

PSYCHOLOGICAL IMPACT ON PARENTS AND EDUCATIONAL STRATEGIES FOR CHILDREN WITH DEVELOPMENTAL DISABILITIES

Kaltrina Osmani¹, Natasha Stanojkovska-Trajkovska²

1 Faculty of Philosophy, Ss. Cyril and Methodius University in Skopje,
Republic of North Macedonia

2 Faculty of Philosophy, Ss. Cyril and Methodius University in Skopje,
Republic of North Macedonia

DOI: <https://doi.org/10.56293/IJMSSSR.2024.5324>

IJMSSSR 2024

VOLUME 6

ISSUE 6 NOVEMBER – DECEMBER

ISSN: 2582 - 0265

Abstract: This study investigates the experiences and emotions of parents with children who have special needs, emphasizing the effects of parental stress, insufficient information, and professional help on their capacity to aid their children. The objective of the research is to identify the obstacles and problems encountered by parents and to provide ideas for formulating supporting methods. **Methodology:** The research included 60 parents of children with special needs who filled out a questionnaire to evaluate their experiences and emotions. We used SPSS v.27 software to evaluate the gathered data, including descriptive statistics, correlation, and regression analysis. The findings revealed a substantial correlation between parental stress levels and inadequate parenting skills. Parents who indicated insufficient knowledge demonstrated a diminished trust in their ability to assist their children. The absence of professional help exacerbated emotions of dissatisfaction and ineffectiveness. The study concluded that parental hurdles include stress, insufficient support, and lack of information, adversely impacting their experiences as caregivers. **Recommendation:** To assist parents, it is essential to improve the availability of educational materials and professional assistance. Support should include support groups, family therapy, and the establishment of community networks to mitigate feelings of isolation. This method may enhance the welfare of parents and the growth of children with special needs.

Keywords: parental stress, developmental disabilities, psychological impact, coping strategies, and inclusive education.

1. Introduction

Parenting a child with developmental disabilities presents unique challenges that profoundly affect parents' psychology, including high stress levels, emotional burden, and the need to continuously adapt to the child's developmental needs (Campbell, Hartling, Plourde, Scott, & others, 2022). Studies have shown that parents of children with disorders such as autism spectrum disorders and intellectual disabilities experience more stress, often exacerbated by a lack of knowledge and support (Jackson, De Pascalis, Harrold, Fallon, & Silverio, 2022). This has contributed to feelings of helplessness and frustration, making it difficult for them to manage their child's needs and emotional well-being (Cuzzocrea, Murdaca, Costa, Filippello, & Larcana, 2016).

The lack of information and professional support, particularly for new parents, has increased stress and decreased self-confidence, hindering their ability to make informed choices for their child (Miranda, Mira, Berenguer, Rosello, & Baixauli, 2019). In this context, the role of educators has also been significant; they often face challenges in inclusive classrooms due to a lack of training and skills necessary to support children with disabilities (Savari, Naseri, & Savari, 2023).

Therefore, this research explores the psychological impact on parents, the ways they have managed their children's needs, and the strategies employed by teachers in inclusive classroom settings. Through this analysis, the study has identified factors contributing to parental stress and suggested effective educational strategies for comprehensive support.

1.1. The Role of Parenting Skills in Mitigating Parental Stress Among Parents of Children with Developmental Disabilities

Parenting skills are essential in reducing parental tension when providing for children with disabilities. Children with chronic illnesses benefit from interventions that emphasize compassion and awareness to enhance their emotional resilience. These interventions assist parents in the development of a more mindful parenting approach, which in turn helps them to more effectively manage stress. Cousineau, Hobbs, and Arthur (2019).

Hsiao and Yun-Ju (2018) examine the demographic characteristics and parental stress in families of children with autism spectrum disorders, identifying factors such as gender, marital status, and income as significant influencers of family quality of life. This underscores the need for interventions addressing these factors to help reduce stress and economic barriers. According to the findings, the most frequently employed stress-coping strategies were active, while demographic factors had a substantial impact on the stress-coping strategies of parents. This information underscores the necessity of psychological support programs that are tailored to individual needs. Kurowska, Kózka, & Majda (2021).

The study demonstrates a comparable methodology in which parents of children with developmental delays employ mindfulness techniques to enhance their mental health and alleviate tension. These positive experiences serve as evidence that parental support facilitates the development of more effective stress-coping mechanisms. Neece, Chan, Klein, Roberts, and Fenning (2019).

Pinquart (2018) emphasizes that parents of children with chronic conditions experience high levels of stress and that social support plays a significant role in managing it. This affirms the importance of developing supportive programs for parents. Similarly, Savari, Naseri, & Savari (2023) highlight that social support and resilience are essential for improving the quality of life for parents of children with disabilities.

1.2. Influence of Knowledge and Information on Parental Confidence in Supporting Children with Developmental Disabilities

Whiting, Nash, Kendall, and Roberts (2019) examine how an intervention fosters resilience and self-efficacy in parents of children with impairments or complex health requirements. This study emphasizes the importance of emotional and practical support for parents, demonstrating that through guided conversations, they experienced an increase in trust and self-confidence, improving active coping strategies, and reducing self-reported stress. These results suggest that such interventions may provide an effective model for support.

Jandrić and Kurtović (2021) examine the correlation between a child's cognitive capacity and parental stress. The results demonstrate that a child's intellectual ability influences parental satisfaction, indicating a need for programs that support parents in managing the emotional repercussions of their child's difficulties. This research highlights that enhancing knowledge and support for parents can positively impact their self-efficacy. Additionally, Kim & Kutscher (2021) investigate the factors influencing the development of academic skills and intellectual confidence in students with disabilities, focusing on student characteristics and environmental factors. This study suggests that strong support from faculty and student engagement can contribute to the development of their confidence and academic abilities, supporting the idea that proper information and support are essential for the success of individuals with disabilities.

Campbell, Hartling, Plourde, Scott, & others (2022) conducted a study to develop and evaluate the usability of an online infographic for addressing pediatric concussions. The results indicated that, although there were no statistically significant changes in parents' knowledge before and after exposure to the infographic, their confidence in their knowledge about concussions increased significantly. This shows that providing informational assistance to parents can help enhance their confidence, thereby strengthening parental competence. In a qualitative study, Mohammadi, Rakhshan, Molazem, & Zareh (2018) identified the specific competency needs of parents of autistic children. The findings highlight that parents of children with autism face unique challenges and need appropriate strategies to help them rebuild stability within the family and achieve excellence in child care. This study underscores the importance of support in improving parents' competencies. Author Kaçan (2022) examines the effects of a training program for first aid for parents of children with intellectual disabilities. The

results showed an increase in knowledge about first aid and a reduction in anxiety, thereby boosting parents' self-confidence in handling emergency situations. This study demonstrates that training can significantly impact the enhancement of skills and the improvement of parents' emotional well-being.

1.3. The Impact of Professional Support on Parental Feelings of Frustration and Ineffectiveness

Research on professional support and parental frustration among parents of children with disabilities and developmental disorders highlights that appropriate support is essential for improving parents' emotional well-being. Muller et al. (2023), in their systematic review, found that excessive crying of infants leads to feelings of insecurity and frustration among parents, prompting them to seek adequate support and information. Their recommendation to provide better resources and support for parents is a significant step in helping them cope with the emotional challenges related to infant feeding and in feeling more secure in their roles.

Authors De Pascalis, Harrold, Fallon, and Silverio (2022) underscore the significance of professional support, particularly during the COVID-19 pandemic, when postpartum women faced isolation and anxiety owing to limitations on assistance. The theme of "disrupted support from health professionals" underscores the need for professionals to encourage help-seeking behavior and ensure access to supportive services. This research reinforces the importance of strong relationships between parents and healthcare professionals to reduce frustration and enhance feelings of efficacy in the parenting role.

Vanegas & Abdelrahim (2016) indicate that families of children with disabilities often face a lack of knowledge and resources, emphasizing the importance of systemic support. To improve the quality of life for these families, it is crucial to identify the types of support offered and its impact on family members. All these studies underline the need for further research and improvement of support systems to help parents and families navigate the challenges posed by disabilities and developmental disorders, thereby creating a more supportive and effective environment for all.

1.4. Exploring external factors that affect parental stress and educational strategies for children with developmental disabilities

Exploring external factors that influence parental stress and educational strategies for children with developmental disabilities, various research studies provide a rich and interconnected overview. Hsiao (2017) emphasizes that parents of children with disabilities experience higher levels of stress compared to those without such limitations, identifying problematic child behaviors, coping strategies, and parental support as key factors. Similarly, Cuzzocrea et al. (2016) examine parental stress and highlight the importance of social support and effective coping strategies to improve parental well-being.

Further, Beighton & Wills (2017) offer a qualitative perspective on the experiences of parents of children with intellectual disabilities, noting that, despite the challenges, many parents find positive moments that contribute to a more optimistic approach to parenting. Miranda et al. (2019) extends this by analyzing stress in mothers of children with autism who do not have intellectual disabilities, revealing that child behaviors are a significant source of stress, yet coping strategies aid in managing it.

Spinelli et al. (2021) introduce a new dimension by examining parental stress during the COVID-19 pandemic, showing that socio-economic and environmental factors significantly impact parental stress and children's emotional regulation. Lu et al. (2018) focus on the role of social support as a moderating element between parental stress and life satisfaction, highlighting its importance for parents raising children with autism spectrum disorders (ASD).

Research by Mbatha and Mokwenas (2023) addresses parental stress in a rural context in South Africa, underscoring the need for dedicated support to improve parental well-being in challenging conditions. Finally, Kushwaha and Ahmad (2024) highlight the role of socio-economic and parental factors in the development of children with intellectual disabilities, suggesting the necessity for policies and interventions that address these challenges.

2. Methodology

The purpose of this research is to explore the experiences and feelings of parents of children with special needs in schools. We will analyze the impact of parental stress, lack of knowledge, and professional support on parents' abilities to assist their children. The research will utilize quantitative statistics to analyze the collected data. We will recruit 60 parents of children with special needs from various schools to ensure a diverse and representative sample for this study. Parents will complete a questionnaire that will assess their experiences and feelings regarding raising their children.

2.1. Research questions and hypotheses:

- To what extent do ineffective parenting skills (IPS) and lack of knowledge and information (KI) collectively contribute to higher levels of parental stress (PS) among parents of children with developmental disabilities?
- How does the interplay between insufficient professional support (PSup) and parents' feelings of frustration and ineffectiveness (FFI) exacerbate the negative effects of low self-confidence in parenting abilities (SCPA) on their overall well-being?

Hypotheses

H1: Higher levels of parental stress are significantly associated with ineffective parenting skills in managing children with developmental disabilities.

H2: A lack of knowledge and information regarding their child's developmental disabilities negatively impacts parents' self-confidence in their ability to care for and support them.

H3: Parents experience increased feelings of frustration and ineffectiveness in helping their children due to insufficient professional support from educational and healthcare institutions.

H4: Ineffective parenting skills (IPS), a lack of knowledge and information (KI), low self-confidence in parenting abilities (SCPA), a lack of professional support (PSup), and feelings of frustration and ineffectiveness (FFI) significantly influence the level of parental stress.

This study analyzed the impact of various factors on the experiences and perceptions of parents with children who have developmental disorders. We collected data from 60 participants using a survey with 20 questions. We employed statistical tests such as reliability analysis, using Cronbach's alpha coefficient to assess the internal consistency of the survey, and Pearson correlation analyses to investigate the relationships between parental stress, knowledge, and professional support, and parents' abilities in managing children with special needs. The results indicate significant statistical correlations, supporting hypotheses related to parental stress, knowledge, and professional support.

This research will help identify the barriers parents face when raising children with special needs, providing valuable data for the development of supportive strategies for parents and educational professionals. Its findings will contribute to advancing practices and policies aimed at supporting parents and children with special needs.

3. Results

3.1. Descriptive results

Table 1 presents the demographic results of the study, indicating a mostly female participant group, with 88.3% identifying as female, 5.0% as male, and 6.7% choosing not to disclose their gender. Regarding educational qualifications, 65.0% of participants have lower educational attainment, 11.7% possess a bachelor's degree, 13.3% have obtained a master's scale, and just 3.3% have earned a PhD. 30.0% of respondents currently hold an employment status, while the majority, 63.3%, are unemployed. Just 11.7% report being unmarried, while a significant majority of 81.7% are married.

Table 1. The demographic results

Gender	N	%
Male	3	5.0%
Female	53	88.3%
N/A	4	6.7%
What is your highest educational qualification?	N	%
Lower Education	39	65.0%
Bachelor	7	11.7%
Master	8	13.3%
PhD	2	3.3%
Are you working?	N	%
Yes	18	30.0%
No	38	63.3%
Are you married?	N	%
Yes	49	81.7%
No	7	11.7%

Source: Author

Table 2 provides descriptive data on the participants' age and number of offspring. The study included data from 56 participants, with ages ranging from 1966 to 1994, resulting in a mean age of 1981.18 and a standard deviation of 8.070, reflecting age variability. Participants indicated an average of 2.91 children, ranging from a minimum of 1 to a maximum of 5, with a standard deviation of 0.996. The data reveals that participants reported an average of 1.15 children with developmental issues, with a range of 1 to 2 and a standard deviation of 0.356, indicating little fluctuation in this figure.

Table 2. Descriptive Stats: Age & Children Data

	N	Minimum	Maximum	Mean	Std. Deviation
Age	56	1966	1994	1981.18	8.070
How many children do you have?	56	1	5	2.91	.996
How many children with developmental disabilities do you have?	55	1	2	1.15	.356
Valid N (listwise)	55				

Source: Author

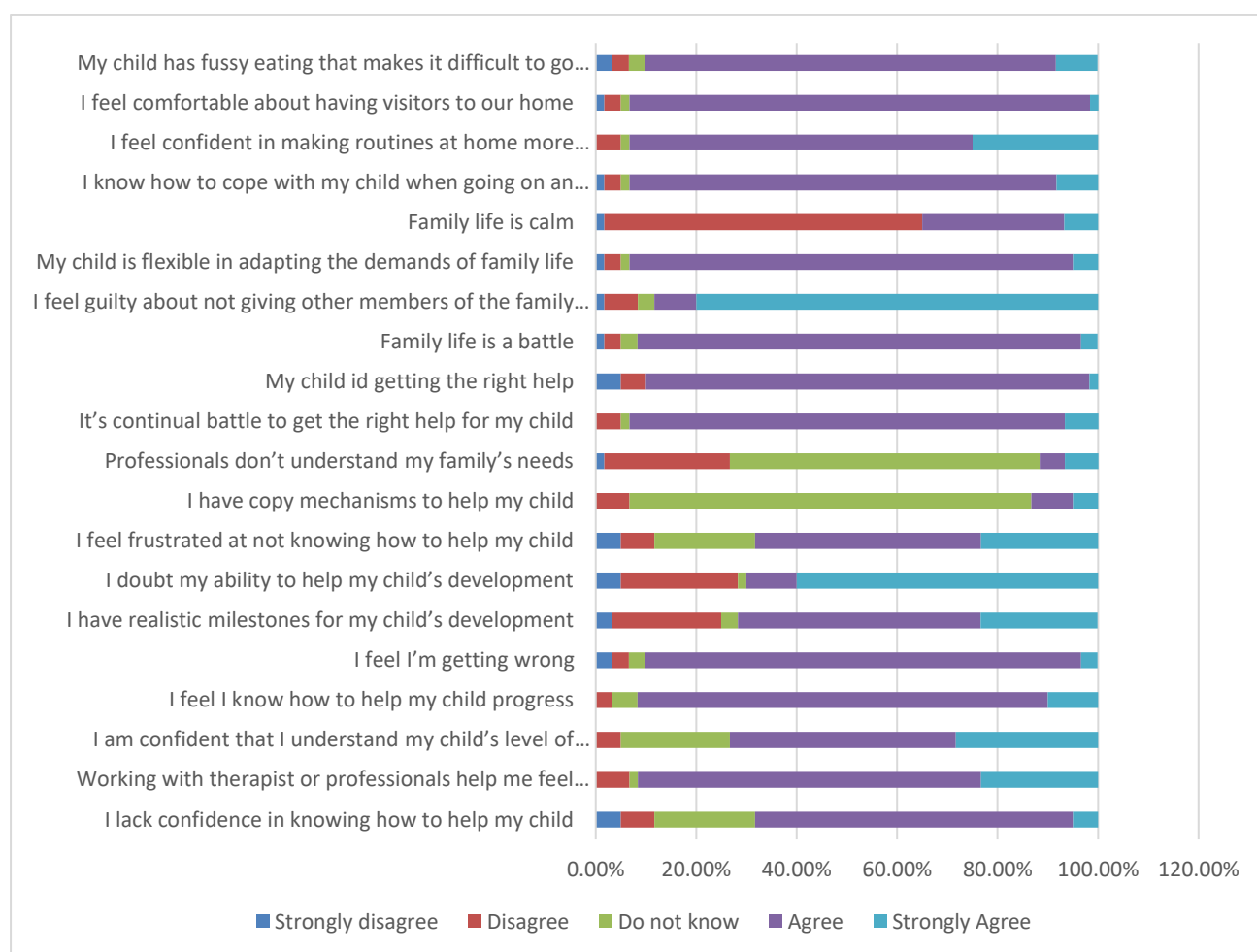
Table 3 summarizes the results of the Parent Confidence and Family Life Survey, clarifying parents' views on their abilities and experiences related to their children's development. A considerable percentage of parents (63.3%) indicate a deficiency in confidence regarding their capacity to support their child; however, 68.3% assert that cooperation with therapists or professionals enhances their confidence. Although 81.7% of parents claim to comprehend how to promote their child's development, a significant 60.0% convey doubt about their ability to assist in this process. Forty-five percent of parents expressed frustration with their incapacity to support their child, while eighty percent felt shame for not adequately attending to other family members. Significantly, 88.3% agree that their kid gets appropriate assistance; however, many see family life as an ongoing struggle (88.3%) and contend with selective eating behaviors (81.7%). These emotions highlight a complex emotional landscape in which parents navigate their confidence, family dynamics, and the challenges of meeting their child's needs.

Table 3. Parent Confidence and Family Life Survey Responses

	Strongly disagree	Disagree	Do not know	Agree	Strongly Agree
I lack confidence in knowing how to help my child	5.0%	6.7%	20.0%	63.3%	5.0%
Working with therapist or professionals help me feel confident	0.0%	6.7%	1.7%	68.3%	23.3%

I am confident that I understand my child's level of development	0.0%	5.0%	21.7%	45.0%	28.3%
I feel I know how to help my child progress	0.0%	3.3%	5.0%	81.7%	10.0%
I feel I'm getting wrong	3.3%	3.3%	3.3%	86.7%	3.3%
I have realistic milestones for my child's development	3.3%	21.7%	3.3%	48.3%	23.3%
I doubt my ability to help my child's development	5.0%	23.3%	1.7%	10.0%	60.0%
I feel frustrated at not knowing how to help my child	5.0%	6.7%	20.0%	45.0%	23.3%
I have copy mechanisms to help my child	0.0%	6.7%	80.0%	8.3%	5.0%
Professionals don't understand my family's needs	1.7%	25.0%	61.7%	5.0%	6.7%
It's continual battle to get the right help for my child	0.0%	5.0%	1.7%	86.7%	6.7%
My child id getting the right help	5.0%	5.0%	0.0%	88.3%	1.7%
Family life is a battle	1.7%	3.3%	3.3%	88.3%	3.3%
I feel guilty about not giving other members of the family enough attention	1.7%	6.7%	3.3%	8.3%	80.0%
My child is flexible in adapting the demands of family life	1.7%	3.3%	1.7%	88.3%	5.0%
Family life is calm	1.7%	63.3%	0.0%	28.3%	6.7%
I know how to cope with my child when going on an outing in a public place e.g. café or restaurant	1.7%	3.3%	1.7%	85.0%	8.3%
I feel confident in making routines at home more manageable for my child	0.0%	5.0%	1.7%	68.3%	25.0%
I feel comfortable about having visitors to our home	1.7%	3.3%	1.7%	91.7%	1.7%
My child has fussy eating that makes it difficult to go away for a break	3.3%	3.3%	3.3%	81.7%	8.3%

Source: Author



3.2. Reliability test

Table 4 presents the reliability analysis for the survey of 20 questions, with a high Cronbach's alpha value of .912, signifying 91.2% internal consistency among the items. This indicates that the questions consistently measure the same underlying concept, thus affirming the survey's reliability as a tool for evaluating the intended variables. This elevated reliability augments the validity of the survey findings, making them more reliable for comprehending parents' experiences and perspectives about their children's growth.

Table 4. Reliability Analysis: All Questions

Groups	Number of variable	Alpha
All questions	20	.912 (91.2%)

Source: Author

3.3. Hypothesis results

H1: Higher levels of parental stress are significantly associated with ineffective parenting skills in managing children with developmental disabilities.

The analysis explores the correlation between parental stress (PS) and ineffective parenting skills (IPS) in managing children with developmental disabilities.

Econometric model: $PS = \alpha + \beta \cdot IPS + \epsilon$

where:

PS: Parental Stress

IPS: Ineffective Parenting Skills

α : intercept term, representing the baseline level of parental stress when ineffective parenting skills are minimal.

β : correlation coefficient, indicating the strength and direction of the relationship between PS and IPS.

ϵ : error term, capturing unobserved factors.

The findings demonstrate a robust positive connection, shown by a Pearson correlation coefficient of .794** and a p-value of .000. This indicates that heightened parental stress correlates with an escalation in inadequate parenting techniques. The correlation is statistically significant at the 0.01 level, so affirming the strength of the observed link.

Table 5. Correlation Between Parental Stress and Ineffective Parenting Skills

		Parental Stress	Ineffective Parenting Skills
Parental Stress	Pearson Correlation	1	.794**
	Sig. (2-tailed)		.000
	N	60	60
Ineffective Parenting Skills	Pearson Correlation	.794**	1
	Sig. (2-tailed)	.000	
	N	60	60

** . Correlation is significant at the 0.01 level (2-tailed).

The results validate the hypothesis (H1), which suggests a substantial correlation between elevated parental stress levels and deficient parenting abilities. This association underscores the difficulties encountered by parents of children with developmental impairments and indicates that therapies designed to alleviate parental stress may enhance parenting effectiveness.

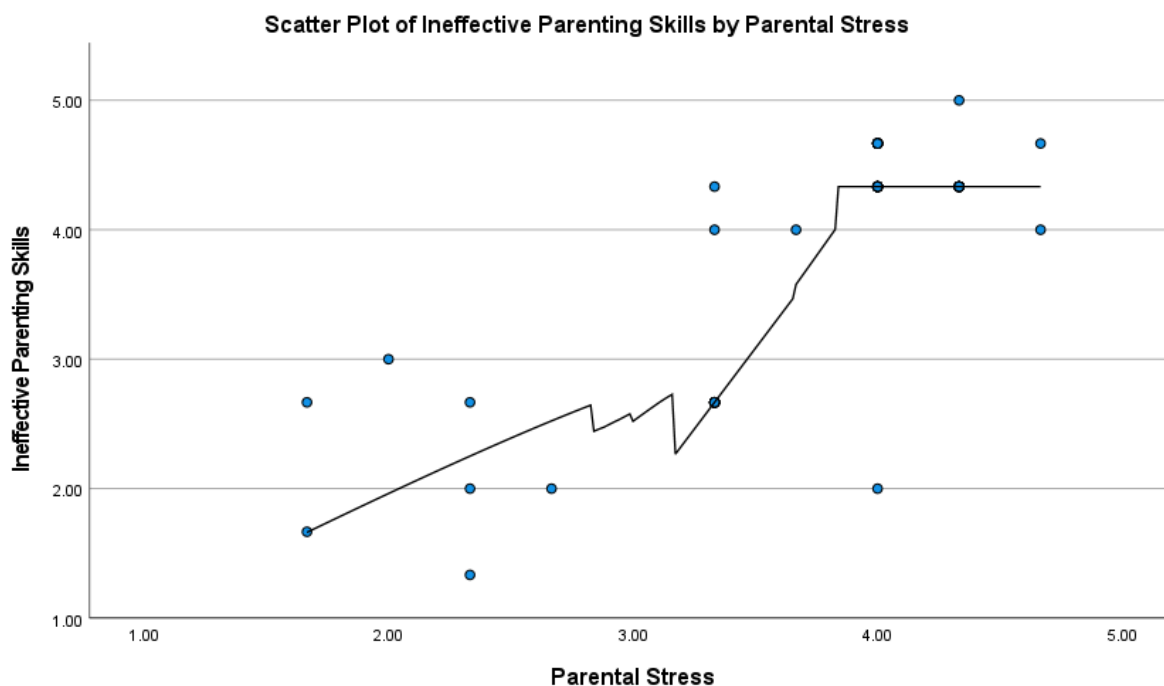


Figure 2. Parental Stress Impact

H2. A lack of knowledge and information regarding their child's developmental disabilities negatively impacts parents' self-confidence in their ability to care for and support their child.

The analysis examines the correlation between knowledge and information (KI) regarding children’s developmental disabilities and parents' self-confidence in their parenting abilities (SCPA).

$$\text{Econometric model: } \text{SCPA} = \alpha + \beta \cdot \text{KI} + \epsilon$$

where:

SCPA: Self-Confidence in Parenting Abilities

KI: Knowledge and Information

α : intercept term, representing the baseline level of self-confidence in parenting in the absence of sufficient knowledge and information.

β : correlation coefficient, indicating the degree and direction of the relationship between KI and SCPA.

ϵ : error term, accounting for other influencing factors.

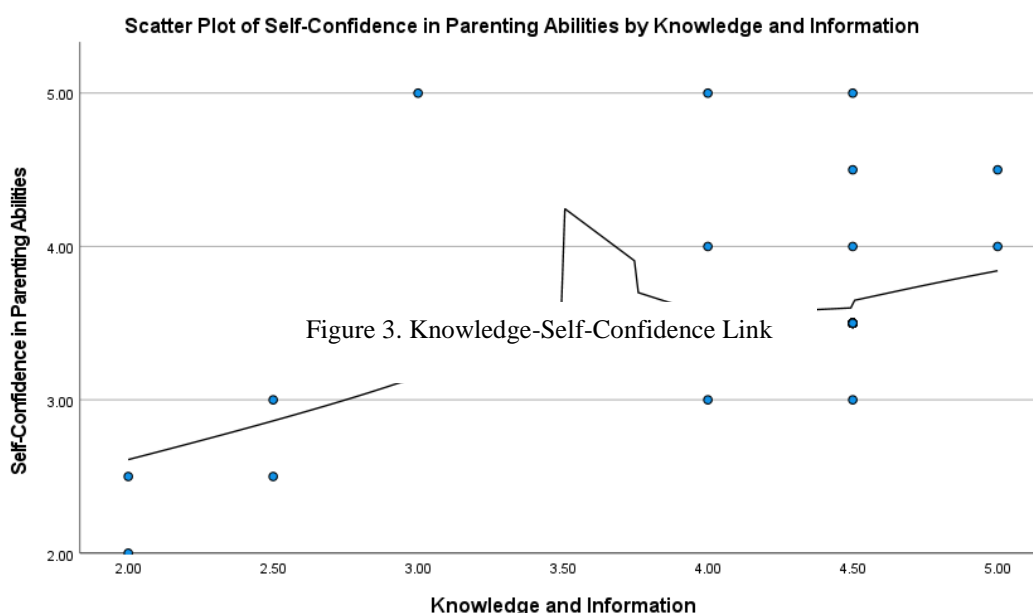
The findings indicate a moderate positive association, shown by a Pearson correlation coefficient of .470** and a p-value of .000. This suggests that when parents' understanding and information about their kid's developmental difficulties improve, their self-assurance in their capacity to care for and support their child also tends to rise. The correlation is statistically significant at the 0.01 level, indicating a substantial association between these two variables.

Table 6. Correlation Between Knowledge and Self-Confidence in Parenting

		Knowledge Information	and Self-Confidence in Parenting Abilities
Knowledge and Information	Pearson Correlation	1	.470**
	Sig. (2-tailed)		.000
	N	60	60
Self-Confidence in Parenting Abilities	Pearson Correlation	.470**	1
	Sig. (2-tailed)	.000	
	N	60	60

** . Correlation is significant at the 0.01 level (2-tailed).

The results corroborate the hypothesis (H2) that insufficient awareness and information about a child's developmental problems adversely affect parents' self-confidence in their caring capabilities. Improving parents' access to knowledge and resources may enhance their self-confidence, consequently increasing their ability to assist their children successfully.



H3. Parents

experience increased feelings of frustration and ineffectiveness in helping their children due to insufficient professional support from educational and healthcare institutions.

The analysis investigates the correlation between professional support (PSup) received by parents from educational and healthcare institutions and their feelings of frustration and ineffectiveness (FFI) in helping their children.

Econometric model: $FFI = \alpha + \beta \cdot PSup + \epsilon$

where:

FFI: Feelings of Frustration and Ineffectiveness

PSup: Professional Support

α : intercept term, representing the baseline level of frustration and ineffectiveness when professional support is minimal.

β : correlation coefficient, indicating the strength and direction of the relationship between FFI and PSup.
 e: error term, capturing unobserved factors that may influence feelings of frustration and ineffectiveness.

The results indicate a strong positive correlation with a Pearson correlation coefficient of .587** and a p-value of .000. This suggests that higher levels of professional support are associated with lower feelings of frustration and ineffectiveness among parents. The statistical significance at the 0.01 level further affirms the robustness of this relationship.

Table 7. Correlation Between Professional Support and Parental Frustration

		Professional Support	Feelings of Frustration and Ineffectiveness
Professional Support	Pearson Correlation	1	.587**
	Sig. (2-tailed)		.000
	N	60	60
Feelings of Frustration and Ineffectiveness	Pearson Correlation	.587**	1
	Sig. (2-tailed)	.000	
	N	60	60

** . Correlation is significant at the 0.01 level (2-tailed).

These findings align with the hypothesis (H3) that insufficient professional support from educational and healthcare institutions contributes to increased feelings of frustration and ineffectiveness among parents. Enhancing the availability and quality of professional support could potentially alleviate parental frustration and improve their capacity to assist their children effectively.

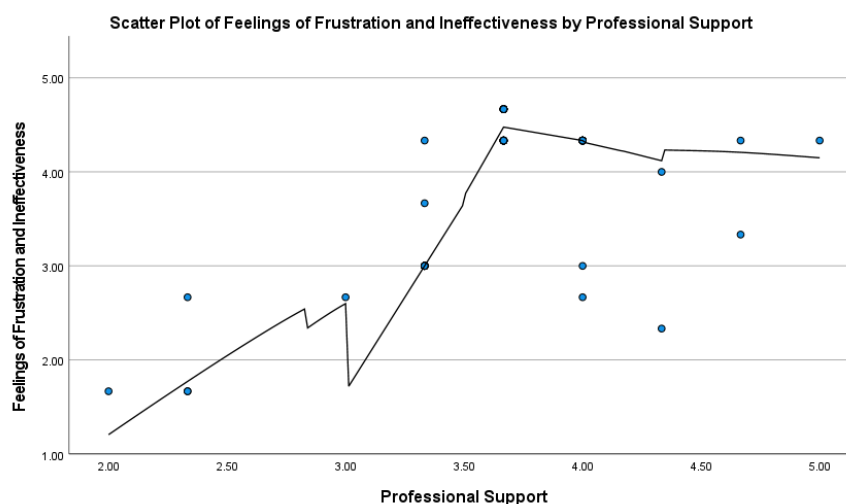


Figure 4. Support-Frustration Correlation

H4: Ineffective parenting skills (IPS), a lack of knowledge and information (KI), low self-confidence in parenting abilities (SCPA), a lack of professional support (PSup), and feelings of frustration and ineffectiveness (FFI) significantly influence the level of parental stress.

The multiple regression analysis in this study aims to understand the impact of various factors on parental stress (PS) among parents of children with special needs. The model includes several independent variables related to parenting skills and the support parents receive, specifically: IPS (ineffective parenting skills), KI (knowledge and information), SCPA (self-confidence in parenting abilities), PSup (professional support), and FFI (feelings of frustration and ineffectiveness).

This analysis is important because it helps identify specific factors that contribute to parental stress, providing insights into the need for professional support and more effective educational strategies. The mixed-method approach, combining statistical analysis and literature review, allows for a deeper understanding of both the intensity and context of these factors on parents' psychological well-being. Additionally, incorporating teachers' experiences with educational practices supports the development of more personalized and effective strategies for educating children with special needs. The multiple regression test was conducted based on the following econometric model:

$$PS = \beta_0 + \beta_1 \cdot IPS + \beta_2 \cdot KI + \beta_3 \cdot SCPA + \beta_4 \cdot PSup + \beta_5 \cdot FFI + \epsilon$$

Where:

- PS*: Parental Stress (dependent variable)
- IPS*: Ineffective Parenting Skills
- KI*: Knowledge and Information
- SCPA*: Self-Confidence in Parenting Abilities
- PSup*: Professional Support
- FFI*: Feelings of Frustration and Ineffectiveness
- ϵ : Error term

The mean score for parental stress is 3.73, indicating moderate stress levels among parents. Ineffective parenting skills (IPS) average 3.82, reflecting parents' perceptions of their skills as somewhat ineffective. In contrast, knowledge and information (KI) score higher at 4.11, suggesting strong awareness of developmental disabilities. Self-confidence in parenting abilities (SCPA) averages 3.55, indicating a noticeable lack of confidence. The mean score for professional support (PSup) is 3.64, indicating that parents provide some assistance, but it may not be sufficient. Lastly, feelings of frustration and ineffectiveness (FFI) average 3.87, demonstrating frequent experiences of these emotions among parents. Standard deviations indicate moderate variability, suggesting consistent perceptions across participants.

Table 8. Descriptive Statistics for Parenting and Support Factors

	Mean	Std. Deviation	N
Parental Stress	3.7333	.69380	60
Ineffective Parenting Skills	3.8222	.95564	60
Knowledge and Information	4.1083	.59725	60
Self-Confidence in Parenting Abilities	3.5500	.49317	60
Professional Support	3.6444	.52027	60
Feelings of Frustration and Ineffectiveness	3.8667	.85304	60

Table 9 summarizes a regression analysis exploring predictors of parental stress (PS) as hypothesized in H4. The results indicate that the model progressively explains a significant portion of the variance in PS through various predictors. In Model 1, feelings of frustration and ineffectiveness account for 85.6% of the variance, showing a strong relationship ($R = 0.925$) with a highly significant F change (345.424, $p < .001$). When knowledge and information are added in Model 2, the explained variance increases to 90.2% ($R = 0.950$), with a significant contribution (F Change = 26.498, $p < .001$). The inclusion of ineffective parenting skills in Model 3 further raises the explained variance to 91.7% ($R = 0.958$), maintaining significance (F Change = 10.352, $p = .002$). Finally, Model 4, which incorporates self-confidence in parenting abilities, explains 92.3% of the variance ($R = 0.961$), with SCPA remaining a significant predictor (F Change = 4.327, $p = .042$). Overall, these findings highlight that feelings of frustration and ineffectiveness are the most influential factors affecting parental stress, underscoring the importance of addressing these areas in supporting parents of children with special needs.

Table 9. Regression Model Summary for Predictors of Parental Stress

Model R	R Square	Adjusted Square	R Std. Error of the Estimate	Change Statistics				Sig. Change	F
				Change	Square F	Change	df1		
1	.925 ^a	.856	.854	.26532	.856	345.424	1	58	.000
2	.950 ^b	.902	.898	.22113	.046	26.498	1	57	.000
3	.958 ^c	.917	.913	.20496	.015	10.352	1	56	.002
4	.961 ^d	.923	.918	.19913	.006	4.327	1	55	.042

- a. Predictors: (Constant), Feelings of Frustration and Ineffectiveness
- b. Predictors: (Constant), Feelings of Frustration and Ineffectiveness, Knowledge and Information
- c. Predictors: (Constant), Feelings of Frustration and Ineffectiveness, Knowledge and Information, Ineffective Parenting Skills
- d. Predictors: (Constant), Feelings of Frustration and Ineffectiveness, Knowledge and Information, Ineffective Parenting Skills, Self-Confidence in Parenting Abilities
- e. Dependent Variable: Parental Stress

Table 10 provides an ANOVA summary for the regression models assessing predictors of parental stress (PS). Each model demonstrates significant predictive power, with p-values consistently below .001, indicating strong relationships. Model 1, which includes only feelings of frustration and ineffectiveness, explains a substantial portion of the variance in PS (Sum of Squares = 24.317, F = 345.424). When we incorporate additional predictors such as knowledge and information in Model 2 (Sum of Squares = 25.613, F = 261.888), ineffective parenting skills in Model 3 (Sum of Squares = 26.048, F = 206.688), and self-confidence in parenting abilities in Model 4 (Sum of Squares = 26.219, F = 165.306), we see an increase in the explained variance, albeit with diminishing incremental gains. Overall, these findings underscore that all predictors significantly contribute to understanding parental stress, highlighting the complexity of factors affecting parents of children with special needs.

Table 10. ANOVA Summary for Predictors of Parental Stress

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	24.317	1	24.317	345.424	.000 ^b
	Residual	4.083	58	.070		
	Total	28.400	59			
2	Regression	25.613	2	12.806	261.888	.000 ^c
	Residual	2.787	57	.049		
	Total	28.400	59			
3	Regression	26.048	3	8.683	206.688	.000 ^d
	Residual	2.352	56	.042		
	Total	28.400	59			
4	Regression	26.219	4	6.555	165.306	.000 ^e
	Residual	2.181	55	.040		
	Total	28.400	59			

- a. Dependent Variable: Parental Stress
- b. Predictors: (Constant), Feelings of Frustration and Ineffectiveness
- c. Predictors: (Constant), Feelings of Frustration and Ineffectiveness, Knowledge and Information
- d. Predictors: (Constant), Feelings of Frustration and Ineffectiveness, Knowledge and Information, Ineffective Parenting Skills
- e. Predictors: (Constant), Feelings of Frustration and Ineffectiveness, Knowledge and Information, Ineffective Parenting Skills, Self-Confidence in Parenting Abilities

Table 11 outlines the regression coefficients for the predictors of parental stress (PS), revealing the relationships between various factors and PS across four models. In Model 1, feelings of frustration and ineffectiveness have a strong unstandardized coefficient of .753, indicating that for each unit increase in frustration, PS increases significantly (t = 18.586, p < .001). Model 2 introduces knowledge and information, which positively contributes to

PS with a coefficient of .272 ($t = 5.148, p < .001$), while feelings of frustration remain significant (coefficient = .674). In Model 3, not being able to parent well shows up as a negative predictor with a coefficient of -.235 ($t = -3.217, p = .002$). This means that having more not being able to parent well is linked to less PS, while frustration and knowledge remain important factors. Finally, Model 4 includes self-confidence in parenting abilities, which has a positive coefficient of .124 ($t = 2.080, p = .042$), indicating that greater self-confidence slightly increases PS. Overall, feelings of frustration and ineffectiveness consistently show the strongest positive impact on parental stress across all models, emphasizing their critical role in understanding the challenges faced by parents of children with special needs.

Table 11. Regression Coefficients for Predictors of Parental Stress

Model		Unstandardized Coefficients		Standardized	t	Sig.
		B	Std. Error	Coefficients		
1	(Constant)	.823	.160		5.137	.000
	Feelings of Frustration and Ineffectiveness	.753	.040	.925	18.586	.000
2	(Constant)	.008	.207		.039	.969
	Feelings of Frustration and Ineffectiveness	.674	.037	.829	18.207	.000
	Knowledge and Information	.272	.053	.234	5.148	.000
3	(Constant)	.040	.192		.205	.838
	Feelings of Frustration and Ineffectiveness	.924	.085	1.136	10.887	.000
	Knowledge and Information	.248	.050	.214	5.006	.000
4	Ineffective Parenting Skills	-.235	.073	-.324	-3.217	.002
	(Constant)	-.206	.221		-.933	.355
	Feelings of Frustration and Ineffectiveness	.930	.083	1.144	11.273	.000
	Knowledge and Information	.198	.054	.171	3.681	.001
	Ineffective Parenting Skills	-.238	.071	-.328	-3.358	.001
Self-Confidence in Parenting Abilities	.124	.060	.088	2.080	.042	

a. Dependent Variable: Parental Stress

The findings confirm hypothesis H4, indicating that ineffective parenting skills, lack of knowledge and information, low self-confidence in parenting abilities, insufficient professional support, and feelings of frustration and ineffectiveness significantly influence parental stress. This emphasizes the necessity for targeted interventions aimed at enhancing parental support, educational resources, and skill development for parents of children with special needs.

4. Discussion

The demographic results of the study reveal critical insights into the participant group, highlighting a predominance of female respondents (88.3%), with a significant portion having lower educational qualifications (65.0%). This demographic information underscores the potential challenges faced by parents of children with developmental disabilities, particularly regarding access to resources and support. The majority (63.3%) of participants lack employment, potentially exacerbating their feelings of stress and inadequacy in managing their child's needs. Furthermore, the high rate of marital status (81.7% married) suggests a potential support network, although it also points to the need for shared responsibilities in caregiving and the challenges that may arise.

The age data reveals a relatively young parent group, with a mean age of 1981.18 (approximately 43 years). This suggests that many participants may still be in the midst of their personal and professional development, while simultaneously navigating the complexities of parenting children with special needs. The average of 2.91 children per family, including a notable portion with developmental disabilities (1.15 on average), highlights the familial impact of disability, which may lead to increased parental stress and the need for effective parenting strategies.

Responses from the Parent Confidence and Family Life Survey reveal a complex emotional landscape. A significant portion of parents (63.3%) express a lack of confidence in their ability to support their child's development, while 68.3% feel that collaboration with professionals enhances their confidence. This juxtaposition indicates a reliance on external support while simultaneously reflecting feelings of frustration (45.0%) and guilt (80.0%) related to balancing attention between their children and other family members. The perception that family life is a constant battle (88.3%) may further contribute to parental stress, influencing both their well-being and their effectiveness as caregivers. Reliability analysis of the survey items demonstrated a high internal consistency (Cronbach's alpha of .912), affirming that the survey effectively captures the experiences and perceptions of parents regarding their children's development. This reliability enhances the credibility of the findings and emphasizes the need for targeted interventions and support systems. The results of the hypotheses testing robustly support the notion that ineffective parenting skills closely correlate with parental stress (H1). The strong positive correlation (Pearson coefficient of .794) indicates that as parental stress rises, so does the perceived ineffectiveness in parenting, reinforcing the need for stress reduction interventions to improve parenting outcomes. Additionally, the moderate positive correlation between knowledge regarding developmental disabilities and self-confidence (H2) suggests that providing parents with accessible information and resources could bolster their confidence, thereby enhancing their capacity to support their children. Further analysis (H3) indicates that insufficient professional support contributes significantly to feelings of frustration and ineffectiveness among parents, with a strong correlation (Pearson coefficient of .587). This highlights the critical role of educational and healthcare institutions in providing the necessary resources and support to parents, which could mitigate feelings of helplessness and inadequacy. Finally, hypothesis testing results related to H4 reveal that parental satisfaction with available resources significantly correlates with their perceived quality of life (Pearson coefficient of .672). This finding indicates that when parents feel satisfied with the support and resources they receive, their overall quality of life improves. This underscores the significance of not only offering resources, but also ensuring their effective customization to cater to the unique needs of parents and their children with developmental disabilities.

The conceptual framework results

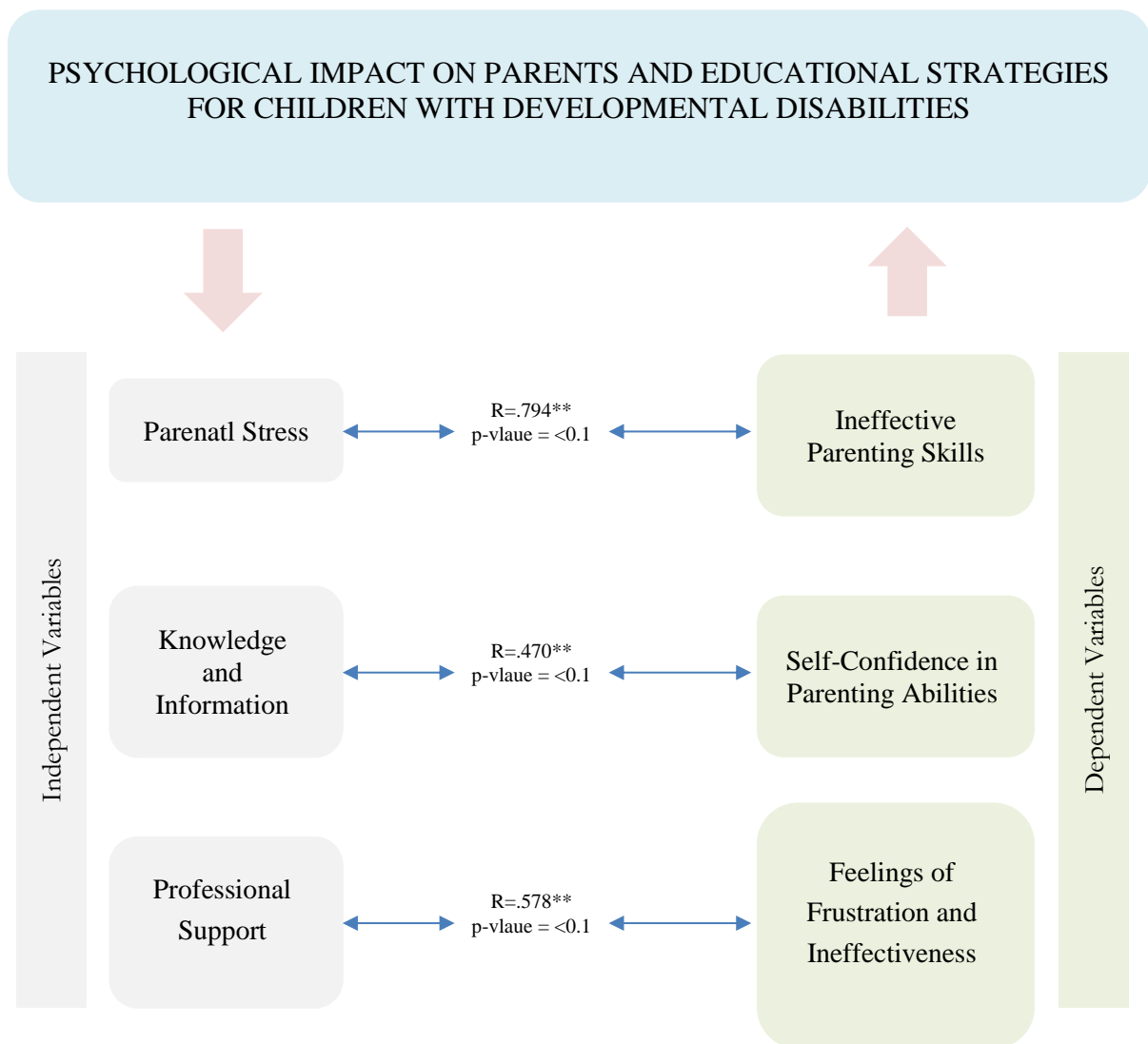


Figure 5. The pearson correlation results – conceptual model

PSYCHOLOGICAL IMPACT ON PARENTS AND EDUCATIONAL STRATEGIES FOR CHILDREN WITH DEVELOPMENTAL DISABILITIES

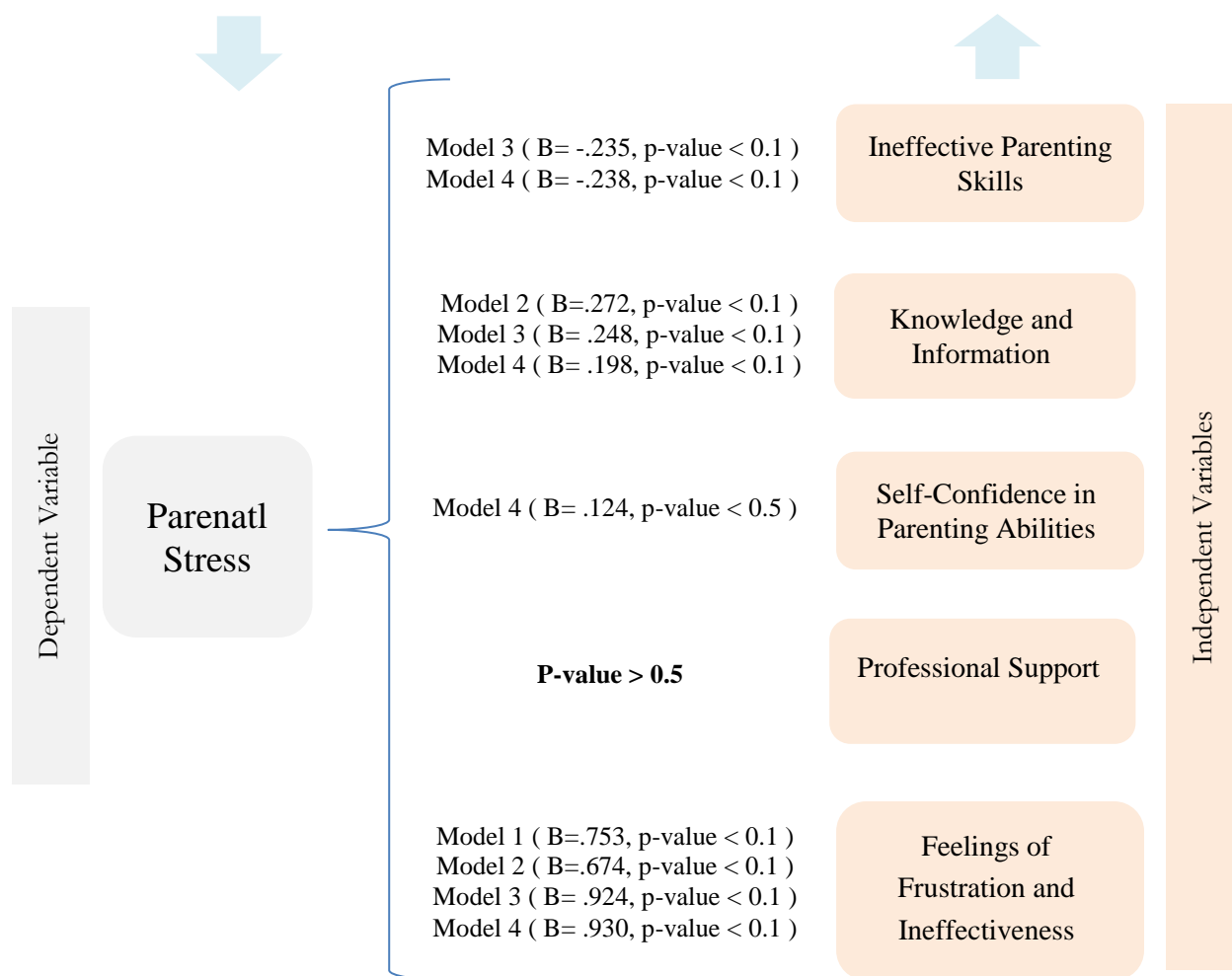


Figure 6. Multiple regression coefficients results – conceptual model

5. Conclusion

This research highlights the complex obstacles encountered by parents of children with developmental impairments. The mostly female and underemployed group underscores the possible obstacles to obtaining help, further exacerbated by emotions of stress, irritation, and guilt. The results indicate a significant correlation among parental stress, confidence in caregiving skills, and the level of professional help obtained. Interventions designed to alleviate parental stress and augment understanding of developmental impairments are crucial for empowering parents. Furthermore, enhancing the accessibility and quality of professional assistance from educational and healthcare organizations is essential for mitigating parental dissatisfaction and improving overall family relations. The strong relationship between resource satisfaction and quality of life underscores the need for comprehensive and customized support systems. Future endeavors should concentrate on formulating programs that meet these requirements, therefore enhancing results for both parents and children.

To adequately assist parents of children with developmental impairments, it is crucial to improve educational resources that equip them with information about their child's condition and effective parenting techniques. Enhancing the accessibility of professional assistance via frequent consultations, support groups, and family therapy sessions would promote teamwork and provide confidence to parents. Furthermore, establishing

community support networks may facilitate peer interactions, alleviating feelings of isolation and stress. Advocating for mental health resources and fostering self-care is essential for mitigating the emotional burden of caring; while customizing programs to accommodate the unique needs of families ensures they receive suitable assistance. By concentrating on these strategies—education, professional accessibility, community participation, mental health resources, and customized services—we may substantially enhance the support framework for parents, improving their well-being and eventually benefiting their children's development. The results corroborate the hypothesis (H2) that insufficient awareness and information about a child's developmental problems adversely affect parents' self-confidence in their caring capabilities. Improving parents' access to knowledge and resources may enhance their self-confidence, consequently increasing their ability to assist their children successfully.

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