COMPARING STRESS LEVELS OF PARENTS OF CHILDREN WITH DEVELOPMENTAL DISORDERS AND PARENTS OF TYPICALLY DEVELOPING CHILDREN IN NORTH MACEDONIA

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Abstract

Parents of children with developmental disorders experience elevated stress levels due to daily caregiving demands. This study investigated stress levels among parents of children with developmental disorders compared to parents of typically developing children. In this study we have used the Parental Stress Scale (PSS). This questionnaire contains 18-item assessing parents' feelings about their parenting role, exploring both positive aspects (emotional benefits, personal development) and negative aspects of parenthood. The questionnaire responses are scored as follows: Strongly disagree = 1 Disagree = 2 Undecided = 3 Agree = 4 Strongly agree = 5. We used 60 subjects from North Macedonia, specifically from the city of Gostivar and Tetovo to complete the research combining N=30 parents of children with developmental disorders and N=30 parents with typically developing children, we found 30 parents of children with developmental disorders in the center of "Blue Puzzle" and 30 parents with typically developing children were found in pediatric centers. We used the independent samples t-test to see if there are any differences. The results showed that the parents of children with developmental disorders are more stressed compared to parents of typically developing children. These findings underscore the critical need for targeted professional support, also for family-centered counseling, and accessible early intervention programs to assist parents in managing everyday challenges.

Keywords: Parents, Children, Developmental Disorder, Stress Level.

Introduction

The parents play a fundamental role in a child's development, providing for them emotional support, care, and opportunities for learning. Parenting involves many responsibilities and challenges that become more challenging when a child has a developmental disorder. In such circumstances, parents often must adapt their daily routines, expectations, and family responsibilities to meet their child's individual developmental and educational needs.

Raising a child with a developmental disorder may involve a range of emotional, psychological, and social challenges. In addition to everyday parenting responsibilities, families may face difficulties related to obtaining appropriate services, attending therapeutic sessions, and addressing concerns about their child's future. These demands may contribute to increased levels of parental stress and may affect parents' overall well-being and daily functioning.

Parental stress is a complex event influenced by several factors of daily life. The way parents perceive and cope with everyday requests, the support they receive from family members, especially fathers, and professionals, and the resources that are available to them may all influence their level of stress. When these requests become continuous and very difficult to manage, they affect parents' emotional well-being, social interacion, family relationships, and also their mental health.

This paper aims to provide a theoretical overview of parental stress among parents of children with developmental disorders.

Stress among parents of children with special needs

Parents may also experience emotional challenges related to uncertainty about their child's development, progress, and future independence. Receiving a diagnosis or recognizing that a child requires additional support may involve a period of adjustment, during which parents

need to understand the child's condition and adapt their expectations and family routines. (Papadopoulos, et al., 2023), in their study of families of children newly diagnosed with autism spectrum disorder, examined parental stress alongside illness perceptions, coping strategies, and family quality of life. Their work highlights the importance of considering how parents understand their child's diagnosis and how they cope with the changes and demands associated with it. (Papadopoulos, et al., 2023)

Another important source of stress is the management of children's behavioral, communication, and developmental needs in everyday situations. Parents may need to respond to challenging behaviors, communication difficulties, emotional dysregulation, or difficulties with daily activities, which can require considerable patience, consistency, and emotional effort. Callanan et al. (2021) reported that stress among parents of children with developmental disabilities is closely associated with children's challenging behavior, and that this relationship may be reciprocal: parental stress can affect how parents respond to behavior, while challenging behavior may further increase parental stress. This indicates that the interaction between the child's needs and the parent's emotional resources is important when understanding family experiences. (Callanan, Signal, & McAdie, 2021)

The impact of parental stress may extend beyond individual emotional wellbeing and influence the functioning of the entire family. Parents may have to reorganize their daily schedules, divide caregiving responsibilities, and balance the needs of the child with employment, household duties, and the needs of other family members. In a study involving 39 parents of 46 children and young people with developmental disabilities, Matthews et al. (2021) explored how families adapted to caregiving-related stressors. Their findings described adaptation at several levels, including everyday practical strategies, the creation of supportive family environments, and changes in parents' personal perspectives. This demonstrates that families develop different ways of managing the demands associated with raising a child with developmental disabilities (Matthews, Puplampu, & Gelech, 2021). Social and economic circumstances can further influence the level of stress experienced by parents. Families with limited financial resources or restricted access to healthcare, educational services, and specialized interventions may face additional difficulties in meeting their children's needs. Mbatha and Mokwena (2023), in their study of mothers and female caregivers of children with developmental disabilities in a rural community in South Africa, examined parental stress in relation to the social and demographic circumstances of families. Their research draws attention to the additional challenges that may arise when families live in communities where resources and support services are limited. Therefore, access to appropriate services and practical assistance is an important consideration in understanding parental stress (Mbatha & Mokwena, 2023)

Research also indicates that the level of parental stress may be associated with the demographic characteristics of parents and children, although these factors do not affect every family in the same way. Scheibner et al. (2024) investigated the relationship between demographic characteristics and parenting stress among parents of children with disabilities. Their study highlights the importance of examining family circumstances and individual characteristics when assessing parental stress, rather than assuming that all parents experience the same challenges or respond to caregiving demands in an identical manner. This supports the view that parental stress is a complex experience shaped by several interacting factors (Scheibner, et al., 2024).

Factors affecting parental stress levels

Several factors may influence the level of stress experienced by parents of children with special needs. These factors are generally related to the child's developmental and behavioral characteristics, parents' psychological and emotional resources, family circumstances, and the availability of social support. Cheng and Lai (2023), in their systematic review of 26 studies involving 5,169 parents, identified diagnosis-related coping difficulties, socioeconomic circumstances, parental gender, and social isolation as important factors associated with parental stress (Cheng & Lai, 2023). One of the most important child-related factors is the presence of behavioral, emotional, and communication difficulties. Children who experience difficulties with social communication, attention, emotional regulation, or adaptive functioning may require additional parental supervision and support in everyday activities. Jung et al. (2023) found that parental stress among caregivers of preschool children with developmental disabilities was associated with several child characteristics, particularly social communication difficulties, attention problems, and aggressive behavior (Jung, Lee, Kim, & Kim, 2023).

Another relevant factor is the severity of the child's symptoms and the level of support the child requires. Greater developmental and behavioral difficulties may increase the time, attention, and emotional involvement expected from parents. In a study involving mothers of preschool children with autism spectrum disorder, Zovko et al. (2023) found that the severity of the child's symptoms and the support received from friends were significant contributors to parental stress (Zovko, Šimleša, & Tomazin, 2023).

The relationship between parents and their ability to cope together with caregiving demands is also important. Fallahchai and Fallahi (2022) found that children's behavioral problems were associated with parental stress, while dyadic coping and perceived social support played important roles in parents' relationship adjustment. These findings suggest that the way parents communicate, support one another, and manage difficulties together may influence their experience of stress (Fallahchai & Fallahi, 2022).

Psychological, emotional and social impacts

Parental stress can have significant consequences for the psychological and emotional wellbeing of parents of children with special needs. Prolonged caregiving demands may contribute to symptoms of anxiety, depression, emotional exhaustion, and reduced psychological wellbeing. Park and Lee (2022), in a study involving 164 mothers of children with disabilities, found a significant relationship between parental stress and depressive symptoms, indicating that higher stress levels may increase the risk of depression (Park & Lee, 2022).

Emotional difficulties may also change over time as parents adapt to their child's diagnosis and ongoing developmental needs. Rattaz et al. (2023), in a longitudinal study examining parents during the three years following an autism diagnosis, found that mothers initially reported higher stress levels than fathers, while anxiety and depression levels decreased over the follow-up period in both parents. These findings suggest that parental emotional experiences may change as families adapt to their circumstances (Rattaz, Loubersac, Michelon, Picot, & Baghdadli, 2023).

The social consequences of parental stress may include reduced social participation, isolation, and difficulties maintaining relationships outside the family. Hsu et al. (2021) examined the experiences of Chinese American parents of children with developmental disabilities and reported associations between parents' perceptions of disability, social support, and health outcomes. Their findings highlight the importance of social connections and support in family wellbeing (Hsu, Deng, & Cheng, 2021). Parental stress may also affect employment, family

routines, and the balance between caregiving responsibilities and personal life. Tokić et al. (2023) examined wellbeing among parents of children with disabilities in relation to employment status, highlighting the importance of considering both caregiving demands and parents' work circumstances when understanding family wellbeing (Tokić, Slišković, & Nikolić I., 2023). Overall, the psychological, emotional, and social consequences of parental stress may influence not only parents' individual wellbeing but also family relationships and everyday functioning. However, these consequences are not inevitable, as social support and appropriate psychological interventions may help reduce their impact. Li et al. (2023), in a systematic review and meta-analysis of 25 randomized controlled trials involving 1,915 participants, found that cognitive-based interventions were associated with reductions in parental stress, depression, and anxiety, as well as improvements in parental wellbeing (Li, Yong, Li, Li, & Xie, 2023).

Coping strategies, professional support and the importance of early intervention

Parents of children with special needs may use different coping strategies to manage the emotional and practical demands of caregiving. These strategies include seeking emotional support, sharing responsibilities with family members, acquiring information about the child's condition, and developing realistic expectations. Professional guidance can also help parents strengthen their coping skills and feel more confident in their parenting role (Erbiçer, et al., 2024).

Research has shown that structured interventions designed for parents can contribute to reducing parental stress and improving family well-being. For example, (Akhani, Dehghani, Gharraee, & Shooshtari, 2021) found that a parent-training intervention for families of children with autism was associated with reduced parental stress, improved quality of life, and positive changes in children's developmental outcomes.

Early intervention is particularly important because it provides children and families with support during the early stages of development. It may include developmental and educational activities, parent training, counselling, and cooperation between professionals and families. The World Health Organization emphasizes the importance of coordinated, family-centered support to promote the development and well-being of children with developmental delays and disabilities (World Health Organization, 2026).

Furthermore, early intervention should consider not only the child's developmental needs but also the emotional well-being and individual circumstances of parents. Estes et al. (2021) found that the relationship between early intervention and parental confidence was influenced by parents' initial stress levels, highlighting the importance of adapting intervention intensity to family needs. Therefore, continuous professional support, parental involvement, and early identification of developmental needs are essential for supporting both children and their families (Estes, et al., 2021).

Methods and results

The objective of this research was to analyze the stress level of parents of children with developmental disorders and comparing them to the stress level with the group of parents of children with typically developing children. Based on the literature review, we raised one research question: **1. Are the parents of children with developmental disorders more stressed compared to the parents of children with typically developing children?**

This research is comparative, through which we will highlight the comparison of the two groups of parents. The sample chosen for this research was 60 subjects from North Macedonia. Specifically, from Gostivar and Tetovo, the parents of children with developmental disorders

were taken from the center “Blue Puzzle”. Group 1 contains N=30 parents of children with developmental disorders, and Group 2 contains N=30 parents of typically developing children.

Results

In this section, we shall present the results regarding the research question, emphasizing the statistical procedure used in this research. We have used the independent-samples t-test to determine whether there is a difference in stress levels between parents of children with developmental disorders and parents of children with typically developing children.

Table 1 . Group Statistics

	Groups1-2	N	Mean	Std. Deviation	Std. Error Mean
Stress Level	Parents of children with Developmental Disorder	30	76,6250	4,07787	,72087
	Parents of typically developing children	30	65,1667	3,31229	,60474

Table 2

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means			
						95% Confidence Interval of the Difference	
		F	Sig.	Df	Sig. (2-tailed)	Lower	Upper
Stress Level	Equal variances assumed	1,260	,266	-12,096)	**.000**	-11,45833)	,94729
	Equal variances not assumed			-12,178)	**.000**	-11,45833)	,94094

In Table 1, the mean for Parents of Children with Developmental Disorders is **76.62**, while the mean for Parents of Typically Developing Children is **65.17**. The results indicate a significant difference between the two groups of parents when looking at their difference in Mean. An independent-samples t-test indicated a statistically significant difference in stress levels between the two groups, $t(58) = -12.10$, $p < .001$.

Conclusion and further implications

We concluded that parents of children with developmental disorders have a very stressed life comparing to the parents of children with typically developing children. They face difficulties in many aspects of their life. This research allows us to turn the focus not only to the children but to the parents of children with developmental disorders, to change things, to raise awareness, and to try different approaches to help them overcome the challenges of living every day with a child with a developmental disorder. This study made us more aware of the

challenges that they have every day. Also made us take action and change their life for the better.

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