

# COMPARISON OF MENTAL DISORDERS IN PARENTS OF CHILDREN WITH DEVELOPMENTAL DEFECTS WITH MENTAL DISORDERS IN PARENTS OF HEALTHY CHILDREN WITHOUT DEFECTS

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## Abstract

There is information in the literature that parents of children with developmental disabilities are more likely to be at risk of mental health problems. In this study, the mental health of parents of children with developmental disabilities was compared with that of parents of children without developmental disabilities. The conducted research showed that parents of children with developmental disabilities are more likely to be diagnosed with depression or other mental disorders than parents of children without developmental disabilities. These changes were related to the parents' age at birth, income, and outcomes of health services opportunities. Parents of children with developmental disabilities may need programs and services that support their mental health

## Introduction

There is a lot of literature on the impact of the birth of a child with developmental disabilities on the mental health of parents (Marquis et al.). Research in the sources showed that there was a significant increase in mental health problems among parents of children with disabilities, but no significant mental health disorders were found among parents of healthy children. The results of this study may be related to methodological problems, there are many difficulties in studying the impact of disability and comparing the results of these studies. The problems include: the use of different diagnoses for children with disabilities and their negative perception by the public; the lack of accurate data on the occurrence and prevalence of disability, which makes it difficult to prove that accurate conclusions have been drawn; the combination of physical disability and mental disability to obtain adequate sample sizes; small research volumes; reliance on convenient sampling; disregard for a large number of potential influencing factors (including social health factors such as income and individual variables such as type of disability); the lack of sufficient control groups; and the absence of large-scale population-based research.





Most existing studies compare parents of children with Autism Spectrum Disorder (ASD) with parents of children with other types of developmental impairment, or parents of children with Down syndrome with parents of children with other types of developmental impairment. It has been established that parents with children with ASD have a higher level of stress or have a greater impact on the mental health of parents than parents of children with other types of developmental disabilities. However, Estes et al. found that there is no difference in psychological stress between parents of children with ASD and parents of children with other types of developmental defects. Hauser-Cram et al. found that the level of stress in mothers of children with developmental disabilities is higher than in fathers.

Parents of a child with mental and physical disabilities often experience the impact of negative social factors on mental health, as well as personal characteristics and experiences that can cause and interact with these inequalities. The social factors that these parents face include: financial difficulties, growing employment, and difficulties in living conditions. A number of population-based studies based on parents' personal reports have shown that the mental health problems in parents of children with mental and physical disabilities can be explained not only by the presence of a child with a disability, but also by socio-economic factors. Other studies have found that personal and family factors can also affect the mental health of parents of children with disabilities. Other studies reported the "advantage of Down syndrome" because parents of children with Down syndrome experienced less stress and mental problems than parents of children with other developmental disabilities. However, Mitchell et al. found that when considering mothers' age, education, social support, and the child's behavioral problems, there was no difference in stress levels among parents of children with Down syndrome compared to parents of children with other developmental disabilities. Hodapp et al. concluded that any advantages of parents of children with Down syndrome over parents of children with other developmental disabilities may be the result of changes associated with the mother's age at birth.

There is evidence that a wide range of factors can influence the psychological state of parents of children with developmental disabilities. For example, some studies have found that families with children with developmental disabilities have lower income levels, and the impact of negative relationships between parents on parents' mental health is even higher. Emerson (2006) studied the feelings of happiness, self-esteem, and work performance in mothers of children with and without developmental disabilities. By statistically monitoring the differences in socio-economic status between the two groups and fully explaining the intergroup differences in the mental state of mothers, they found that mothers of children with developmental disabilities have a risk of low self-esteem, unhappiness, and low productivity of more than 50 percent. Using data from the "Millennium Cohort" study in the United Kingdom, Emerson et al. found that parents of children with delayed cognitive development are at a higher risk of mental illness than parents of children without such a problem. However, as a result of taking into account the differences in socio-economic conditions (income, working status, education, housing conditions, etc.), the probability of mental disorders decreased insignificantly for fathers and significantly decreased for mothers. From 1990 to 2014, a study was conducted in the Canadian province of British Columbia (BC) using administrative data at the population level to study the mental health of parents with children with developmental disabilities. The administrative data in the study has many advantages for





studying disability-related issues and addresses a number of weaknesses of previous studies. The data used made it possible to form large groups of parents of children with rare diagnoses, rather than combining parents of children with disabilities into large groups. These data do not rely on reports in themselves, but provide demographic data on the birth of children with developmental disabilities, and may include some individual characteristics that may lead to the formation of large groups in comparison, reducing the chances of selection, and affecting outcomes. This study is the first to use administrative data at the population level to study the parents of children with mental and physical disabilities. The main issue studied in this study is whether the mental health of parents with a child with a developmental disability differs from the mental health of parents with a child without a developmental disability.

The studies also identified many other factors affecting parental well-being in families with children with developmental disabilities. These include factors such as the gender of the child with developmental disabilities, the number of family members, the child's behavior, and social stigma. The results of the study on the influence of these factors are contradictory, since the limited family and individual variables included in the existing studies may be associated with the small size of most study samples and the lack of differentiation of the types of developmental defects. Despite these limitations, studies show that caring for children with developmental disabilities is a stressful process, and factors related to the continuous satisfaction of the needs of such children may lead to greater access to medical services for depression and other mental health issues.

### Research Objective

The main goal of this study is to identify psychological differences by comparing the psychological state of parents with disabled children with the psychological state of parents with healthy children. During the study, it is planned to determine how the state of disability is associated with stress, anxiety, depression, and other mental disorders in parents, as well as to study the level of their psychological adaptation, the need for social support, and the factors influencing mental health. Through this goal, it is expected that psychological approaches and recommendations will be developed that will provide practical assistance in ensuring the mental well-being of families with healthy and disabled children.

### Research Task

1. Determining the level of stress, depression, and anxiety in parents with children with developmental disabilities.
2. Determining the level of stress, depression, and anxiety in parents with healthy children.
3. Identification and statistical comparison of differences in stress, depression, and anxiety levels between parents with developmental disabilities and parents with healthy children.
4. Analyze how the level of mental disorders is related to factors such as the parents' financial situation, the number of other children in the family, the parents' age, and the child's gender.
5. Comparative analysis of stress, depression, and anxiety levels in each group, dividing respondents into four groups (parents of disabled and healthy children born in 2007-2011 and 2012-2016).





6. Identify the main risk factors affecting mental health within each demographic factor (e.g., age, financial status).
7. Based on the results obtained, develop practical proposals for strengthening the psychological health of parents with disabled children.

### Materials and Methods.

The study was conducted among 60 parents of students of specialized auxiliary school No. 87 for children with mental developmental disabilities in the Yunusabad district of Tashkent. 54 parents of students from school No. 249, specializing in social sciences, located in the Mirabad district, were selected as a comparison group. Parents of both groups were divided into groups that did not need social assistance and socially disadvantaged groups according to their social and financial level. It was determined to what extent mental disorders in parents are related to financial difficulties in the family, regardless of whether their children have developmental disabilities or not. In addition, the parents' age at birth, the child's gender, and the number of other children in the family were also taken into account, and the significance of these criteria in parental mental disorders was analyzed.

In addition, in the study, parents of children with and without developmental disabilities (healthy) were divided into four groups: parents of children with developmental disabilities born in 2007-2011; Parents of children with disabilities born in 2012-2016; Parents of healthy children born in 2007-2011; Parents of healthy children born in 2012-2016. Data for each parent were studied from the child's birth date to 2025 (last date of data collection).

In the study, depressive, anxiety, and stress disorders in the mental state of the examined parents were determined using special scales. For example: the PSI (Parenting Stress Index) scale was used to identify stress disorders, the DASS-21 (Depression Anxiety Stress Scales) scale was used for depressive disorders, and the GAD- (7 Generalized anxiety disorder 7-item) scale was used to identify anxiety disorders. The results were compared with the results of the comparison group; the data were analyzed.

### Results

A total of 114 parents participated in the study. Of these, 60 were children with developmental disabilities (28 born in 2007-2011, 32 in 2012-2016), and 54 were parents of healthy children (25 born in 2007-2011, 29 in 2012-2016).

According to the results analyzed on the PSI (Parenting Stress Index) scale, it was found that parents of children with developmental disabilities have a high level of stress. The average stress rate for parents of children with developmental disabilities born in 2007-2011 was  $67.2 \pm 8.3$ , which is significantly higher than in the group of parents of healthy children born in 2007-2011 (on average  $52.4 \pm 6.2$ ). A similar result was observed for the parents of children born in 2012-2016 (with developmental disabilities:  $69.1 \pm 7.8$ , healthy:  $55.3 \pm 5.9$ ). It was also established that the difference between parents of children with developmental disabilities and parents of healthy children is statistically significantly ( $p < 0.05$ ).

Degree of depression: When analyzing the level of depression according to the DASS-21 scale, it was noted that parents of children with developmental disabilities have a high level of depression.



The average depression rate for parents of children with developmental disabilities born in 2007-2011 was  $18.9 \pm 4.7$ , and for parents of healthy children -  $12.3 \pm 3.5$  ( $p < 0.01$ ). Similar differences were found for parents of children born in 2012-2016 (with developmental disabilities:  $20.4 \pm 5.2$ , healthy:  $13.1 \pm 4.1$ ,  $p < 0.01$ ).

Level of anxiety: As a result of analyzing the level of anxiety using the GAD-7 (Generalized Anxiety Disorder 7-item) scale, it was found that parents of children with developmental disabilities have a high level of anxiety. In 2007-2011, the level of anxiety in parents of children with developmental disabilities averaged  $15.2 \pm 5.3$ , and in parents of healthy children -  $9.1 \pm 3.9$  ( $p < 0.01$ ). Similar results were observed for parents of children born in 2012-2016 (with developmental disabilities:  $16.3 \pm 5.6$ , healthy:  $10.4 \pm 4.0$ ,  $p < 0.01$ ). (table 1)

The influence of financial status, parental age, the number of other children, and the child's gender: it was found that the level of stress and depression was higher among parents with low financial status. In particular, among parents of children with developmental disabilities, those with low financial security (40%) showed high levels of stress and anxiety. Although stress levels decreased with parental age, the levels of depression and anxiety remained high regardless of age.

In addition, no significant differences were found between the mental disorders affected by the child's gender, i.e., no significant differences in the levels of stress, depression, and anxiety were observed between parents who had a male or female child.

Statistical analysis: The ANOVA test was used for statistical analysis. The results showed that the difference between each group was statistically significant ( $p < 0.05$ ). Differences in the levels of stress, depression, and anxiety were revealed in all groups. In addition, the results of studying the relationship between mental disorders and such factors as financial status, parental age, and the number of other children using Pearson's correlation were also statistically significant ( $p < 0.05$ ).

**Table: Comparison of levels of mental disorders by groups and socio-demographic factors**

Group	Stress (PSI, avg $\pm$ SD)	Depression (DASS-21, avg $\pm$ SD)	Anxiety (GAD-7, avg $\pm$ SD)	Impact of financial position	Influence of parental age	Effects of the number of other children	Child's gender exposure
2007-2011, parents of a disabled child	$67.2 \pm 8.3$	$18.9 \pm 4.7$	$15.2 \pm 5.3$	Low supply has high stress	High in young parents	Having many children = high stress	No difference
2007-2011, parents of a healthy child	$52.4 \pm 6.2$	$12.3 \pm 3.5$	$9.1 \pm 3.9$	Low supply has high stress	High in young parents	Low impact	No difference
2012-2016, parents of a disabled child	$69.1 \pm 7.8$	$20.4 \pm 5.2$	$16.3 \pm 5.6$	Low supply has high stress	High in young parents	Having many children = high stress	No difference
2012-2016, parents of a healthy child	$55.3 \pm 5.9$	$13.1 \pm 4.1$	$10.4 \pm 4.0$	Low supply has high stress	High in young parents	Low impact	No difference
Group	Stress (PSI, avg $\pm$ SD)	Depression (DASS-21, avg $\pm$ SD)	Anxiety (GAD-7, avg $\pm$ SD)	Impact of financial position	Influence of parental age	Effects on the number of other children	Child's gender exposure





2007-2011, parents of a disabled child	67.2 ± 8.3	18.9 ± 4.7	15.2 ± 5.3	Low supply has high stress	High for young parents	Having many children = high stress	No difference
2007-2011, parents of a healthy child	52.4 ± 6.2	12.3 ± 3.5	9.1 ± 3.9	Low supply has high stress	High for young parents	Low impact	No difference
2012-2016, parents of a disabled child	69.1 ± 7.8	20.4 ± 5.2	16.3 ± 5.6	Low supply has high stress	High for young parents	Having many children = high stress	No difference
2012-2016, parents of a healthy child	55.3 ± 5.9	13.1 ± 4.1	10.4 ± 4.0	Low supply has high stress	High for young parents	Low impact	No difference

## Conclusion

The main goal of the study was to compare the psychological state of parents of children with developmental disabilities with parents of healthy children. Based on the data collected in the study, the levels of stress, depression, and anxiety were studied, and several socio-demographic factors (financial status, parents' age, number of children, child's gender) were determined to influence these mental disorders.

**1. Differences in the levels of stress, depression, and anxiety:** The study results show that the levels of stress, depression, and anxiety in parents of children with disabilities are significantly higher than in parents of healthy children. **In parents of children with disabilities born in 2012-2016**, these differences were more pronounced. These changes were statistically significant and were checked using **the ANOVA and t-test**, and it was confirmed that the indicators of all three mental disorders (stress, depression, anxiety) were high. Parents with disabled children, in particular, are more likely to experience stress and depression, which negatively affects their overall mental health.

**2. Influence of socio-demographic factors:** Socio-demographic factors, such as financial situation, age of parents, number of children, and gender of the child, had a significant impact on the mental state. **Low financial status** leads to increased levels of stress and anxiety. This factor is often indicated as the main factor affecting the mental health of parents. **Regarding the age of the parents**, young parents (20-30 years old) were more prone to stress and depression. Parents in this age group experience additional anxiety while caring for their children, which negatively affects their mental state. In addition, **number of children** is also of great importance, and parents with many children experience more stress. This further complicates their mental state and increases the number of worries related to their children's health or development. **The child's gender** did not have a significant impact in the study - this factor did not clearly affect the indicators of stress or other mental disorders.

**3. Correlation of mental disorders:** The study revealed a strong positive correlation between stress, depression, and anxiety. Increased stress usually leads to increased levels of depression and anxiety. This relationship shows that the mental health of parents depends not only on individual disorders, but also represents factors that are closely interconnected. Increased levels of stress and anxiety, in turn, exacerbate depressive states, which significantly affects the overall psychological





state of the family. The study also showed that among the parents of **children with disabilities**, these disorders are at the highest level.

**4. Limitations of the study and future research:** The methodologies used in the study and the results obtained have been expanded, taking into account changing socio-demographic factors, but there are some limitations. In the study, only the mental state of parents and socio-demographic factors were considered, and in future studies, the mental health of the children themselves and other socio-psychological factors should also be taken into account. In addition, only moderate mental disorders were studied in the study, while severe mental disorders, such as post-traumatic stress disorder, postnatal depression, should be studied in greater depth.

### Scientific Novelty

The scientific novelty of this study lies in the fact that the mental health of parents of children with disabilities was studied in depth for the first time using multidimensional psychological analysis methods (PSI, DASS-21, GAD-7) in comparison with parents of children with disabilities. Also, the influence of socio-demographic factors, including financial status, parental age, and the number of children, on mental disorders was analyzed with a new approach. The study revealed high levels of stress, depression, and anxiety in parents of children with disabilities, bringing new scientific achievements to this topic.

### References

1. Bernard-Bonnin, A. C. (2004). Maternal depression and child development. *Pediatrics and Child Health*, 9 (8), 575-583.
2. Gilson, K. M., Davis, E., Johnson, S., Gains, J., Reddiough, D., & Williams, K. (2018). Needs and preferences for mental health care for mothers of children with disabilities. *Child Care Health and Development*, 44 (3), 384-391.
3. Singer, G. H. (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.
4. Masulani-Mwale, C., Kauye, F., Gladstone, M., & Mathanga, D. Prevalence of psychological distress among parents of children with intellectual disabilities in Malawi *BMC Psychiatry*, 2018, 18:146. Page: 1-10.
5. Arnold, D. L., & McPherson, S. A systematic review on the mental health of parents of individuals with learning disabilities. *SAGE Open Medicine*, 2024, 12:26344041231217104. Page: 1-10.
6. Aydın, M., Ulutürk, K., Pehlivan, A., Kaya, A., & Karabacak, S. Investigation Into The Stress-Coping Levels of Parents of Children with Autism Who Receive Physical Education. *International Journal of Disabilities Sports and Health Sciences*, 2024, 7 (3):637-647. Page: 637-647.
7. Dizdarevic, A., Memisevic, H., Osmanovic, A., & Mujezinovic, A. Family quality of life: perceptions of parents of children with developmental disabilities in Bosnia and Herzegovina<3. *International Journal of Developmental Disabilities*, 2022, 68 (3):274-280. Page: 274-280.



8. Hassanein, H. A. S. Post-Traumatic Growth of Parents of Children with Autism Spectrum Disorder and Intellectual Disabilities: A Literature Review  
Psycho-Educational Research Reviews, 2024, 13 (3):179-185. Page: 179-185.
9. Wolstencroft, K., et al. Mental health impact of autism on families of children with intellectual and developmental disabilities of genetic origin. Journal of Child Psychology and Psychiatry Advances. Page: 1-10.
10. Brennan, D., Lewis, M., & Slišković, A. Welfare of Parents of Children with Disabilities - Does Employment Status Matter? MDPI, 2023, 12 (8):463. Page: 1-11.
11. Cosma, G., et al. Comorbidity Patterns and Temporal Associations of Multiple Long-Term Conditions in Adults with Intellectual Disability: An Observational Study in the United Kingdom. Archive, 2025. Page: 1-10.
12. Heslon, K., Hanson, J. H., & Ogourtsova, T. Mental health in children with disabilities and their families: red flags, services' impact, facilitators, barriers, and proposed solutions. Frontiers in Rehabilitation Sciences, 2024, 5:1347412. Page: 1-15.
13. Baker-Ericzén, M. J., Brookman-Frazee, L., & Stahmer, A. C. Stress Levels and Mental Health Symptoms Among Parents of Children with Autism and Other Developmental Disabilities. Journal of Autism and Developmental Disorders, 2005, 35 (6):701-711. Page: 701-711.

