

# Paternal and Maternal Stress in Caring for Children with Learning Disabilities in Inclusive Basic Schools in Abuja, Nigeria

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## ABSTRACT

The present study evaluated paternal and maternal stress levels while taking care of their children with learning disabilities in Inclusive Basic Schools in Abuja, Nigeria. The study adopted a descriptive survey design. The study population was 2007 parents of children with learning disabilities from twenty (20) Inclusive Basic Schools across the six Area Councils of the Federal Capital Territory (FCT). Three hundred fourteen (314) samples were recruited using the Krejcie and Morgan formula. Parental Stress Scale (PSS) by Berry and Jones (1995) was utilized to measure stress levels among the samples. Descriptive statistics was employed in data analysis using the Statistical Package for Social Sciences (SPSS) version 23.0. Results revealed that the mother had a stress mean score of  $48.39 \pm 5.68$  and the father had a stress mean score of  $48.83 \pm 5.33$  with a t-value of  $-0.710$  and a p-value of  $0.478$ . Since the p-value is greater than  $0.05$ , it means that there is no significant difference between the mean score of the stress of the mother and the father while taking care of their children with learning disabilities. The study recommends that fathers with high stress levels should be involved in the stress management group available in inclusive basic schools. In addition, school administrators should provide training programs for parents of children with learning disabilities in inclusive basic schools towards alleviating their stress due to caregiving.

**Keywords:** Paternal, Maternal, Perceived Stress, Children with Learning Disabilities, Inclusive Basic Schools.

## INTRODUCTION

In 2020, the World Health Organization (WHO) reported that disability affects one in seven people globally. A wide range of impairments, activity restrictions, and participation restrictions in both children and adults have been referred to as "disabilities" in the past (WHO, 2020). According to estimates, one billion people, or 15% of the world's population, live with a disability. From this estimated population of one billion, children account for 93 million, while adults account for 720 million. Disabilities can be congenital (prenatal and perinatal) or acquired (postnatal) (WHO, 2020). In the United States, learning disabilities refer to a set of conditions inhibiting children's physical capabilities, learning-related abilities, and behavioural functioning (Centers for Disease Control and Prevention, 2019). The prevalence rate of learning disabilities in children in the United States is approximately 1 in 6 (Zablotsky et al., 2019), and globally, 52.9 million children are reported as having learning disabilities (Hong et al., 2022). Of these children, 95% are from low-and middle-income countries.

Parental stress as a persistent emotional condition is a feeling of distress that occurs when the demands of the child-rearing cycle are viewed as greater than personal and social resources (BeLue et al., 2015), which could have many negative consequences for both parents and their children's functioning (Hartley et al., 2018). The raising of a child with learning disabilities puts enormous stress on their Father and mother (Lin et al., 2018;

Waizbard-Bartov et al., 2019). Compared to parents of children without learning disabilities, parents of children with learning disabilities have been found to suffer unfavorable and elevated stress because of the extra care that must be provided for their children. This is further attributed to the changing and varying demands they are faced with in terms of their children's specific needs (Isa et al., 2017).

Research highlights that stress arises when individuals struggle to meet changing environmental demands, often leading to negative outcomes such as frustration, burnout, and dereliction of responsibilities (Zhang et al., 2012). For parents, this stress can be particularly intense. Parental stress is commonly defined as a negative psychological response to the demands and strains associated with parenting roles, impacting not only parents' emotional health but also their relationship with their children and the child's emotional and social development (Deater-Deckard, 2016).

Dyson (2016) further explains that parental stress among parents of children with learning disabilities stems from their struggle to cope with the special care demands these children require. This stress can lead to negative outcomes, including feelings of guilt, heightened psychological distress, and family dysfunction. Given these challenges, numerous studies have found that raising children with various disabilities is a demanding task that often results in significant parental stress (Fong & Ali, 2023; Mbatha & Mokwena, 2023; Savari et al., 2021; Staunton et al., 2020).

Family stress is a continuous experience for families with children who have learning disabilities, as these developmental challenges require special care and attention integrated into daily family life. This research aims to assess the stress levels of both fathers and mothers caring for children with learning disabilities in inclusive elementary schools in Abuja, Nigeria. The study is motivated by the significant emotional and practical challenges these parents endure. Here, parental stress refers to the various emotional burdens and difficulties that arise in caring for children with learning disabilities, including physical exhaustion, financial strain, anxiety, grief, guilt, social stigma, resentment from relatives and neighbors, and even marital conflicts (Logsdon, 2018).

### **A. Statement of The Problem**

Over the years, fathers and mothers of children with learning disabilities have always been faced and burdened with the poor performance of their children with learning disabilities in schools and their lack of social skills, which causes fathers particularly to be ashamed of their children with learning disabilities in public, thereby cause emotional stress which is dangerous to the health of these parents. In addition, Parents of children with learning disabilities are more likely to struggle with despair, physical health issues, and a decline in quality of life. The care for children with learning disabilities is extremely daunting, quite energy dissipating and sapping, pre-occupying, very stressful and challenging. A study of this nature is expected to ascertain the level of stress fathers and mothers of children with learning disabilities go through, create a road map by which the stress is alleviated, and find out if there exists any significant difference in the stress level between the fathers and the mothers of children with learning disabilities.

### **B. Research Questions**

The following research questions guided the study:

1. What is the paternal and maternal stress levels across family income?
2. What is the paternal and maternal stress levels in taking care of their children with learning disabilities?

### **C. Objectives of the Study**

The aim of this study was to evaluate the Paternal and Maternal Stress Levels in taking care of Children with Learning Disabilities in Inclusive Basic Schools in Abuja, Nigeria.

The specific objectives were to:

1. determine the paternal and maternal stress levels across family income.
2. examine the paternal and maternal stress levels in taking care of their children with learning disabilities.

#### D. Hypotheses

The following null hypotheses were formulated tested at 0.05 level of significance:

1.  $H_{01}$ : There is no significant difference between paternal and maternal stress mean scores in taking care of their children with learning disabilities across family income.
2.  $H_{02}$ : There is no significant difference between paternal and maternal stress mean scores in taking care of their children with learning disabilities.

### METHODOLOGY

#### A. Research Design

This study used a descriptive survey design, which is well-suited for gathering data at a single point in time using a survey instrument.

#### B. Research location

The study was conducted in Nigeria's Federal Capital Territory, Abuja. This location was chosen because, as a relatively new capital, Abuja has drawn diverse ethnic groups from across the nation and includes a significant population of children with learning disabilities from all backgrounds in Nigeria. Additionally, Abuja serves as the policy-making center of the country, making it an ideal location for research that could inspire similar studies and inform policies across the states.

#### C. Population

The population for this study consisted of 2,007 parents of children with learning disabilities from 20 inclusive basic schools across the six Area Councils of the Federal Capital Territory (FCT), Abuja, Nigeria.

#### D. Samples

A stratified sampling technique was employed to obtain the sample by dividing the population into distinct, non-overlapping groups or categories (strata) and then selecting a simple random sample from each group (Awotunde & Ugodulunwa, 2004). Using Krejcie and Morgan's (1970) formula, an appropriate sample size of 322 was calculated based on the total population of children with learning disabilities. The formula for determining the sample size is as follows:

$$S = \frac{X^2 NP(1 - P)}{d^2(N - 1) + X^2 P(1 - P)}$$

S = required sample size

$X^2$  = the table value of chi-square for 1 degree of freedom at desired confidence level (3.841)

N = the population size = 2007

P = the population proportion assumed to be 0.5 since this would provide the maximum sample size)

d = the degree of accuracy expressed as a proportion (0.05)

$d^2$  = the degree of accuracy expressed as a proportion (0.0025)

$$S = \frac{3.84 \times 2007 \times 0.5(1 - 0.5)}{0.05^2(2007 - 1) + 3.84 \times 0.5(1 - 0.5)}$$

$$\frac{3.84 * (2007) * 0.5 * (0.5)}{0.0025 * (2006) + 3.84 * 0.5 * (0.5)}$$

$$\frac{3.84 \times 2007 \times 0.25}{0.025(2006) + 3.84 \times 0.25}$$

$$\frac{3.84 \times 2007 \times 0.25}{0.0025(2006) + 3.84 \times 0.25} = \frac{1926.72}{5.015 + 0.96} = \frac{1926.72}{5.975} = 322.46 \approx 322$$

**E. Instruments**

The study adopted the Parental Stress Scale (PSS) developed by Berry and Jones in 1995. The PSS comprises 18 items that determine parents' perception of their parenting roles, exploring both positive aspects (for example, emotional benefits and personal development) and negative aspects of parenthood (e.g. demands on resources and feelings of stress). The PSS was intended to evaluate parental stress for both mothers and fathers of children with and without clinical problems across a wide age range. The PSS contains measures of stress, emotion, and role satisfaction, including perceived stress, work/family stress, loneliness, anxiety, guilt, marital satisfaction/commitment, job satisfaction, and social support. The instrument was divided into two sections, which are Section A and B. Section A covers the demographic information of the respondents on gender and family income status, while Section B consists of 18 items with a 5-point Likert scale with categories of (1 = Strongly disagree 2 = Disagree 3 = Undecided 4 = Agree 5 = Strongly agree, with the assigned scores of 1, 2, 3, 4 and 5. Cronbach Alpha method was used to determine the internal consistency of the items. In the pilot study, an initial coefficient of 0.804 was recorded. After minor adjustments were made and applied in the main study, Cronbach's Alpha score increased to 0.972.

**F. Analysis**

The study utilized descriptive statistics, including mean, standard deviation, and simple percentages, to address the research questions, while inferential statistics, specifically ANCOVA and chi-square, were applied to test the formulated hypotheses.

**RESULTS**

**A. Demographic Information**

Table 1. Demographic Information Distribution of Parent of Children with Learning Disabilities (N=314)

Variables	Gender		Total
	Mothers	Fathers	
<b>Family Income</b>			
Low Income (0-N35,000)	58(18.5)	28(8.9)	86(27.4)
Middle Income (N36,000 - N75,000)	110(35)	93(29.6)	203(64.6)
High Income (N76,000 & Above)	7(2.2)	18(5.7)	25(8)
Total	175(55.7)	139(44.3)	314(100)

In terms of family income, the analysis reveals that, 27.4% (n=86)(comprises of 18.5% females and 8.9% males); earn less than N35,000 per month, 64.6% (n=203)(comprises of 35.0% females and 29.6% males) earn between N36,000 and N75,000 per month, while 8.0% (n=25)(comprises of 2.2% females and 5.7% males);

earn N75,000 and above per month. This shows that majority of the parents earn between N36, 000 and N75, 000 per month. This is supported by Mean score of family income of N55, 000 that lies between N36, 000 to N75, 000. This indicates that, on the average, majority of the parents earn N55, 000 per month. The finding implies financial provisions to take care of their children with learning disabilities were from middle income class of which majority were mothers.

**B. Paternal and Maternal Stress**

The levels of Paternal and Maternal stress levels as presented in Table 2 revealed that more than half of the parents (n=167) 53.2% reported moderate parental stress, while (n=70) 22.3% reported low parental stress. Based on the mean score (M = 48.59, SD = 5.52), it can be said that majority of the parents reported moderate parental stress.

Table 2: Paternal and Maternal Stress Level in taking care of their Children with Learning Disabilities

Variables	Mean±SD	Gender		Total (%)
		Female (%)	Male (%)	
<b>Extent of Parental Stress</b>	<b>48.59±5.52</b>			
Low		35 (11.1)	35 (11.1)	70 (22.3)
Moderate		103 (32.8)	64 (20.4)	167 (53.2)
High		37 (11.8)	40 (12.7)	77 (24.5)

Note: SD = Standard Deviation. And Percentages in Parentheses (%)

Table 3 shows the ANCOVA Analysis on Paternal and Maternal Stress Mean Scores in Caring for their Children with Learning Disabilities across Family-Income Levels with F (1, 124) = 0.547 and a , p > 0.05, since the p-value of 0.000 is greater than 0.05 level of significance, the null hypothesis was accepted, indicating that there was no significant interaction effect of Family Income on Paternal and Maternal Stress. The result further reveals an adjusted R squared value of .014 which means that 1.4 percent of the variation in the dependent variable which is Parental Stress in taking care of Children with learning disabilities is explained by variation in the family-income in taking care of Children with learning disabilities, while the remaining 98.6% was due to other factors not included in this study.

Table 3: Summary of ANCOVA on Paternal and Maternal Stress Mean Scores in Caring for their Children with Learning Disabilities across Family-Income Levels

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	285.322 <sup>a</sup>	5	57.064	1.897	.095
Intercept	321510.901	1	321510.901	10688.278	.000
Family-Income	135.326	2	67.663	2.249	.107
Gender	16.448	1	16.448	.547	.460
Family-Income * Gender	42.887	2	21.444	.713	.491
Error	9264.856	308	30.081		

a. R Squared = .030 (Adjusted R Squared = .014)

Finding shows that there was no significant difference between the Paternal and Maternal Stress Level in taking care of their children with learning disabilities. Therefore, the researcher accepts the null hypothesis.

Tables 4: A 2x 3 Contingency Table Cross-Classifying 314 Parents of Children with Learning Disabilities by Gender and Stress Levels

Gender	Parental Stress Levels			Row Total (RT)
	Low	Moderate	High	
Paternal	35 (30.99)	64 (73.93)	40 (34.09)	139
Maternal	35 (39.01)	103 (93.07)	37 (42.91)	175
Column Total (CT)	70	167	77	314

Note: Expected values are in parentheses (E)

Column Total = CT

Row Total = RT

Grand Total = GT = 314

Table 5: Chi-square Analysis of Paternal and Maternal Stress Level in taking care of their children with learning disabilities

Stress Levels	O	E	O-E	(O-E) <sup>2</sup>	(O-E) <sup>2</sup> /E
Low	35	30.99	4.01	16.08	0.52
Moderate	64	73.93	-9.93	98.60	1.33
High	40	34.09	5.91	34.93	1.02
Low	35	39.01	-4.01	16.08	0.41
Moderate	103	93.07	9.93	98.60	1.06
High	37	42.91	-5.91	34.93	0.81
				<b>X<sup>2</sup></b>	<b>5.16</b>

Tested at 0.05 level of significance.

Degree of freedom = df

$$df = (c-1)(r-1)$$

$$df = (3-1)(2-1) = (2)(1) = 2$$

Calculated Chi-square value  $X^2_{cal}$  at 0.05 = 5.16

Tabulated Chi-square value  $X^2_{tab}$  at 0.05 = 5.991

$$X^2_{cal} < X^2_{tab} \quad 5.16 < 5.99$$

## DISCUSSION

The study found no significant difference in stress levels between mothers and fathers caring for children with learning disabilities. The findings suggest that, despite the added demands of caregiving, parents' stress can be alleviated when motivated by affection for their child, combined with dedicated caregiving and optimism that their efforts will yield positive results. This aligns with research by Lin et al. (2018) and Waizbard-Bartov et al. (2019), who reported that raising a child with learning disabilities places considerable stress on parents.

Parents of children with learning disabilities have been identified to experience untoward and increased stress due to special care required of their children compared to the parents of children without learning disabilities. Past study by Deater-Deckard, (1998) and Deater-Deckard et al. (2006) reported that parental stress refers to aversive psychological reactions to the pressures and demands of parental roles, which has a direct impact on the emotional well-being of the parents, the relationship between parents and children, and on the emotional and social development of the child. In summary, parents of children with learning disabilities had parental stress regardless of their age groups. This finding is consistent with Taderera and Hall (2017) in a phenomenological study, which investigated the stress parents go through while attempting to nurture a child with learning disabilities. In addition, Moriwaka, (2012) reported that higher stress levels are created by various factors that influence a special needs family. Special needs families are often in a lower income bracket due to the need for one parent to become the primary caregiver of the special needs child. When that aspect is compounded with the high financial necessities for a special needs child, the situation can create even greater stress for the family unit (Hanvey, 2002).

## CONCLUSION

Based on the findings of this study, the following conclusions were drawn. The majority of the parents of children with learning disabilities who pick up their children from the inclusive basic schools were women (mothers), and their stress level was moderate, but at a high stress level, the majority were fathers of children with learning disabilities. There was no significant difference between Paternal and Maternal Stress Levels in taking care of their children with learning disabilities at the low and moderate stress levels based on family income, but at the High family income level, there was a significant difference between high paternal stress level while no significant difference was observed within maternal stress levels.

## RECOMMENDATIONS

Based on the study's findings, it is recommended that fathers experiencing high-stress levels participate in stress management groups available within inclusive basic schools. Additionally, school administrators should offer targeted training and support programs for parents, particularly fathers of children with learning disabilities, to help them manage caregiving challenges effectively.

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