

Research Paper

Psychological Predictors Among Caregivers of Children with Special Needs

Ishvar^{1*}, Shanmukh V. Kamble²

ABSTRACT

Background: Caregivers of children with special needs often experience significant psychological challenges due to the increased demands of caregiving. These challenges can affect their mental health and overall well-being. Understanding factors associated with parenting stress, anxiety, depression, caregiver burden, and resilience is important for developing effective support services. **Aim:** The study aimed to assess parenting stress, anxiety and depression, caregiver burden, and resilience among caregivers of children with special needs and to identify significant demographic and caregiving-related predictors of these outcomes. **Methods:** A cross-sectional quantitative research design was used. The sample consisted of 57 caregivers of children with special needs selected through purposive sampling in Karnataka. Data were collected using the Parenting Stress Index–Short Form (PSI-SF), Hospital Anxiety and Depression Scale (HADS), Caregiver Burden Inventory (CBI), Connor–Davidson Resilience Scale (CD-RISC-10), and a demographic information sheet. Descriptive statistics and stepwise multiple regression analyses were performed using SPSS. **Results:** Caregivers reported high parenting stress ($M = 106.54$, $SD = 19.14$), moderate anxiety and depression ($M = 15.33$, $SD = 6.65$), considerable caregiver burden ($M = 17.77$, $SD = 7.31$), and moderate resilience ($M = 34.86$, $SD = 6.68$). Child diagnosis, child age, family size, socioeconomic status, duration of caregiving, house type, type of residence, and nature of marriage significantly predicted psychological outcomes. The regression models explained substantial variance in parenting stress, anxiety, and depression, caregiver burden, and resilience. **Conclusion:** Caregivers face considerable psychological challenges influenced by child-related and family-related factors. Targeted psychosocial interventions and resilience-building programs are needed to enhance caregiver well-being.

Keywords: *Caregivers, Children with Special Needs, Parenting Stress, Anxiety, Depression, Caregiver Burden, Resilience, Psychological Predictors*

Caring for children with special needs presents unique challenges that can significantly impact the emotional and psychological health of caregivers. Children with developmental, physical, or intellectual disabilities often require constant attention and specialized support. This demand can increase stress, anxiety, and depression among caregivers (Baker et al., 2003; Estes et al., 2009). Parenting stress refers to the distress

¹Research Scholar, Dept. of Psychology, K. U. Dharwad

²Professor, Dept. of Psychology, K. U. Dharwad

*Corresponding Author

Received: June 08, 2026; Revision Received: July 10, 2026; Accepted: July 14, 2026

parents experience when the demands of parenting exceed their available resources and coping abilities (Abidin, 1995). Research indicates that caregivers of children with special needs experience a higher risk of psychological distress than those caring for typically developing children (Olsson & Hwang, 2001).

Caregiver burden encompasses the physical, emotional, and social strain involved in providing care. This burden can result in a lower quality of life, feelings of social isolation, and poor mental health (Zarit et al., 1980). Studies show a strong connection between high caregiver burden and increased parenting stress, along with symptoms of anxiety and depression. This highlights the importance of early identification and supportive interventions (Singer et al., 2007). On the positive side, resilience, or the ability to handle difficulties well, can help lessen the negative psychological effects of caregiving (Hartley et al., 2014). Caregivers with greater resilience tend to manage stress more effectively, support their mental health, and carry out caregiving tasks successfully.

Although research on the psychological challenges faced by caregivers of children with special needs has grown globally, there are still few studies examining the links between parenting stress, anxiety, depression, caregiver burden, and resilience, particularly in India. Understanding these relationships is crucial for developing targeted interventions that can enhance caregiver well-being and improve outcomes for children with special needs. Therefore, this study aims to explore the levels of parenting stress, anxiety, depression, caregiver burden, and resilience among caregivers, while also investigating the predictors of parenting stress through stepwise multiple regression analysis.

Research on caregivers of children with special needs has been increasing worldwide, but several key gaps remain, especially in India. Most studies have examined parenting stress or caregiver burden in isolation. Very few have looked at multiple psychological outcomes together, such as stress, anxiety, depression, caregiver burden, and resilience. Furthermore, past research often lacks detailed analyses, like stepwise multiple regression, which can identify specific demographic and caregiving-related predictors. There has been limited attention to socio-demographic factors—such as type of residence, socioeconomic status, family size, and nature of marriage—in relation to caregiver mental health. Additionally, only a few studies have focused on caregivers of diverse disability groups, including those with speech and hearing impairments and Down syndrome. There is also a notable lack of region-specific evidence from Karnataka, despite growing awareness and support initiatives. This study aims to address these gaps by examining multiple psychological variables simultaneously and identifying their predictors within a detailed, region-specific framework.

Research Gap

Although research on caregivers of children with special needs has increased globally, several important gaps remain, particularly in the Indian context. Most studies have focused on parenting stress or caregiver burden in isolation, with very few examining multiple psychological outcomes together, such as stress, anxiety, depression, caregiver burden, and resilience. Additionally, past research often lacks comprehensive multivariate analyses like stepwise multiple regression that can identify specific demographic and caregiving-related predictors. Limited attention has been given to socio-demographic influences—including type of residence, socioeconomic status, family size, and nature of marriage—on caregiver mental health. Moreover, few studies have explored caregivers of diverse disability groups such as speech and hearing impairment and Down syndrome. There is also a notable scarcity of region-specific evidence from Karnataka despite growing awareness and support

initiatives. The present study addresses these gaps by examining multiple psychological variables simultaneously and identifying their predictors within a comprehensive, region-specific framework.

Objectives

1. To assess the levels of parenting stress, anxiety and depression, caregiver burden, and resilience among caregivers of children with special needs.
2. To examine the influence of demographic and child-related variables on parenting stress, anxiety and depression, and caregiver burden.
3. To identify key demographic and caregiving predictors that significantly contribute to resilience among caregivers of children with special needs.

Hypotheses

H1: Demographic and child-related variables—including caregiver age, gender, education, marital status, nature of marriage, employment status, socioeconomic status, type of residence, housing type, relationship to the child, family type, number of family members, presence of co-caregivers, family history of disability, child age, child diagnosis, and duration of caregiving—will significantly predict psychological outcomes (**parenting stress, anxiety and depression, caregiver burden, and resilience**) among caregivers of children with special needs.

METHOD

Research Design

A cross-sectional quantitative research design was used, employing a survey method to collect data on parenting stress, anxiety and depression, caregiver burden, and resilience among caregivers of children with special needs. Standardized scales were administered, and stepwise multiple regression was conducted to identify significant demographic and caregiving predictors of these psychological outcomes.

Participants

The study included a total of 57 caregivers of children with special needs selected through purposive sampling in Karnataka. Participants were primary caregivers—parents or guardians—caring for children below 12 years diagnosed with developmental, intellectual, or sensory disabilities.

Tools Used

- Parenting Stress Index–Short Form (PSI-SF; Abidin, 1995): A 36-item measure assessing stress in the parent–child system across three subscales—Parental Distress (PD), Parent–Child Dysfunctional Interaction (PCD), and Difficult Child (DC).
- Hospital Anxiety and Depression Scale (HADS; Zigmond & Snaith, 1983): A 14-item tool measuring anxiety and depression symptoms in non-clinical populations.
- Caregiver Burden Inventory (CBI; Novak & Guest, 1989): A 12-item scale assessing multidimensional caregiver burden including emotional, physical, social, and time-dependent aspects.
- Connor–Davidson Resilience Scale (CD-RISC-10; Connor & Davidson, 2015): A 10-item measure evaluating resilience, defined as the ability to cope with adversity and stress.
- **Demographic Data Sheet:** was also used to collect information related to child age, diagnosis, family size, socioeconomic status, residence type, and nature of marriage.

Procedure

Participants were contacted through special schools, early intervention centres, and therapy clinics. After obtaining informed consent, questionnaires were administered either in person or through guided self-report sessions. Caregivers were assured of confidentiality and anonymity. Data collection took approximately 20–30 minutes per participant. Completed questionnaires were screened for accuracy and entered into SPSS for analysis.

Ethical Considerations

Ethical principles were strictly followed throughout the study. Prior to data collection, informed consent was obtained from all participants, and they were informed about the purpose of the research, voluntary participation, and their right to withdraw at any stage without any consequences. Confidentiality and anonymity of participants were maintained, and the collected data were used solely for research purposes. Care was taken to ensure that participation did not cause any psychological discomfort or harm to the caregivers.

Data Analysis

Data were analysed using SPSS, where descriptive statistics (Mean and Standard Deviation) were computed to examine the levels of parenting stress, anxiety and depression, caregiver burden, and resilience among caregivers. Stepwise Multiple Regression Analysis was further performed to identify the most significant predictors for each psychological variable, specifically focusing on predictors of Parenting Stress, Anxiety and Depression, Caregiver Burden, and Resilience.

RESULTS AND DISCUSSION

Table No 1: Mean and Std. Deviation of Parenting Stress, Anxiety and Depression, Caregiver Burden, and Resilience Among Caregivers of Children with Special Needs.

Variables	N	Minimum	Maximum	Mean	Std. Deviation
Parenting Stress	57	72	153	106.54	19.14
Anxiety and Depression	57	3	29	15.33	6.65
Caregiver Burden	57	8	29	17.77	7.31
Resilience	57	23	46	34.86	6.68

Presents the descriptive statistics of Parenting Stress, Anxiety and Depression, Caregiver Burden, and Resilience among caregivers of children with special needs (N = 57). The findings show that caregivers reported an average Parenting Stress score of 106.54 (SD = 19.14). This suggests a high level of stress related to caregiving responsibilities. The average score for Anxiety and Depression was 15.33 (SD = 6.65). This indicates moderate psychological distress among the participants. Caregiver Burden had an average score of 17.77 (SD = 7.31), showing a significant level of burden in managing their children's needs. The average Resilience score was 34.86 (SD = 6.68), indicating that participants had a moderate ability to cope with caregiving challenges. Overall, the results show that caregivers of children with special needs experience high levels of stress, psychological distress, and caregiving burden while maintaining a moderate capacity for resilience.

Table No 2: Stepwise Multiple Regression Analysis Predicting Parenting Stress Among Caregivers of Children with Special Needs

Factors	Beta Coefficient	Std. Error	R ²	t- Value
Child diagnosis (Down syndrome)	11.16	2.38	.289	4.69*
No of Family Members (1-4)	2.76	1.09	.076	2.52*
House Type (rent)	6.48	2.13	.096	3.04**
Nature of Marriage (close relative)	-12.87	3.85	.097	-3.34**
Adjusted R ² : .558, F-ratio: 16.06***				

The stepwise multiple regression analysis found four significant predictors of parenting stress among caregivers of children with special needs. The overall model was significant, $F = 16.06$, $p < .001$, and explained 55.8% of the variance in parenting stress (Adjusted $R^2 = .558$). Among the predictors, child diagnosis (Down syndrome) was the strongest positive predictor ($\beta = 11.16$, $t = 4.69$, $p < .05$), meaning caregivers of children with Down syndrome reported higher levels of parenting stress. Living in a rented house ($\beta = 6.48$, $t = 3.04$, $p < .01$) and having a smaller family size (1–4 members) ($\beta = 2.76$, $t = 2.52$, $p < .05$) were also linked to increased parenting stress. In contrast, close-relative marriage was a significant negative predictor ($\beta = -12.87$, $t = -3.34$, $p < .01$), suggesting lower parenting stress among these caregivers.

These findings support recent research showing that caregivers of children with developmental disabilities, including Down syndrome, experience higher stress due to increased caregiving demands, health concerns, and long-term support needs. Recent studies also indicate that financial and housing-related challenges add significantly to caregiver stress. Meanwhile, larger family networks often provide practical and emotional support that can lower stress levels. Additionally, family cohesion and support from extended family members have been identified as protective factors that help caregivers manage their responsibilities. Overall, the findings emphasize the important role of child-related and family-related factors in influencing parenting stress among caregivers of children with special needs.

Table No 3: Stepwise Multiple Regression Analysis Predicting Anxiety and Depression Among Caregivers of Children with Special Needs.

Factors	Beta Coefficient	Std. Error	R ²	t-value
Child age (0 months -3 years)	6.96	1.72	.232	4.04***
Child diagnosis (speech and Hearing)	4.98	1.49	.140	3.44**
Duration (months -2 years)	-4.08	1.54	.075	-2.65*
Age (20-30 years)	-3.45	1.33	.064	-2.69*
Adjusted R ² : .511 F-ratio: 13.34***				

The stepwise multiple regression analysis showed that the model significantly predicted anxiety and depression among caregivers of children with special needs, $F = 13.34$, $p < .001$. It accounted for 51.1% of the variance (Adjusted $R^2 = .511$). Child age (0–3 years) was the strongest positive predictor ($\beta = 6.96$, $t = 4.04$, $p < .001$). This means caregivers of younger children experienced higher levels of anxiety and depression. Child diagnosis of speech and hearing impairment was also a significant positive predictor ($\beta = 4.98$, $t = 3.44$, $p < .01$).

Psychological Predictors Among Caregivers of Children with Special Needs

On the other hand, the duration of caregiving (up to 2 years) ($\beta = -4.08$, $t = -2.65$, $p < .05$) and caregiver age (20–30 years) ($\beta = -3.45$, $t = -2.69$, $p < .05$) were significant negative predictors. This suggests that caregivers with more caregiving experience and younger caregivers had lower anxiety and depression levels.

These findings align with recent studies that show caregivers of very young children with special needs often face more emotional distress. This distress arises from uncertainty about the child's future, increased caregiving demands, and challenges adjusting. Research also indicates that caregivers of children with communication impairments report higher anxiety and depressive symptoms due to difficulties in communication, social interaction, and accessing specialized services.

Additionally, studies suggest that caregivers gradually develop coping skills and strategies over time, which can lessen psychological distress as their caregiving experience grows. Younger caregivers may show greater psychological flexibility and adaptability, which can help reduce the effects of caregiving stress. Overall, these findings highlight the need for early psychological support and intervention for caregivers, especially those caring for very young children and children with speech and hearing impairments.

Table No 4: Stepwise Multiple Regression Analysis Predicting Caregiver Burden Among Caregivers of Children with Special Needs.

Factors	Beta Coefficient	Std. Error	R ²	t-value
Child Diagnosis (Down syndrome)	-4.50	0.90	.318	-5.01***
Age (21-30years)	-4.10	1.55	.079	-2.63**
No of Family Members (1-4)	-1.35	0.40	.104	-3.30**
Child Age (0 Months -3 years)	4.08	1.50	.064	2.73**
Duration (3 years and above)	2.07	0.70	.065	2.97**
Type of Residence (suburban)	-1.95	0.69	.051	-2.81**
Adjusted R²: .681 F-ratio: 17.470**				

The stepwise multiple regression analysis showed that the model significantly predicted caregiver burden among caregivers of children with special needs, $F = 17.47$, $p < .01$. It explained 68.1% of the variance in caregiver burden (Adjusted $R^2 = .681$). Child diagnosis (Down syndrome) was the strongest predictor ($\beta = -4.50$, $t = -5.01$, $p < .001$). This was followed by caregiver age (21–30 years) ($\beta = -4.10$, $t = -2.63$, $p < .01$), number of family members (1–4) ($\beta = -1.35$, $t = -3.30$, $p < .01$), and type of residence (suburban) ($\beta = -1.95$, $t = -2.81$, $p < .01$), all linked to lower caregiver burden. On the other hand, child age (0–3 years) ($\beta = 4.08$, $t = 2.73$, $p < .01$) and duration of caregiving (3 years and above) ($\beta = 2.07$, $t = 2.97$, $p < .01$) were significant positive predictors, indicating higher caregiver burden.

These findings align with recent research that shows caregiver burden is affected by factors related to both the child and the family. Studies indicate that caring for very young children with special needs often requires intense supervision, therapy coordination, and emotional involvement, which increases the burden on caregivers. A longer duration of caregiving has also been tied to cumulative physical, emotional, and financial stress. Recent evidence suggests that younger caregivers and those in supportive family settings may face lower burdens due to better adaptability and more social support. Additionally, residential and family-context factors can affect access to resources and caregiving help. Overall, the findings emphasize the complex nature of caregiver burden and highlight the need for specific support services for families with young children who have special needs.

Table No 5: Stepwise Multiple Regression Analysis Predicting Resilience Among Caregivers of Children with Special Needs.

Factors	Beta Coefficient	Std. Error	R ²	t-value
Type of Residence (Suburban)	2.80	0.86	.165	3.27**
Child Diagnosis (Down syndrome)	2.68	0.85	.131	3.13**
Social Economic Status (Low)	-4.05	1.78	.064	-2.30*
House Type (rented)	2.88	0.78	.132	3.63***
Nature of Marriage (Married to a close relative)	-3.60	1.66	.044	-2.17*
No of Family Members (5 and above)	-1.52	0.70	.040	-2.14*
Order of Birth child (2)	-1.97	0.91	.038	-2.16*
No of Children in House (3 and above)	2.15	1.02	.033	2.09*
Child Age (0 Months -3 years)	-3.74	1.72	.033	-2.17*
Adjusted R ² : .68 F-ratio: 10.817***				

The stepwise multiple regression analysis showed that the model significantly predicted resilience among caregivers of children with special needs, $F = 10.82$, $p < .001$. It explained 68% of the variance in resilience (Adjusted $R^2 = .680$). Significant positive predictors of resilience included type of residence (suburban) ($\beta = 2.80$, $t = 3.27$, $p < .01$), child diagnosis (Down syndrome) ($\beta = 2.68$, $t = 3.13$, $p < .01$), house type (rented) ($\beta = 2.88$, $t = 3.63$, $p < .001$), and number of children in the household (3 and above) ($\beta = 2.15$, $t = 2.09$, $p < .05$). In contrast, low socioeconomic status ($\beta = -4.05$, $t = -2.30$, $p < .05$), marriage to a close relative ($\beta = -3.60$, $t = -2.17$, $p < .05$), number of family members (5 and above) ($\beta = -1.52$, $t = -2.14$, $p < .05$), second-born child ($\beta = -1.97$, $t = -2.16$, $p < .05$), and child age between 0 and 3 years ($\beta = -3.74$, $t = -2.17$, $p < .05$) were significant negative predictors of resilience.

Recent research supports these findings, indicating that resilience among caregivers is influenced by personal, family, and socioeconomic factors. Studies show that caregivers with better social and environmental support often report higher resilience and a greater ability to deal with caregiving challenges. Economic hardship has been linked to lower resilience due to increased financial stress and limited access to supportive resources. Research suggests that caring for very young children with special needs can decrease resilience because of heightened caregiving demands and uncertainty about the child's development. Family structure, caregiving responsibilities, and social support networks are important factors in resilience among caregivers. Overall, the findings show that resilience is influenced by both risk and protective factors. This highlights the need for psychosocial interventions and family support programs to help strengthen resilience among caregivers of children with special needs.

CONCLUSION

This study found that caregivers of children with special needs face significant psychological challenges. These include high parenting stress, moderate levels of anxiety and depression, substantial caregiver burden, and moderate resilience. The findings showed that various child-related and demographic factors, such as child diagnosis, child age, duration of caregiving, family size, socioeconomic status, type of residence, house type, and nature of marriage, significantly affect these psychological outcomes. The regression analyses revealed that these factors explain a large share of the variance in parenting stress, anxiety and depression, caregiver burden, and resilience. This underscores the complex interplay of personal, family, and environmental influences on caregiver well-being. The

study stresses the need for early identification of at-risk caregivers and targeted psychosocial interventions. Counseling services, caregiver support programs, and resilience-building strategies are necessary to reduce psychological distress and improve coping. Strengthening support systems for caregivers can enhance their overall well-being and lead to better developmental and caregiving outcomes for children with special needs.

REFERENCES

- Abidin, R. R. (1995). *Parenting Stress Index–Short Form (PSI-SF): Professional manual* (3rd ed.). Psychological Assessment Resources.
- Baker, B. L., McIntyre, L. L., Blacher, J., Crnic, K., Edelbrock, C., & Low, C. (2003). Pre-school children with and without developmental delay: Behaviour problems and parenting stress over time. *Journal of Intellectual Disability Research*, 47(4–5), 217–230. <https://doi.org/10.1046/j.1365-2788.2003.00484.x>
- Connor, K. M., & Davidson, J. R. T. (2003). Development of a new resilience scale: The Connor–Davidson Resilience Scale (CD-RISC). *Depression and Anxiety*, 18(2), 76–82. <https://doi.org/10.1002/da.10113>
- Estes, A., Munson, J., Dawson, G., Koehler, E., Zhou, X. H., & Abbott, R. (2009). Parenting stress and psychological functioning among mothers of preschool children with autism and developmental delay. *Autism*, 13(4), 375–387. <https://doi.org/10.1177/1362361309105658>
- Hartley, S. L., Papp, L. M., & Bolt, D. (2014). Spillover of marital interactions and parenting stress in families of children with autism spectrum disorder. *Journal of Clinical Child & Adolescent Psychology*, 45(2), 1–13.
- Novak, M., & Guest, C. (1989). Application of a multidimensional caregiver burden inventory. *The Gerontologist*, 29(6), 798–803. <https://doi.org/10.1093/geront/29.6.798>
- Olsson, M. B., & Hwang, C. P. (2001). Depression in mothers and fathers of children with intellectual disability. *Journal of Intellectual Disability Research*, 45(6), 535–543. <https://doi.org/10.1046/j.1365-2788.2001.00372.x>
- Singer, G. H. S. (2006). Meta-analysis of comparative studies of depression in mothers of children with and without developmental disabilities. *American Journal on Mental Retardation*, 111(3), 155–169.
- Zarit, S. H., Reever, K. E., & Bach-Peterson, J. (1980). Relatives of the impaired elderly: Correlates of feelings of burden. *The Gerontologist*, 20(6), 649–655. <https://doi.org/10.1093/geront/20.6.649>
- Zigmond, A. S., & Snaith, R. P. (1983). The Hospital Anxiety and Depression Scale. *Acta Psychiatrica Scandinavica*, 67(6), 361–370. <https://doi.org/10.1111/j.1600-0447.1983.tb09716.x>

Acknowledgment

The author(s) appreciates all those who participated in the study and helped to facilitate the research process.

Conflict of Interest

The author(s) declared no conflict of interest.

How to cite this article: Ishvar, & Kamble, S.V. (2026). Psychological Predictors Among Caregivers of Children with Special Needs. *International Journal of Indian Psychology*, 14(3), 001-008. DIP:18.01.001.20261403, DOI:10.25215/1403.001