

# Depression among parents of disabled children

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# Abstract

The purpose of this study was to measure the scale of depression among parents of disabled children. The study focused on understanding the relationship between the financial state of parents and depression, gender differences and the impact of parents' age on depression. In this research, 74 parents of disabled children participated including 37 mothers and 37 fathers. The research was conducted in the Peja region. The Beck's depression questionnaire was used. There were additional demographic questions in the questionnaire including one question about children's diagnoses, one about parents' education and one about children's age. The SPSS 16 version was used to analyze the data. Analyses done in this research are: descriptive analyses, independent t-tests and Pearson correlations. The results have shown that mothers are more depressed than fathers. Another factor that impacts parents' depression is their financial state where the results have shown that families with lower income tend to have more depression compared to others who have a higher income. Moreover, based on the results of the study, it was found that parents' age does not correlate with depression and parents of children with autism and mental development delays have higher scales of depression.

**Keywords:** Autism, Cerebral palsy, Child diagnoses, Children's, Depression, Down syndrome, Learning difficulties, Mental retardation, Parents income.

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## **1. Introduction**

Depression is considered a global health issue. It is an affective disorder referred to as abnormal affect such as depressed mood, sadness, feeling low or feeling empty. People suffering from depression report a loss of interest or pleasure, apathy and a sense that nothing is enjoyable as it once was [1, 2].

Depression also has cognitive symptoms that differ from its affective symptoms. Depression is called a cognitive disorder because people with this disorder have negative thoughts about themselves, about other people and about the world and the future. People with depression see themselves as incompetent, worthless and they are critical of their own acts and characteristics [2, 3]. Other features of depressed people are guilt and hopelessness feelings, low self-esteem, the feeling of being unable to manage their lives or make the right decisions for themselves and the inability to solve their own

problems. Furthermore, the Beck cognitive model of depression hypothesizes a vulnerability to depression due to tendencies to see oneself, the world and the future in negative ways [2]. Depression, as a cognitive disorder also has other mental difficulties such as concentration, decision making and memory difficulties [2]

Behavioral characteristics or symptoms: The most common behavioral characteristics are withdrawal from social activities and prolong bed rest. Some depressed people exhibit psychomotor changes such as speaking and moving slowly, having a monotone voice, less eye contact, agitation [2].

Physical symptoms: Depressed people have reduced energy, feel heavy, lack physical stamina to complete tasks, sleep changes and their appetite changes [2].

In other words, depression is characterized by low interest in the things one liked before and feeling low or not good most of the time [4].

Moreover, statistics show that there has been an enormous increase in depression rates. Based on those statistics, states that have the highest rates of depression also have high rates of other diseases such as obesity, heart attacks and other diseases. Around 121 million people in the world suffer from some form of depression and one in ten Americans at some point in their lives suffers from depression.

Some ethnic groups report higher rates of depression than other groups. Groups that have the highest rate of depression are African- Americans, Hispanics and Caucasians [5].

## 1.1. State of the Parents of Children with Special Needs

The state of the parents who have children with disabilities or special needs differs from the state of the parents that have children with normal development. Poverty, difficulties in working while caring for the child's needs, a lack of time for themselves and high divorce rates in families with special needs children are some of the main challenges that these parents face.

#### 1.2. Culture Impact on Defining Depression

The culture in which we live impacts the way we define depression. West culture has a different definition if compared to east culture as does the way that it is treated, for example in West, it is treated as medical treatment and counseling, whereas in the East, since it is a more collectivist culture it is treated in a more traditional way even though the symptoms are the same. As a result, it is used for medical purposes in the West more than in east culture [6].

### 1.3. Risk for Depression

According to De Paulo [7], women have higher risks of being depressed than man. According to him, one of the reasons women has more depressive developments because women tend to define themselves based on the relationships they have with others. Married women are more depressed than unmarried while women who have children are more depressed than those who are married but do not have children. The reason for this might be that women in most cultures have the responsibility of taking care of the children. However, this does not occur in males because married males experience less depression than single men.

## 1.4. Depression Symptoms

Depression symptoms differ from one person to another. According to the World Health Organization, one depressive episode can be identified as constant sadness for a two-week period, this is accompanied by a loss of ability to feel happy, a loss of concentration, mental disfunction and a feeling of being trapped with no way out which also leads to suicidal thinking [8]. The duration and severity of symptoms differ from person to person. When parents first learn about the child's diagnosis, they use some coping strategies. The first one is to deny the diagnosis. After this first reaction, when parents feel powerless and disappointed, there is the second phase of sending the child to all the centers, they can find in order to not deal with it. After this, there is positive thinking and comparing a child's diagnosis with other children that are in a similar situation or the worst situation seems to help them deal with the diagnosis and accept it. They try to take information and learn how to be more helpful to their child after accepting the child's diagnosis in some way.

Sullivan [9] researched gender differences in the copying strategies used by the parents of children with down syndrome in stressful situation. This study included 150 parents 74 of whom were young parents with children under the age of 5 Results have shown that there are gender differences in the way parents cope with stressful situations in these fields: Asking for social and emotional support was higher in mothers or females than in fathers, showing their emotions was again higher in mothers than in fathers but the acceptance of child diagnoses was higher in males than in females. Also, there were no gender differences in strategy usage between young and older parents [10]. The research investigated the impact of children's disabilities on parents' mental health. Results from the Beck Depression Inventory showed that of 290 parents, 25% had extreme depression, 39% had severe depression and 28% had moderate depression. Another study done in 2022 found that child development disorders have a significant impact on parent mental health with parents experiencing more anxiety than depression. In addition, it was found that the higher the developmental disorder in children, the more the parents' mental health was affected. Children that have chronic conditions like Down syndrome, autism disorder, cerebral palsy and other chronic condition are an emotional burden for caregivers and parents [11]. Results from another study showed that parents of children with chronic conditions have higher levels of depression and stress and lower life quality than parents of children with other health conditions such as type one diabetes [12].

### 1.5. Types of Depression

Major depressive disorder is the most common type of depression. In order to be diagnosed, a person should have the depressive symptoms for two weeks which if not treated can last for ages.

Dysthymia is similar to major depressive disorder but here the symptoms last longer than two years. In this way, it is classified as chronic depression.

Bipolar disorder is known as an affective disorder, people with this disorder have fast mood changes. They go from a passive depressive state to another state of feckless energy where they think they can do everything and in this way, they overwork themselves and then they go to the depressive state.

Adjustment disorder with depressed mood, this type of depression comes from big changes in someone's life as a response to those changes.

Post-natal depression is another type of depression that affects women after giving birth and it occurs because of hormonal changes that happen after the child is born [13].

Depression is associated with social risk factors such as poor social abilities.

Some of the characteristics are impaired attachment: social anhedonia, hyper-sensitivity to rejection, altruistic punishment, impaired communication and emotion recognition and social perception and behavioral dysfunction [14].

In a meta-analysis done by Singer [15] during years 1984 to 2003i t was found that mothers of children who have disabilities are at high risk of depression compared to mothers of children who have normal development.

Some other factors that impact or increase depression in parents of children with disabilities or special needs are poor family satisfaction, low problem-solving abilities, poor physical health and stress appraisal. A study done by Resch, et al. [16] with 110 parents who have children with disabilities found that these factors were associated with parental depression with 83% accuracy.

A study conducted with 134 mothers who have children with autism spectrum disorder Showed that parenting stress mediated the relationship between child behavior problems and a decrease in parenting self-efficacy impacted or increased depression and anxiety [17, 18].

Another study was done to see if there were significant differences in depression and anxiety between parents who had disabled children and those who had children with normal development. The results showed higher anxiety and depression levels in parents with disabled children [19].

The level of depression was higher in parents of children with disabilities than in parents of children with normal development. Mothers have a low quality of life than fathers of children with disabilities. This research compared the levels of depression in the two groups of parents also compared parent gender differences and depression [20]. Two other studies found similar results with mothers experiencing greater depressive symptoms than fathers [21, 22]. It is also found that if the IQ (Intelligence quotient) of the children decreases or is lower compared to other children' IQ depression in parents increases [21]. Another research with parents of autistic children found no significant gender differences in depression levels [23].

Demographic factors such as age, education of the parent and career are studied in 100 mothers in a province of Iran. A study found that 73% of mothers had some degree of depression and 21% had severe depression. From them, 36 had high school diplomas, 14% had university diplomas but from them, 88% were housewives with 99% of husbands being employed. So despite their education they were unable to work because they had to take care of their children [24].

A study done in 2019 found that at population levels, parents of children who have developmental disabilities have higher depression or other mental diagnoses than those who have children with normal development [25].

In the study of parents of children with Down syndrome, sociodemographic factors such as mothers age, level of education, status income and employment status were investigated. Data showed that mothers are more vulnerable to develop depression but there was no significant association between sociodemographic factors and depression in mothers of children with Down syndrome [26]. Furthermore, another study compared parents of children who have Down syndrome with parents of healthy children. As a result, it was observed that parents of children with Down syndrome had a higher proportion of depression, anxiety and stress than parents of healthy children [27]. Similar results were found in mothers of children with intellectual disabilities when they were compared with mothers of children with normal development. Results showed that mothers of children with intellectual disabilities have higher levels of depression than mothers of children with normal development [28].

Parents of children with disabilities tend to experience more psychological distress and suffering, higher rates of depression because they encounter many challenges in raising the child. A study done with 244 parents of children with physical and mental disorders showed that 36% of parents experience severe distress based on sociodemographic characteristics such as the age of parents, gender of the child. Parents education level had no significant correlation to parent mental health while parents' job status demonstrated a positive impact on their mental health [29]. Scherer, et al. [30] conducted a meta-analysis on parent's depression and anxiety when they have children with intellectual and developmental disabilities. Nearly all the analyzed studies found a positive relationship between depression and parenting a disabled child. Important factors that impact parents' depression are disability severity and household income. There was also gender differences discovered with mothers having higher levels of depression than fathers.

The same results about the household income effect were found in Emerson, et al. [31]. Another study done with parents of children with cerebral palsy found out that poor economic status of family, poor living condition, parents' gender (mothers having higher depression than fathers) are factors associated with higher levels of depression [32].

The effects of having a child with disabilities were researched by Kostiukow, et al. [33]. They compared parents of children with autism spectrum disorder of parents with normal development. The results indicated that parents with

children with autism spectrum disorder had greater levels of depression, lower levels of happiness than parents of children without autism spectrum disorder. There was no significant relationship between parents' age and depression. Also, the education level of the parent showed significant differences in their sense of happiness and depression levels. So, parents who had only finished high school and had children with autism showed higher levels of depression than parents who had higher education and had children with autism. Similar results were found in the study done in Croatia [34] where significant differences were found between the life quality of parents of children with disabilities and parents of children with normal development. There was a statistically significant effect of education in the life of the parent. As a result, parents with higher level of education who had disabled children had better life quality than parents with lower education level. Depression levels in parents of children with autism were studied by Cohrs and Leslie [35].

These researches prove that parents of children with autism are significantly more likely to have depression than parents of children without autism spectrum disorder. Fathers of children with autism are less likely to be diagnosed with depression than mothers of children with autism. They still have significantly higher rates of depression than fathers who do not have children with autism spectrum disorder. Another important finding in this research was that parental depression increased with child age since there was an increase in taking care of children's needs.

Psychological aspects of parents who have children with disabilities and behavioral problems have been studied by Ricci, et al. [36]. The study investigated the stress and depression levels of parents of disabled children. Results showed that depression was higher in mothers than in fathers and parenting stress and wellbeing were associated with children's behavior problems.

Since the child's diagnosis is seen as a factor that contributes to the parents' level of stress, anxiety and depression. A study done by Craig, et al. [37] compared how different child diagnoses impact parents' wellbeing. A study revealed that parents of children with neurodevelopmental disorders experience higher levels of stress than parents with typical development, parents of children with autism spectrum disorder, Attention Deficit Hyperactivity disorder (ADHD) reported the highest levels of stress while parents of children with learning and language disorders experience more stress than parents of children with neurodevelopmental disorders.

#### 2. Methodology

#### 2.1. Participants

This research included 74 parents, 37 mothers and 37 fathers of children with special needs.

## 2.2. Questionnaire

Beck Depression questionnaire was used in this research. Demographic questions, parents' education, monthly income, child diagnoses and child age were added to the questionnaire.

### 2.3. Design of the Study

Based on the primary purpose of the study which was collecting and analyzing data it is a cross-sectional study which means collecting data without manipulating the environment. This design is descriptive.

### 2.4. Procedure

Data was collected from the day care center "Pema" in Peja municipality where children with special needs are treated. A Beck questionnaire was used in the center. Parents are called by phone and are asked to participate in the study if they want to. Of the 112 parents who were called, 74 have agreed to complete the questionnaire. Parents have been informed of the purpose of the study and are informed that there is no right or wrong answer. Also, they have been informed that the data will be used only for the purpose of the study and will be anonymous.

#### 2.5. Ethical Consideration

To conduct the research, first it is taken the permission from the day care center "Pema" must first granted the permission then parents were contacted and informed about the research and if they wish to participate.

## **3. Results**

74 parents have participated in this research, 37 mothers and 37 fathers. Data are analyzed with the SPSS. The analyses done were: descriptive statistics, correlation and independent t-test.

Results show that mothers are more depressed than fathers, parents that see their child as difficult to manage have more depression than those who consider it not that difficult or easy to manage, parents in poor financial states have more depression, age of the parents does not impact their depression while child diagnosis impacts depression, in this particular research parents of children with autism and late development have higher rates of depression.

- I. Descriptive statistics: Parents Age:
  - 1. 14 or 18.9% parents group age 27-31 years old.
  - 2. 24 or 32.4% parents group age 32-36 years old.
  - 3. 12 or 16.2% parents group age 37-41 years old.
  - 4. 13 or 17.6% parents group age 42-46 years old.
  - 5. 5 or 6.8% parents group age 47-51 years old.
  - 6. 5 or 6.8% parents group age 52-56 years old; and
  - 7. 1 or 1.4% parent in the group age 57-61 years old.

Age mean was 38.27≈38 years old.

### *First hypothesis (1): Mothers have more depression than fathers.*

The gender mean for depression from all variables for fathers was 2.46 and for mothers was 2.80. The independent ttest show significant differences in depression between mothers and fathers [t (70) = -2.91, p=.05]. With depression mean in mothers 40, SD (Standard deviation) (13, 43, and for fathers 30.6, SD (Standard deviation) (13.80). So, from these results, it can be said that the first hypothesis is proved. Table 1 displays descriptive statistics about parent's age, education, monthly income, child's age, gender and diagnoses (see Table 2 and Table 2.1).

Table 1.           Presents descriptive statistics		1	
Variables	Characteristic	Frequency	Percent
	27-31 years old	14	18.9
	32-36 years old	24	32.4
	37-41 years old	12	16.2
Parents age	42-46 years old	13	17.6
	47-51 years old	5	6.8
	52-56 years old	5	6.8
	57-61 years old	1	1.4
	Primary education	24	32.4
Parents education	High school education	32	43.2
Parents education	University education	17	23.0
	Did not go to school	1	1.4
	50-100 euro	4	5.4
Monthly income	100-200 euro	10	13.5
	200-300 euro	30	40.5
	300-400 euro	24	32.4
	400-500 euro	5	6.8
	More than 500 euro	1	1.4
	2-5 years old	12	16.2
	5-8 years old	18	24.3
Child age	8-12 years old	22	29.7
	12-15 years old	11	14.9
	15-18 years old	11	14.9
	Female	28	37.8
Child gender	Male	46	62.2
	Autism	19	25.7
	Late development	14	18.9
Child diagnoses	Learning difficulties	7	9.5
Child diagnoses	Down Syndrome	16	21.6
	Cerebral Palsy	9	12.2
	Mental retardation	9	12.2
	Easy to manage	4	5.4
Evaluation of child state	Moderately	20	27.0
	manageable	50	
m . 1	Hard to manage	50	67.6
Total		74	100.0

Table 2.2 describes independent samples t-test.

## Hypothesis (2): Monthly financial income has a negative correlation with depression

Knowing that economic status has a significant impact on how families function and that economic status is even more important in families with children with special needs. This research examined the relationship between monthly incomes and depression scales in parents of children with special needs.

From this analysis, it is seen that there is a significant negative correlation between depression and monthly income r = -0.071, sig= 0.5. So, the parents with lower income were more depressed than those with higher incomes. (see Table 3 and Table 3.1).

Variables	Depression means b	ased in gender
	Male	Female
Sadness	2.38	2.95
Pessimism	2.38	3.16
Earlier failure	2.54	2.86
Loss of pleasure	2.49	2.84
Guilt feelings	2.57	2.84
Punishment	2.38	2.76
Not liking him/herself	2.35	2.57
Self-critique	2.62	3.08
Suicidal thoughts	1.49	1.43
Crying	2.35	3.30
Worrying	2.43	2.89
Loss of interest	2.46	2.78
Indecisiveness	2.30	2.92
Unworthiness	2.41	2.57
Loss of energy	2.59	2.81
Changes in sleep	3.14	2.95
Irritation	2.43	2.59
Eating changes	2.73	3.08
Concentration difficulties	2.38	2.76
Tiredness	2.73	2.84
Loss of interest for sexual relationship	2.41	2.76
Total mean	2.46	2.80

Table 2.				
Presents depression	means	based	in	gender.

# Table 2.1.

Presents Independent t-test results.

Group s	sta	tis
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Group statistics					
Depression	Gender	Ν	Mean	Std. deviation	Std. error mean
	Male	37	30.6	13.8	2.26
	Female	35	40.0	13.4	2.27

## Table 2.2.

Presents independent samples t-test.

		Levene' for equa variance	ality of	t-test for e	quality of me	ans				
		F	Sig.	Т	Df	Sig. (2-tailed)	Mean difference	Std. error difference		nfidence he difference Upper
Depression	Equal variances assumed	0.90	0.05	-2.91	70	0.004	-9.35	3.21	-1.58E+01	-2.94
Depression	Equal variances not assumed			-2.91	6.99E+01	0.004	-9.35	3.21	-1.58E+01	-2.95

Table 3.

Presents Correlation between monthly income and depression.

Correlations

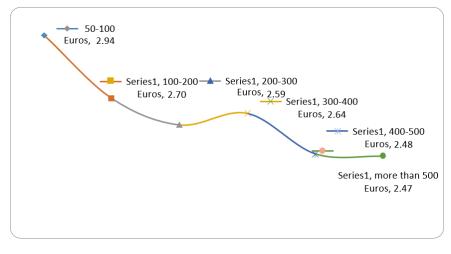
correlations			
		Depression	Monthly income
	Pearson correlation	1	-0.07
Depression	Sig. (2-tailed)		0.55
	N	72	72
M	Pearson correlation	-0.071	1
Monthly income	Sig. (2-tailed)	0.556	
	Ν	72	74

Variables	Monthly income								
	50-100	100-200	200-300	300-400	400-500	More than			
	Euro	Euro	Euro	Euro	Euro	500 Euro			
Sadness	3.50	3.00	2.50	2.58	2.40	3.20			
Pessimism	3.25	2.80	2.80	2.75	2.59	3.00			
Earlier failure	3.50	2.80	2.77	2.46	2.40	3.00			
Loss of pleasure	2.75	2.80	2.57	2.71	2.40	3.00			
Guilt feelings	2.75	2.60	2.60	2.92	2.45	2.95			
Punishment	2.00	3.10	2.50	2.71	2.50	3.00			
Mot liking him/ herself	2.50	2.60	2.27	2.67	2.40	2.00			
Self –critique	3.25	3.00	2.86	2.92	2.98	2.80			
Suicidal thoughts	2.00	1.70	1.53	1.17	1.40	2.00			
Crying	3.25	3.00	2.57	3.17	2.20	2.00			
Worrying	3.00	2.30	2.77	2.83	2.60	2.00			
Loss of interest	3.25	2.30	2.63	2.63	2.80	2.00			
Indecisiveness	2.75	2.60	2.50	2.75	2.60	2.00			
Unworthiness	2.75	2.90	2.50	2.33	2.20	2.00			
Loss of energy	3.00	2.90	2.76	2.71	2.40	2.00			
Sleep changes	3.25	3.50	2.87	3.02	2.40	2.00			
Irritation	2.75	2.60	2.57	2.46	2.85	2.00			
Eating changes	2.75	2.70	3.10	2.92	2.60	1.00			
Difficulties in concentration	3.50	2.30	2.33	2.83	2.87	3.50			
Tiredness	3.50	2.50	2.83	2.20	2.40	3.50			
Loss of interest for sexual relationship	2.50	2.60	2.67	2.70	2.70	3.00			
Total Mean	2.94	2.70	2.59	2.64	2.48	2.47			

 Tables 3.1.

 Presents the mean of depression based on monthly income.

Figure 1 illustrates the total means of depression and monthly income.



**Figure 1.** Total mean for depression and monthly income.

Hypothesis 3: Parents who believe their child's state is easy to manage have less depression than those who believe it is difficult to manage

Table 4 shows that in all variables means are higher for parents who value their child state as difficult to manage. Total depression refers to parents who value child condition as easy to manage is 1.48; not so hard is 2.42 and hard to manage is 2.78. So, parents that value child's condition as easy have less depression than those who consider as hard to manage.

### Table 4.

Total depression mean based on parents' evaluation of child condition.

Variables	Depression means based on parents evaluation of child condition						
	Easy to manage	Not that hard to manage	Hard to manage				
Sadness	1.25	2.30	2.92				
Pessimism	1.50	2.35	3.04				
Earlier failure	1.50	2.35	2.94				
Loss of pleasure	1.25	2.35	2.90				
Guilt feelings	1.50	2.35	2.94				
Punishment	1.25	2.35	2.04				
Not liking him/herself	1.00	2.20	2.68				
Self-critique	1.50	2.84	3.00				
Suicidal thoughts	1.00	1.45	1.50				
Crying	2.25	2.55	2.98				
Worrying	1.75	2.45	2.90				
Loss of interest	1.50	2.40	2.80				
Indecisiveness	1.75	2.55	2.70				
Unworthiness	1.00	2.25	2.70				
Loss of energy	1.50	2.42	2.96				
Sleep changes	1.25	3.25	3.10				
Irritation	1.25	2.40	2.66				
Eating changes	2.50	2.75	3.00				
Difficulties in concentration	1.50	2.35	2.74				
Tiredness	1.5	2.5	3.08				
Loss of interest for sexual relationship	1.50	2.42	2.78				
Total mean	1.48	2.42	2.78				

Hypothesis 4: Young parents have more depression than older parents.

This hypothesis is not proved because in the fifth table it can be seen that depression means are not different in different age group.

Depression is classified by according to age group:

- 1. 2.37 is for 27-31 years old
- 2. 2.68 is for 32-36 years old
- 3. 2.64 is for 37-41 years old
- 4. 2.63 is for 42-46 years old
- 5. 3.06 is for 47-51 years old
- 6. 2.77 is for 52-56 years old
- 7. 2.71 is for 57-61 years old

Data from Table 5 shows that hypothesis is not proved because younger parents don't have more depression than older parents.

## 4. Discussion

Research focuses on the depression of parents of children with disabilities, parents' gender and age differences, monthly income, child diagnoses and conditions.

Based on the results, it can be seen that mothers are more depressed than fathers, so there is a significant difference between mothers and fathers in the degree of depression [t (70) = -2.91, p = .05]. With an average of depression in mothers at 40, SD (standard deviation) (13, 43) and in fathers at 30.6, Ds (13, 80). The results are similar to those of the studies done by Azeem, et al. [38] where mothers have more depression than fathers. Similar results were found in the studies done by Ricci, et al. [36]; Cohrs and Leslie [35]; Chouhan, et al. [21], where mothers had greater levels of depression than fathers. Some of the reason that our research has similar results is culture, mothers are more expected to take care of their children's needs.

The condition of the child has been linked to depression, similar results have emerged in my research where parents who rated the child's condition as difficult to manage had more depression. The same results have been shown in the studies of Scherer, et al. [30] where disability severity is a factor that impacts parent depression. These results are in contradiction with the results of the study of Manuel, et al. [39]according to which the condition of the child (mild or severe) has not been influential in maternal depression.

In current research, the age of the parents is not influential in depression. The same results were found in Wahab and Ramli [29]. While in the study done by Falk, et al. [40] the age of the mothers significant in study conducted by Falak, et al.as the new mothers reported higher anxiety, stress and depression.

Depression means according to parent's age.

Variables			I	Parents age			
	27-31	32-36	37-41	42-46	47-51	52-56	57-61
	Years	Years	Years	Years	Years	Years	Years
	old	old	old	old	old	old	old
Sadness	2.50	2.83	2.75	2.38	2.80	2.80	2.00
Pessimism	2.57	2.88	2.75	2.77	3.00	2.60	3.00
Earlier failure	2.43	2.96	2.42	2.69	3.00	2.60	3.00
Loss of pleasure	2.29	2.96	2.42	2.62	2.80	2.60	4.00
Guilt feelings	2.43	2.79	2.50	2.77	3.20	3.00	2.00
Punishment	2.07	2.75	2.83	2.38	3.20	3.20	2.00
Not liking him/herself	2.14	2.67	2.33	2.54	2.80	2.20	2.00
Self-critique	2.86	2.88	2.75	2.85	3.50	2.80	3.00
Suicidal thoughts	1.21	1.58	1.50	1.23	1.60	1.80	2.00
Crying	2.43	2.71	2.83	3.08	3.40	3.20	3.00
Worrying	2.29	2.83	3.08	2.54	2.60	3.00	3.00
Loss of interest	2.36	2.46	2.83	2.62	3.60	2.60	3.00
Indecisiveness	2.57	2.46	2.58	2.69	3.20	2.80	2.00
Unworthiness	2.29	2.46	2.67	2.23	3.40	2.60	2.00
Loss of energy	2.43	2.71	2.75	2.85	3.75	2.80	2.00
Sleep changes	2.93	3.04	2.75	3.31	3.20	3.20	3.00
Irritation	2.07	2.50	2.50	2.69	3.20	2.40	4.00
Eating changes	3.14	2.75	2.67	3.00	3.00	3.20	3.00
Difficulties in concentration	2.36	2.54	2.50	2.69	2.80	2.80	3.00
Tiredness	2.36	2.83	3.08	2.92	3.40	2.80	3.00
Loss of interest for sexual relationship	2.14	2.70	2.92	2.38	2.80	3.20	3.00
Total mean	2.37	2.68	2.64	2.63	3.06	2.77	2.71

Another finding of this current research is that parents with lower incomes have more depression than those with higher incomes. Some of the reasons for these findings include the financial burden and costs those parents face when raising a disabled child. Household income was found to be an important factor in increasing and decreasing parents' stress and depression [29]. The current research revealed that child diagnosis has an impact on parent depression where parents of children with Autism and cerebral palsy showed highest level of depression. Results from the study done by Ljubičić, et al. [12] showed that parents of children with chronic developmental conditions such as Autism Spectrum Disorder, Down syndrome, cerebral palsy have higher levels of depression than parents of children with other diagnoses.

## 5. Conclusion and Recommendations

From this research, these conclusions can be drawn: mothers have more depression than fathers, parents who see the child's condition as severe have more depression, poor financial condition affects a higher degree of depression and the age of the parents is not influential in depression.

Based on this research, it turned out that parents' income has a negative correlation with the rate of depression, so the higher the income of parents, the lower the rate of depression. Knowing these state institutions, it is recommended that parents of children with disabilities provide greater financial support for childcare. More supportive programs or activities for parents would help them deal with all of their children's requests and needs. In the end, there should be greater institutional support for mothers since they have huge responsibilities for childcare.

## 6. Research Limitations

The limitation of this current research is the small sample size. In order to have more general findings, it would be beneficial to do research in five regions of Kosovo.

## References

- [1] M. M. Ridosh, K. J. Sawin, B. P. Klein-Tasman, and G. N. Holmbeck, "Depressive symptoms in parents of children with spina bifida: A review of the literature," *Comprehensive Child and Adolescent Nursing*, vol. 40, no. 2, pp. 71-110, 2017. https://doi.org/10.1080/24694193.2016.1273978
- [2] C. Hammen, *Depression*. London: Psychology Press, 1997.
- [3] I. Lehner-Adam and B. Dudas, "Cognitive behavioral therapy (CBT) of depressive disorders," *Mood Disorders*, p. 61, 2013. https://doi.org/10.5772/54200
- [4] L. Walsh, *Depression care across the lifespan*. Chichester: Wiley-Blackwell, 2009.
- [5] M. S. Reddy, "Depression: The disorder and the burden," *Indian Journal of Psychological Medicine*, vol. 32, pp. 1-2, 2010. https://doi.org/10.4103/0253-7176.70510
- [6] P. Gilbert, *Depression: The evolution of powerlessness*. Routledge, 1992.

- [7] J. R. De Paulo, Understanding depression: What we know and what you can do about it. John Wiley & Sons, 2002.
- [8] M. E. Keck, *Depression*. Switzerland: Lundbeck (Schweiz) AG, 2010.
- [9] A. Sullivan, "Gender differences in coping strategies of parents of children with downsyndrome," *Down Syndrome Research and Practise*, vol. 8, no. 2, pp. 67-73, 2002.
- [10] Z. Ahmad, K. Anwar, N. Ishtiaq, and H. Arshad, "Impact of intellectual disabilities of children on mental health of parents," *Liaquat Medical Research Journal*, vol. 4, no. 1, pp. 15-21, 2022.
- [11] S. Bagur, B. Paz-Lourido, B. Mut-Amengual, and S. Verger, "Relationship between parental mental health and developmental disorders in early childhood," *Health & Social Care in the Community*, pp. 1–10, 2022. https://doi.org/10.1111/hsc.13891
- [12] M. Ljubičić, S. Delin, and I. Kolčić, "Family and individual quality of life in parents of children with developmental disorders and diabetes type 1," *Journal of Clinical Medicine*, vol. 11, no. 10, p. 2861, 2022. https://doi.org/10.3390/jcm11102861
- [13] M. Ashworth, *Types of depression*. Psych Central, 2007.
- [14] A. Kupferberg, L. Bicks, and G. Hasler, "Social functioning in major depressive disorder," *Neuroscience & Biobehavioral Reviews*, vol. 69, pp. 313-332, 2016. https://doi.org/10.1016/j.neubiorev.2016.07.002
- [15] G. H. Singer, "Meta-analysis of comparative studies of depression in mothers of children with and without developmental disabilities," *American Journal on Mental Retardation*, vol. 111, no. 3, pp. 155-169, 2006. https://doi.org/10.1352/0895-8017(2006)111[155:mocsod]2.0.co;2
- [16] J. Resch, A., T. R. Elliott, and M. R. Benz, "Depression among parents of children with disabilities," *Families, Systems, & Health*, vol. 30, no. 4, pp. 291–301, 2012.
- [17] D. L. Rezendes and A. Scarpa, "Associations between parental anxiety/depression and child behavior problems related to autism spectrum disorders: The roles of parenting stress and parenting self-efficacy," *Autism Research and Treatment*, vol. 2011, pp. 1-10, 2011. https://doi.org/10.1155/2011/395190
- [18] R. Agarwal *et al.*, "Stress and anxiety among parents of transition-aged children with autism spectrum disorder: A systematic review of interventions and scales," *Review Journal of Autism and Developmental Disorders*, pp. 1-23, 2022.
- [19] Claudia and M. L. Sandu, "Anxiety and depression in parents of disabled children," *Technium Social Sciences Journal, Technium Science*, vol. 3, no. 1, pp. 141-150, 2020.
- [20] S. F. Kazmi, S. Praveen, S. Karamat, and A. M. Khan, "Depression and quality of life of parents of disabled children," *Annals of Pakistan Institute Medical Sciences*, vol. 10, no. 3, pp. 125–127, 2014.
- [21] S. C. Chouhan, P. Singh, and S. Kumar, "Assessment of daily parenting stress and depressive symptoms among parents of children with intellectual disability," *International Multispecialty Journal of Health*, vol. 2, no. 4, pp. 22-29, 2016.
- [22] K. Willis, L. Timmons, M. Pruitt, H. L. Schneider, M. Alessandri, and N. V. Ekas, "The relationship between optimism, coping, and depressive symptoms in Hispanic mothers and fathers of children with autism spectrum disorder," *Journal of Autism and Developmental Disorders*, vol. 46, no. 7, pp. 2427-2440, 2016. https://doi.org/10.1007/s10803-016-2776-7
- [23] H. Amirian, S. Solimani, F. Maleki, S. R. Ghasemi, S. Reshadat, and N. R. Gilan, "A study on health-related quality of life, depression, and associated factors among parents of children with autism in Kermanshah, Iran," *Iranian Journal of Psychiatry and Behavioral Sciences*, vol. 11, no. 2, pp. 1-7, 2017. https://doi.org/10.5812/ijpbs.7832
- [24] S. H. Motamedi, R. Seyednour, M. Noori Khajavi, and S. Afghah, "A study in depression levels among mothers of disabled children," *Iranian Rehabilitation Journal*, vol. 5, no. 1, pp. 3-7, 2007.
- [25] S. Marquis, K. McGrail, and M. Hayes, "A population-level study of the mental health of siblings of children who have a developmental disability," *SSM Popul Health*, vol. 28, no. 8, p. 100441, 2019.
- [26] M. Swanepoel and T. Haw, "A pilot study evaluating depression in mothers with children diagnosed with Down syndrome in state health care," *Journal of Intellectual Disability Research*, vol. 62, no. 11, pp. 952-961, 2018. https://doi.org/10.1111/jir.12549
- [27] H. T. Jameel, S. Rafiq, and U. Kalsoom, "A study on level of depression, anxiety and stress among parents of Down syndrome children versus parents of healthy children," *International Journal Biol Pharm Allied Science*, vol. 5, no. 7, pp. 1553-1560, 2016.
- [28] R. R. Gogoi, R. Kumar, and S. P. Deuri, "Anxiety, depression, and quality of life in mothers of children with intellectual disability," *Open Journal Psychiatry Allied Science*, vol. 8, no. 1, pp. 71-75, 2017.
- [29] R. Wahab and F. F. A. Ramli, "Psychological distress among parents of children with special needs," *International Journal of Education, Psychology and Counseling*, vol. 7, no. 46, pp. 498-511, 2022.
- [30] N. Scherer, I. Verhey, and K. H., "Depression and anxiety in parents of children with intellectual and developmental disabilities: A systematic review and meta-analysis," *PloSone*, vol. 14, no. 7, p. e0219888, 2019, https://doi.org/10.1371/journal.pone.0219888
- [31] E. Emerson, C. Hatton, G. Llewellyn, J. Blacker, and H. Graham, "Socio-economic position, household composition, health status and indicators of the well-being of mothers of children with and without intellectual disabilities," *Journal of Intellectual Disability Research*, vol. 50, no. 12, pp. 862-873, 2006. https://doi.org/10.1111/j.1365-2788.2006.00900.x
- [32] B. Gugała *et al.*, "Assessment of anxiety and depression in Polish primary parental caregivers of children with cerebral palsy compared to a control group, as well as identification of selected predictors," *International Journal of Environmental Research and Public Health*, vol. 16, no. 21, pp. 1-16, 2019. https://doi.org/10.3390/ijerph16214173
- [33] A. Kostiukow, P. Poniewierski, D. Janowska, and W. Samborski, "Levels of happiness and depression in parents of children with autism spectrum disorder in Poland," *Acta Neurobiol Exp*, vol. 81, pp. 279-285, 2021. https://doi.org/10.21307/ane-2021-026
- [34] A. K. Misura and H. Memisevic, "Quality of life of parents of children with intellectual disabilities in Croatia," *Journal of Educational and Social Research*, vol. 7, no. 2, pp. 43–48, 2017. https://doi.org/10.5901/jesr.2017.v7n2p43
- [35] A. C. Cohrs and D. L. Leslie, "Depression in parents of children diagnosed with autism spectrum disorder: A claims-based analysis," *Journal of Autism and Developmental Disorders*, vol. 47, no. 5, pp. 1416-1422, 2017. https://doi.org/10.1007/s10803-017-3063-y
- [36] F. Ricci, C. Levi, E. Nardecchia, P. Andrea, and G. Salvatore, "Psychological aspects in parents of children with disability and behavior problems," *European Psychiatry*, vol. 41, no. S1, pp. s792-s792, 2017. https://doi.org/10.1016/j.eurpsy.2017.01.1519
- [37] F. Craig *et al.*, "Parenting stress among parents of children with neurodevelopmental disorders," *Psychiatry Research*, vol. 242, pp. 121-129, 2016. https://doi.org/10.1016/j.psychres.2016.05.016

- [38] M. W. Azeem *et al.*, "Anxiety and depression among parents of children with intellectual disability in Pakistan," *Journal of the Canadian Academy of Child and Adolescent Psychiatry*, vol. 22, no. 4, pp. 290-295, 2013.
- [39] J. Manuel, M. J. Naughton, R. Balkrishnan, B. Paterson Smith, and L. A. Koman, "Stress and adaptation in mothers of children with cerebral palsy," *Journal of Pediatric Psychology*, vol. 28, no. 3, pp. 197-201, 2003. https://doi.org/10.1093/jpepsy/jsg007
- [40] N. H. Falk, K. Norris, and M. G. Quinn, "The factors predicting stress, anxiety and depression in the parents of children with autism," *Journal of Autism and Developmental Disorders*, vol. 44, no. 12, pp. 3185-3203, 2014. https://doi.org/10.1007/s10803-014-2189-4