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# The investigation of the depression levels of parents of children with autism<sup>1</sup>

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#### Abstract

The aim of this study was to investigate the depression levels of parents of children with autism. The depression levels of mothers (N=35) and fathers (N=23) of autistic children educated in special education and rehabilitation centers were examined. In this study, socio-demographic features i.e., gender, age, education of mothers and fathers, occupation, were collected and the Beck Depression Inventory was applied to the parents to determine the risk factors of depression, symptom levels. The inventory includes 21 phrases of self-evaluation and possible scores range from 0 - 63. In the statistical analysis of the data, frequency values were applied to the evaluation of the demographic status. The mean and standard deviation were determined to evaluate the depression levels. T-tests were performed to compare the depression levels of mothers and fathers. An Anova test was performed to assess the relationships between the parameters. As a result, it was determined that mothers of autistic children have medium levels of depression (18,80±11,05), and fathers of autistic children have mild levels of depression. T-test analysis showed no significant differences between depression levels of mothers and fathers (p<0,05). Additionally; when income rates, occupations and educational status parameters were taken into account there was no significant difference according to the Anova test (p<0,05). In conclusion, mothers of autistic children have higher depression levels than the fathers.

**Keywords:** Autism; depression; family with autism.

#### 1. Introduction

After becoming aware of a pregnancy, the expectations and desires of the parents and the entire family and is to have a healthy child. However, when a child is born with a disability, it creates frustration, stress and mental trauma for the parents and other members of the family (Kaytez et al., 2015; AltugOzsoy, 2006).

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Some of the most common special needs children are autistic children. Autism is, in the broadest sense, a neuropsychiatric disorder, which cannot be determined precisely, and affects the life of the child and the family in a negative way, because of the abnormalities of social relations, communication, behavior and delayed cognitive development (Yanardag et al., 2009; Arslan&Ince, 2015; Ustuner Top, 2009; Gulec-Aslan et al., 2009). Autism or autistic disorder is only one of the categories that define developmental disability under the name of "Autistic Spectrum Disorders" or "Pervasive Developmental Disorders".

Children with autistic spectrum disorder are a mental health challenge for parents. For families, autistic children may cause more stress and depression than other physically disabled and chronic ill children (Ingersoll &Hambrick, 2011) and parents may feel concerned about the impact of their autistic children on their other children or how they will affect their own lives. There are often difficulties for the child with specific needs to adapt to the family life. The basis of all these concerns often are families' fears of being ignorant of the unknown (Ustuner Top, 2009).

Autistic characteristics differ from child to child. Parents are often confronted with a series of behaviors that are difficult to define. Stresses on families are caused by dealing with the needs and wishes of a child who cannot communicate, trying to keep up with family commitments, coping with different forms of behavior in children and protecting them from danger. The reactions parents may experience in these traumatic situations include feelings of guilt, difficulties finding extra time and energy for their children and heavy financial burdens for education and health expenditures, which, because of the increased anxiety and stress, can lead to depression (Firat, 2016; Girli, 2006; Ustuner Top, 2009). On top of this, families often believe that they are not strong enough to deal with the responsibilities which is another source of depression (Kaytez et al., 2015; Ergin et al., 2007). Depression usually occurs after a process of suffering.

The aim of this study was to examine the depression levels of families with autistic children.

### 2. Method

The research was of a qualitative type and depression levels of mothers (35±18,80) and fathers (23±13,13) of autistic children who attended special education and rehabilitation institutions were investigated.

Socio-demographic characteristics (sex, age, mother's education, father's education, occupation) of the families with autistic children were ascertained with one-on-one interviews. The Beck Depression Inventory (1961) includes 21 phrases of self-evaluation and the scale was used to measure the level and severity of depression in the interviewed families. The range of the possible scores was between 0 - 63. The validity and reliability of the Turkish version of the form was conducted by Hisli (1989) (Ayvaz et al., 2006).

The families were informed about the study and verbal consent was obtained. The interviews were conducted at the appropriate times in autistic rehabilitation centers. In the statistical analysis of the data, frequency values were applied to the evaluation of the demographic status and the mean and standard deviation were calculated to evaluate the depression levels. T-tests were performed to compare the depression levels of mothers and fathers. An Anova test was performed to assess the relationships between the parameters.

# 3. Findings

**Table 1.**Distribution of the parents

Variable	n	0/0			
Mother	35	60,3			
Father	23	39,7			
Total	58	100,0			

58 participants participated in this study (Mothers %60,3, fathers %39,7).

Table 2.Distribution of the ages

Variables	n	0/0
25-35 age	23	39,7
36 45 ages	27	46,6
46-55 age	8	13,8
Total	58	100,0

Average ages of the participants; %39,7 were at the age of 25-35, %46,6 were at the age of 36-45, %13,8 were at the age of 46-55.

**Table 3.**Educational levels of the mothers

Variable	n	0/0
High School	16	27,6
Associate's Degree	12	20,7
Bachelor's Degree	28	48,3
Master's Degree	2	3,4
Total	58	100,0

Educational levels of the mothers were %48,3 Bachelor's degree, %27,6 High School, %20,7 Associate's degree, %3,4 Master's Degree.

Table 4. Educational levels of the fathers

Variable	n	%
High School	7	12,1
Associate's Degree	9	15,5
Bachelor's Degree	41	70,7
Master's Degree	1	1,7
Total	58	100,0

Educational levels of the fathers were; %70,7 Bachelor's Degree, %15,5 Associate's Degree, %12,1'i High School, %1,7 Master's Degree.

**Tablo 5.**Occupational distribution of the parents

		p
Variable	n	%
House wife	14	24,1
Employee	4	6,9
Self-employment	22	37,9
Civil Servant	18	<b>31,</b> 0
Total	58	100,0

Occupational distribution of the parents were; %37,9 Self-employment, %31 Civil Servant, %24,1 House wife, %6,9 employee.

**Table 6.**T test results of the depression levels of the parents

	Sex	N	Min.	Std. Deviation	t	p
Depression Total	Mother	35	18,8	11,05	1,922	,060
Points	Father	23	13,13	10,88	1,922	,000

<sup>\*</sup>P<0.05

There was no significant difference in the depression parameters of the parents that participated in the study (p>0,05). Depression levels; mothers (18,80±11,05) moderate, fathers (13,13±10,88) mild depression.

**Table 7.** Anova test results according to the occupational variables

Variables	n	%	t	р
House wife	14	19,92		
Employee	4	10,75		
Self-employment	22	12,5	2,538	,066
Civil Servant	18	20,16		
Total	58	16,55		

In the ANOVA test result of the subjects according to occupational variables; house wives (19.92±12,36) moderate depression, employees (10.75±6.23) mild level, self-employments (12.50±10.11) mild level, civil servants (20.16±11.02) moderate depression levels were observed. Generally, the mean depression levels of all groups were mild level of depression (16.55±11,24).

**Table 8.** Anova test result of the educational levels of the mothers

Variables	n	Mean	Std. Deviation	f	р
High School	16	17,56	10,19		
Associate's Degree	12	13,66	11,69		
Bachelor's Degree	28	17,53	12,1	,474	,702
Master's Degree	2	12	,00		
Total	58	16,55	11,24		

There was no significant difference in the comparison of the educational variables and Beck Depression scale total scores of the mothers who participated in this research (p>0,05). In the ANOVA test result of the mothers according to the educational variables; High school (17,56±10,19) moderate depression, associate's degree (13,66±11,69) mild depression, bachelor's degree(17,53±12,10) moderate depression, master's degree (12±0) mild depression levels were observed.

**Table 9.** Anova test result of the educational levels of the fathers

Variables	n	Mean	Std. Deviation	f	р
High School	7	11,4286	7,41299		
Associate's Degree	9	19,2222	5,78312		
Bachelor's Degree	41	16,9512	12,58561	,714	,548
Master's Degree	1	12,0000	,00		
Total	58	16,5517	11,24554		

There was no significant difference in the comparison of the educational variables and Beck Depression scale total scores of the fathers who participated in this research (p>0,05). In the ANOVA test result of the fathers according to the educational variables; High School (11,42±7,41) mild depression, Associate's Degree (19,22±5,78) moderate depression, Bachelor's Degree (16,95±12,58) moderate depression, Master's Degree (12±0) mild depression were observed.

## 4. Results, Conclusions and Recommendations

In assessing the problems and mental conditions of families with autistic children, qualitative research identified that parents are forced to accept the situation when their children are diagnosed with autism, they undergo drastic changes in their lifestyles, become isolated from their communities, more sensuality, they worry about their future, and give up many things that wanted to do. Despite all of this, they often come to find that taking care of their children gives them happiness and initiate major changes in the ways they view life (Ustuner Top, 2009).

In a similar study; variables of families participating in the research were as follows: 80% were mothers, 54% were in the 36-50 age group, 62% were unemployed, 28% graduated from high school, 66% equal income & expense, 58% had 2 children, 92% were not relative, 36% had disabled children within the 6-9 age group, 74% of the children were mentally disabled, 56% of the children were male, 44% were female, 68% of them were educated in special education (DereliveOkur, 2008). In this study, occupational groups of the parents included: 24,1% were housewives, 6,9% were employees, 37,9% were self-employed and 31% were civil servants. Making up the participants were 60.3% mothers, 39,7% fathers, with average ages as follows: 25-35 (39,7%), 36-45 (46,6%), and 46-55 (13,8%). Educational levels of mothers were: 27,6% high school, 20,7% associate degree, 52.13% bachelor's degree. Educational levels of the fathers were; 12,1% high school, 15,5% associate degree, and 72,4% bachelor's degree.

In a study of the depression levels of parents with a disabled child, (Softa, 2013), the parents' mean depression scores were moderate:  $21,600 \pm 10,722$ . In a similar study in which the depression levels of disabled families were investigated, families were reported as severely depressed:  $39,98\pm10,71$ 

(Dereli&Okur, 2008). Ingersoll veHambrick (2011) found depression levels of families with autistic children were moderate  $21.42 \pm 12.85$ . In research that focused on the depression levels of both families with healthy children and families with autistic children, results showed that the depression levels of families with autistic children were higher (Durakan et al., 2010; Towairqi et al., 2015; Kiani et al., 2014).

As a result of studies on the level of depression and determination of the factors affecting parents with disabled children, parents' total depression score average was found to be low:  $13.44 \pm 9.51$  (Erginetal., 2007). According to the Beck Anxiety Scale, scores used in a study to determine anxiety, depression and stress levels of mothers of both mentally and physically disabled children, showed that mothers had higher depression scores than the control group (Uguz et al., 2004).

Demir et al. (2012) investigated depression levels of mothers of mentally disabled children, and the average scores were:  $21.60\pm12.99$ . In their work, Olsson & Hwang (2001) found that autistic families reported higher depression scores than the control group (normal developmental child) and children with mental retardation. In our study, the depression levels of mothers (18.80  $\pm$  11.05) and fathers (13.13  $\pm$  10.88) with autistic children were found to support the literature.

In a study that investigated the attitudes of mothers with mentally disabled children toward coping with depression, anxiety and stress (Sengul&Bayhan, 2013), the mean score using the Hamilton Depression Rating Scale was 6.0, the lowest and highest scores were 1-23, the mean score of the control group was 4.5, the lowest and highest scores were 0-19. The difference between these two groups is statistically significant. For depression levels, it was determined as severe depression  $(39.98\pm10.71)$ , and mothers  $(41.4\pm10.38)$  were found to have higher depression score than the fathers  $(34.3\pm10.60)$  (Dereli&Okur, 2008).

In a study of depression and anxiety levels of parents of autistic children, mothers were found to have higher depression scores than fathers (Firat, 2016). In our study, similar results were obtained for the depression levels of mothers (18.80±11,05) and fathers (13,13±10,88).

According to the results of our study and comparisons with other research, we concluded that parents of autistic children have higher levels of depression. The depression scores of the mothers were found to be higher than the depression scores of the fathers.

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