Agreement between Pearson and Spearman estimates does not rule out confounding, selection effects, or shared selfreport response tendencies.

Exploratory WHO-5 threshold Twelve participants (14.12%) had WHO-5 scores at or below 50, whereas 73 (85.88%) scored above 50. This screening-oriented threshold is not a diagnosis of depression or any other psychiatric disorder. Because WHO-5 transformed scores occur in increments of four, no participant in the dataset scored exactly 50, and the reported counts for <50 and ≤50 coincide.

No causal model, intervention effect, or diagnostic subgroup comparison is inferred from these descriptive and correlational analyses.

6. Discussion

The central finding was a statistically significant negative relationship between parenting stress and recent subjective psychological well-being. The coefficient ($r = -0.675$) indicates a substantial inverse association in the participating sample, with the confidence interval supporting a negative population association under the assumptions of the analysis. However, neither the magnitude nor the p-value proves that parenting stress causes lower well-being.

The findings are consistent with the general caregiving literature's emphasis on parenting-related demands and maternal psychological experiences (Davis & Carter, 2008; Estes et al., 2009; Hayes & Watson, 2013). Direct comparisons of effect sizes are inappropriate without matching populations and instruments. The WHO-5 assesses positive recent experiences rather than depression symptoms or Ryff's multidimensional psychological well-being domains.

The stress-appraisal perspective provides one possible interpretation: perceived demands may coexist with fewer opportunities for rest, positive affect, and engagement. Nevertheless, the study did not directly assess appraisal, coping, social support, service availability, household finances, or child functional support needs. These remain possible third variables rather than empirically demonstrated explanations.

A cross-sectional association could also reflect reciprocal processes. For example, lower subjective wellbeing may influence how parenting demands are appraised, and contextual circumstances may influence both scores. Longitudinal or intervention research would be required to clarify temporal ordering and evaluate mechanisms.

The early-childhood focus is clinically relevant because families may be coordinating developmental assessment, treatment planning, and early intervention. At the same time, experiences vary by child, family, and setting. A mother's stress score should never be interpreted as a measure of parenting competence, and a child's diagnosis should not be treated as a sufficient explanation of maternal well-being.

7. Implications for Clinical Psychology and Early Intervention

The findings support considering caregiver well-being as a legitimate topic during child-development and rehabilitation consultations. Brief, voluntary discussion of parenting demands and positive well-being may help identify mothers who would welcome further support. Any follow-up should be respectful, confidential, and responsive to the mother's preferences rather than presuming that all caregivers are distressed.

Possible practice responses include psychoeducation about developmental services, accessible counseling referral pathways, flexible appointment coordination, and opportunities for families to discuss practical caregiving challenges. These are recommendations informed by the observed association and broader clinical reasoning; their effectiveness was not tested in this study.

Family-centered care should recognize the role of partners, relatives, and community resources when mothers wish to involve them. Service access, financial costs, travel, and shared caregiving responsibilities may be important in understanding stress. Future studies should measure these factors explicitly before drawing conclusions about protective or risk mechanisms.

8. Study Limitations

First, the cross-sectional design prevents causal or temporal conclusions. Second, the sample of 85 mothers cannot be assumed representative of all mothers of children with neurodevelopmental disorders; recruitment methods and sites must be fully documented. Third, both primary measures relied on self-report, creating possible recall, social desirability, and commonmethod influences.

Fourth, bivariate correlation does not control for maternal health, social support, socioeconomic resources, child support needs, or service access. Fifth, diagnostic heterogeneity may obscure meaningful differences between groups. Sixth, the PSS-18 lacks a universal clinical cutoff, and WHO-5 is not a stand-alone psychiatric diagnosis. Finally, the dissertation notes a corrected PSS total and demographic coding issues that warrant final audit before journal submission.

9. Conclusion

Among 85 mothers of children aged 0–6 years diagnosed with neurodevelopmental disorders, higher parenting stress was associated with lower recent subjective psychological well-being (Pearson $r = -0.675$, $p < .001$). The direction was supported by Spearman's rank correlation. These results emphasize the importance of attending to maternal psychological experiences within family-centered child-development services. They do not establish causality or demonstrate the effectiveness of any intervention.

10. Recommendations for Future Research

Future studies could use multicenter recruitment, documented diagnostic and support-need profiles, and larger samples to assess generalizability and subgroup variation. Longitudinal research could investigate whether changes in stress precede changes in well-being. Mixed-methods work could incorporate mothers' perspectives on coping, services, social support, and everyday priorities. Evaluations of caregiver-support programs should use prespecified outcomes and appropriate comparison designs.

Acknowledgement
The author expresses sincere gratitude to Ms. Evangeline Supriya, Assistant Professor, for her guidance and academic support throughout the preparation of the project and article. The author also acknowledges the academic support provided by the Department of Psychology, Centre for Distance and

Online Education, JAIN (Deemed-to-be University), Bengaluru.

Declaration

The author declares that this article is based on the author's academic project entitled "Special Education System in Kerala", prepared as part of the M.Sc. Psychology programme at JAIN (Deemed-to-be University), Bengaluru. The work is based on secondary sources and document analysis. The manuscript has been prepared for academic publication purposes.

Conflict of Interest

The author declares that there is no conflict of interest associated with this article.

Funding

No specific financial support or external funding was received for this study.

Data Availability

This article is based on publicly available secondary sources, policy documents, educational reports, and published materials reviewed for the academic project. No primary participant-level dataset was generated for this study.

References

[1] Abidin, R. R. (1995). Parenting Stress Index: Professional manual. [Verify edition and publisher].
[2] American Psychiatric Association. (2022). Diagnostic and statistical manual of mental disorders (5th ed., text rev.). American Psychiatric Association.
[3] Berry, J. O., & Jones, W. H. (1995). The Parental Stress Scale: Initial psychometric evidence. Journal of Social and Personal Relationships, 12(3), 463–472. [Verify bibliographic details].
[4] Bronfenbrenner, U. (1979). The ecology of human development. Harvard University Press.
[5] Davis, N. O., & Carter, A. S. (2008). Parenting stress in mothers and fathers of toddlers with autism spectrum disorders. [Verify journal, volume, and pages].
[6] Diener, E. (1984). Subjective well-being. Psychological Bulletin, 95(3), 542–575.
[7] Estes, A., et al. (2009). Parenting stress and psychological functioning among mothers of preschool children with autism and developmental delay. [Verify full citation].
[8] Hayes, S. A., & Watson, S. L. (2013). The impact of parenting stress: A meta-analysis of studies comparing parents of children with and without autism spectrum disorder. [Verify full citation].
[9] Lazarus, R. S., & Folkman, S. (1984). Stress, appraisal, and coping. Springer.
[10] Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological wellbeing. Journal of Personality and Social Psychology, 57(6), 1069–1081.
[11] Singer, G. H. S. (2006). Meta-analysis of comparative studies of depression in mothers of children with and without developmental disabilities. [Verify full citation].
[12] Topp, C. W., Østergaard, S. D., Søndergaard, S., & Bech, P. (2015). The WHO-5 Well-Being Index: A systematic review of the literature. Psychotherapy and Psychosomatics, 84(3), 167–176.