

NEAR EAST UNIVERSITY
GRADUATE SCHOOL OF SOCIAL SCIENCES
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MASTER'S PROGRAMME

MASTER'S THESIS

**PSYCHOLOGICAL SYMPTOMS AND ALEXITHYMIA TRAITS OF PARENTS HAVING CHILDREN
WITH SPECIAL NEEDS**

Gizem BOZALP AKGÜN

NICOSIA

2017

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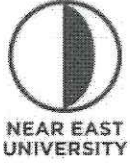


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I Gizem BOZALP AKGÜL, hereby declare that this dissertation entitled
"Psychological Symptoms And Alexithymia Traits Of
Parents Having Children With Special Needs"

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ABSTRACT**Psychological Symptoms And Alexithymia Traits Of Parents Having Children With Special Needs****Gizem Bozalp Akgün****June 2017**

The aim of the study is examined that psychological symptoms and alexithymia traits of parents having children with special needs. The study consist of 84 parents have children with special needs. Symptom Check List was used for determine that psychological symptoms and Toronto Alexithymia Scale was used for determine that alexithymic traits. Socio-demographic information form was used to learn that socio-demographic variables of participants by researchers. In the conclusion of the study, obsessive-compulsive and depression symptoms of parents was found that 1 of over. Somatization and depression scores of female participants than in male participants were found to be higher, significantly. The total scores of alexithymia of 36-40 age groups were higher than 30 years and under of the total scores of alexithymia. The scores of additional items were found significant difference according to the working style. The scores of interpersonal sensitivity, phobic anxiety, psychotism symptoms were determined to show significant difference according to low socioeconomic status. There was a significant and positive correlation between the scores of difficulty describing feeling and the symptom scores of somatization, obsessive-compulsive, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, psychotism, and additional items. There was a significant and positive correlation between the scores of difficulty identifying feeling and the symptoms scores of somatization, obsessive compulsive, interpersonal sensitivity, depression, anxiety, hostility, psychotism, additional items. Mental well-being of parents is very important for education and development of children with special needs. Likely, compenent and adequate psychologists about adult psychopathology should work in special education and rehabilitation centers.

Key Words: *Parents of children with special needs, Psychological Symptoms, Alexithymia, Special Education And Rehabilitation Center*

ÖZ**Özel Gereksinimli Çocuğa Sahip Olan Ebeveynlerin Psikolojik Belirtileri Ve Aleksitimi
Düzeylerinin Belirlenmesi****Gizem Bozalp Akgün****Haziran 2017**

Çalışmanın amacı özel gereksinimli çocuğa sahip olan ebeveynlerin psikolojik belirtilerinin ve aleksitimi düzeylerinin incelenmesidir. Çalışma, 84 özel gereksinimli çocuğun ebeveynlerinden oluşmaktadır. Psikolojik belirtileri saptamak amacıyla Psikolojik Belirti Tarama Ölçeği, aleksitimik özellikleri belirlemek için Toronto Aleksitimi Ölçeği kullanılmıştır. Çalışmada sosyo-demografik değişkenleri öğrenmek amacıyla araştırmacılar tarafından hazırlanan sosyo-demografik bilgi formu kullanılmıştır. Araştırma sonuçlarında, ebeveynlerin obsesif-kompulsif ve depresyon belirtileri 1'in üzerinde bulunmuştur. Kadın katılımcıların somatizasyon ve depresyon belirtileri, erkek katılımcılara nazaran anlamlı düzeyde daha fazla bulunmuştur. 36-40 yaş aralığı katılımcıların aleksitimi toplam puanları, 30 yaş ve altı olan katılımcıların aleksitimi toplam puanlarından daha yüksek bulunmuştur. Ek maddelerde görülen belirti puanları çalışma şekline göre anlamlı farklılık göstermiştir. Kişilerarası duyarlılık, fobik anksiyete, psikotizm belirtileri ile düşük sosyoekonomik düzey arasında anlamlı düzeyde farklılıklar tespit edilmiştir. Duyguları tanımada güçlük puanları ile somatizasyon, obsesif kompulsif, kişilerarası duyarlılık, depresyon, anksiyete, öfke, fobik anksiyete, paranoid düşünce, psikotizm, ek maddeler, belirti puanları arasında pozitif yönlü ve anlamlı ilişki bulunmuştur. Duyguları söze dökmeye güçlük puanları ile somatizasyon, obsesif kompulsif, kişilerarası duyarlılık, depresyon, anksiyete, öfke, psikotik, ek maddeler belirti puanları arasında pozitif yönlü ve anlamlı ilişki bulunmuştur. Bu çocukların eğitim ve gelişiminde ailenin ruhsal durumu önemli role sahiptir. Dolayısıyla özel eğitim ve rehabilitasyon merkezlerinde yetişkin psikopatolojisine hakim psikologların görev almasının gerektiği düşünülmektedir.

Anahtar kelimeler: *Özel gereksinimli çocukların ebeveynleri, Psikolojik Belirtiler, Aleksitimi, Özel Eğitim Ve Rehabilitasyon Merkezleri*

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ABBREVIATIONS

SES:	Socio-Economic Status
ASD:	Autistic Spectrum Disorders
DS:	Down Syndrome
WHO:	World Health Organization
ICF:	International Classification of Functioning
SCL-90-R:	The Symptom Checklist-90-Revised
TAS-20:	Toronto Alexithymia Scale-20
MR:	Mental Retardation
PW:	Prader Willi syndrome
CP:	Cerebral Palsy
PDD:	Pervasive Developmental Disorder
DMD:	Duchenne Musclar Dystrophy

1. INTRODUCTION

When parents have children, they rearrange and make changes in their lives to ensure their good and healthy development. This is a situation in which they are prepared and perceived as "normal". However, the situation changes when a child with special needs comes to the world and/or is diagnosed; loss of imagination and expectation is in question. Depending on the diagnosis group, the fact that the child has special needs is recognized and learned in the womb, birth, or developmental stages in which the various developmental retardations, differences and problems are experienced.

1.1. Child With Special Needs

Child/individual with special needs: According to the Ministry of National Education Special Education Services Regulation; "Individuals requiring special education are individuals who differ significantly from the level expected from their peers in terms of their individual characteristics and educational qualifications for various reasons".

According to the World Health Organization (WHO); "Functionality and disability in the International Classification of Functioning (ICF), adopted as a conceptual framework for the World Disability Report, is understood as a dynamic interaction between health conditions and contextual factors at both individual and environmental levels" and this interaction is "bio-psycho-social" (WHO, 2011 World Disability Report).

Child/individual with intellectual disability: According to the Ministry of National Education Regulation on Special Education Services (2000): "condition of inability with significant limitations in conceptual, social and practical adaptation skills with mental functions occurring before the age of 18"

Child/individual with a physical disability: According to the Ministry of National Education Regulation on Special Education Services (2000), physical disability is defined separately as orthopedic disability and disability due to nerve injury:

“Orthopedic disability: Due to disease, disorder and disability in skeletal, muscular and joints, the situation affecting individual's educational performance and social adaptation negatively”

“Disability due to nerve injury: Neurological impairment in development process, affecting the individual's educational performance and social adaptation negatively”

Disability in Multiple Areas: According to the Ministry of National Education Regulation on Special Education Services (2000): it is defined as "inability situation which is observed in multiple areas which heavily affect the individual's educational performance and social adaptation in a negative way during the developmental period".

1.2. Mourning Reaction Of Parents

Psychological difficulties experienced by parents may differ according to the diagnosis group and developmental level of children. Parents, together with knowing that their children have special needs, have many problems together (Deniz, Dilmaç, Arıcak, 2009, p. 953-968). When the parents learn that they have a different child, the feelings they experience are quite complex (Karpas & Girli, 2012, p. 69-85). The main feeling underlying the rejection of a child with special needs by the parents may be a "mourning reaction", which is due to the loss of a healthy child whom they dream of (As cited in MacGregor, 1994). Extreme sadness and mourning arise in parents after learning that their children have special needs (Fışlıoğlu & Fışlıoğlu, 1997; As cited in Deniz, Dilmaç, Arıcak, 2009, p. 955). According to Freud (1917), mourning is a reaction to the loss of a beloved close relative or some intellectual - abstract values like a country, liberty, an aim. According to Lindermann (1944), mourning is a complex process, a life that is determined by changes in emotional, cognitive, behavioral, bodily, and social areas that begin with a loss (As cited in Şenelmiş, 2006, p. 1-20). According to Sloman, Springer and Vachon (1993), mourning does not occur only because of the death of a living person; it can also emerge with the death of the dream of having "perfect" children (As cited in Sarısoy, 2000). The loss of the "ideal" in the dreams of people is in question. In fact, death is a physical loss, but

with the arrival of a child with special needs, this is perceived by the parents as "the loss of the ideal" (Karpas, Girli, 2012, p. 69-85). Some studies showed that with the birth and diagnosis of a child with special needs, their families show the same mourning reactions as those who mourn the death of one of their loved ones (Castle, 1998; Kozub, 2008; Leonard, 1986; Wong, 2005).

1.3. Psychological Symptoms Of Parents Having Children With Special Needs

In the current situation, some mothers enter into the lost and mournful process while others have feelings like guilt, nervousness (Cameron, Dodson, Day, 1991, p. 13-17). In a study using qualitative research method in Karabük by Kahraman and Çetin, the mothers first gave reactions such as shock, rejection, guilt and hostility when they learn the developmental retardation of their babies (Kahraman & Çetin, 2015, p. 97-128). It is seen in many types of research that having a child with special development in the family can cause an emotional tightness for family members, a stressful life experience and the presence of a constant stressor (McCubbin, 1989, p.436 – 443; Minners, 1988, p. 184 – 192; Daniş 2006, p. 101). The constant response reactions seen in parents, the effort to survive and stay strong, and the inability to accept the situation can lead to the appearance of some psychological symptoms. In some studies, the effects of the children with special needs on the family were examined and it was stated that the parents experienced feelings such as denial, shock, anxiety, anger, fear, guilt until they accepted this situation (Girli, Özkes, Yurdakul, 2000, p. 6-17). Likewise, 146 mothers were interviewed in 5 special education and rehabilitation centers operating in Ankara and the emotions experienced by these mothers were investigated in the direction of aim of the study. The feelings including sadness, uncertainty, anxiety, hopelessness, hostility, helplessness, guilt, painfulness, pity, loneliness and misfortune were found to be at the forefront (Daniş, M.Z., 2006, p.101). Thus, the psychological distress that is experienced causes impairment and difficulties in the functioning of the parents (İçmeli, Ataoğlu, Canan, Özçetin, 2008, p. 21-28). An individual with special needs who joins the family also brings psycho-social and economic problems (Yıldırım, Aşlar, Karakurt, 2012, p. 200-209). Some studies also support this. In a study conducted with 154 mothers having children with special needs (mental, physical,

hearing) in Erzincan province, depression, somatization, hostility, paranoid thought and psychoticism, anxiety, phobic anxiety were observed as "high" according to additional items, interpersonal sensitivity statements, SCL-90 scoring criteria, and socioeconomic status was found to be a significant variable affecting this situation at the same time (Yıldırım, Aşlar, Karakurt, 2012, p. 200-209).

In the study of sample consisting of 407 parents in Istanbul and Konya, the state and trait anxiety and life satisfaction of the parents were significantly different depending on the diagnosis group of the child: Parents having children with Down syndrome / mental retardation had the highest state and trait anxiety scores, while parents having children with language and speech retardation had the lowest score averages. When the life satisfaction of the parents was examined, it was seen that the parents of the children who had hearing diagnosis had the highest score, and the parents of the children diagnosed with Down syndrome / mental deficiency had the lowest average score (Deniz, Dilmaç, Arıçak, 2009, s. 953-968).

In studies conducted by Olson, McCubbin, Banes, Larnes, Mixen, Wilson (1983) and Turnbull and Winton (1984), anxiety factors in parents having a child with special needs are directly proportional to behavioral and health problems resulting from difficulties in diagnosis and developmental difficulties. In a study conducted by Uğuz et al. in 2004 to determine the anxiety, depression and stress levels of 80 mothers having mental retardation children and 89 mothers having children with normal development, mothers having children with mental retardation were found to have higher anxiety, depression and stress levels. In this study, of the children aged between 3-22 years, 29 were diagnosed with mental retardation (MR), 26 were diagnosed with autistic spectrum disorder (ASD) and 25 were diagnosed with cerebral palsy (CP), and their mothers constituted the experiment group, and 89 mothers having children with normal development constituted the control group (Uğuz, Toros, İnanç, Çolakkadıoğlu, 2004, p. 42-47).

In a study by Khamis (2007) in the United Arab Emirates, the sample consisted of parents of 225 children diagnosed with mental retardation; in accordance with the aim of the study, it was concluded that the parents' psychiatric symptoms increased in direct proportion to the level of disability or deficiency of the children; and it was

inversely proportional to socioeconomic status and the age of the children. In a study with the sample consisting of mothers having 40 children diagnosed with autism and 38 children diagnosed with mental retardation in Çukurova University Faculty of Medicine, general psychopathology scores of mothers having autistic children were found to be significantly higher compared to mothers of children with mental retardation (Fırat, Diler, Avcı, Seydaoglu, 2002, p. 679-684). In a study conducted in Bosnia and Herzegovina, the experimental group consisted of mothers (N = 23) and fathers (N = 12) of cerebral palsied children and control group consisted of mothers having children with normal development (N = 16). The aim of this study was to examine the depression in the families of children with cerebral palsy, no statistically significant difference was found between mothers and fathers in the experimental group and also no statistically significant relation was found between the experimental group and the control group (Mehmedinović, Sinanović, Ahmetović, 2012, p. 820-821). These past studies show that the psychological symptoms of parents having children with special needs are significantly higher. Parents having children with special needs should, therefore, receive psychological support. According to a research conducted in two special rehabilitation centers in Gaziantep it was detected that 46.9% of the mothers having children with mental and physical disabilities were uncomfortable with respect to the view of the society, 38.9% had difficulty communicating with their surroundings, 75.8% were worried about the future of their children, 46.3% stated that their children felt guilty due to their disability, 61.1% stated that their children had difficulty in the treatment process and 45.3% stated that they did not receive social support from the environment (Karadağ, 2009).

1.4. Alexithymia Levels Of Parents Having Children With Special Needs

Another part of the study is the study of the Alexithymia levels of parents having children with special needs. Alexithymia is a Greek word (Dereboy, 1990), and the person who first introduced this concept was Sifneos in 1972 (Koçak, 2002, p.183-212). It was used by psychoanalytic theorists to describe the psychosomatic statement, but a direct relationship between alexithymia and psychosomatics was not found; today's clinical description is the difficulty of recognizing, distinguishing and

expressing emotions (Koçak, 2002, p. 183-212). In the literature of mental health and disorders, alexithymia is a level (Taylor, 1984) or characteristics rather than being used as a diagnosis. The main features of alexithymic personality features are difficulty in recognizing, defining, distinguishing, expressing and verbalizing the feelings, the absence or limitation of fantasy and imaginary world, mechanical style thinking, outward cognitive structure, lack of dreaming, lack of creativity, weak empathy ability, behavior without thinking, anger-induced extreme crying, preferring the loneliness, persistent and repetitive speaking behavior on the same subject and messy expression (Lesser, 1981; Sifneos, 1988; Taylor 1991, Krystal 1979-1982).

1.4.1. What Is Alexthymia According To Psychoanalysis

According to psychoanalytic approach, in infancy and early childhood, the ability to imagine and create images can not improve due to the consequence of the inability of the child's internal representation arising from the disorder associated with the mother-child relationship. As a result, the personality of the child who does not have fantasy ability cannot be developed, and the defensive mechanism that the non-self-developed individual develops against psychotic diseases is alexithymia (Mc Dougall, 1982, p.81-90).

1.4.2. What Is Alexthymia According To Neurophysiological

According to the neurophysiological approach and researchers, the causes of alexithymia are as follows: Disconnection between the minds in the right and left hemispheres of the brain (Hoppe & Bogen, 1977, p. 148-155); disconnection between the limbic system and neocortex (Mac Lean, 1949, p. 338-353); sensory stimuli blocked in the striatum (Nemiah, 1975, p. 140-147); and finally impairment in the processing and response of emotions due to impairment of function in the anterior chamber of the brain in a study conducted in 1997 (Lane, Ahern, Schwrtz, 1997, p. 834-844).

1.4.3. What Is Alexthymia According To Cognitive Approach

According to the cognitive approach; the cognitive process that results from psychological problems and that has lost its function is interpreted in an improper

way and assumptions are formed that distort functionality (Beck, 1995). The assumptions that impair functioning, depending on early experience, constitute negative schemas, distortions, and alexithymia can be explained in this way (Beck, 1995).

1.4.4. What Is Alexithymia According To Social Learning And Behavioral Approach

According to social learning and the behavioral approach, alexithymic characteristic which is more common in socioeconomic and sociocultural societies (Lesser, 1985, p. 82-85) is a learned condition in the family and social environment (Stoudemire, 1991, p. 365-381).

1.5. Similarities Between Autism Spectrum Disorder And Asperger Syndrome With Alexithymia

From all these studies, alexithymia may be of psychological origin. Traumatic events, developmental problems, sociocultural factors (Lesser, 1981, p.537, Thompson 2008, p.11), miscommunication in family members (Kench & Irwin, 2000, p 737-744) may lead to the development of alexithymic features. There are significant similarities between autism spectrum disorder and Asperger syndrome with alexithymia. Alexithymic individuals also cannot understand, name or describe their feelings of themselves and others, as seen in autism and Asperger syndrome (Taylor, 1987, p. 88-90). The alexithymic features seen in individuals with autism spectrum disorder diagnosis are 85% (Thompson, 2009, p.20). Cold personality, solid personality and pragmatic personality characteristics were observed in the parents of children who were diagnosed with ASD (Hurley et.al., 2007, p.1680).

1.6. Details Of The Research Groups

In this study, the diagnoses of children with special needs were divided into three main groups: mental disability, physical disability, mental and physical disability. Parents were included in the mental disability group if the special education courses in the special education and rehabilitation center aimed at reducing the symptoms of diagnosis aimed only at mental development, If it was intended for physical

development and if education was taken in this direction, they were included in the group of physical disability, and if the purpose was to improve both areas and the lessons were taken in this direction, the parents were included in the group of mental and physical disability (disability in multiple areas).

Parents of the children diagnosed with PDD, ASD, Asperger syndrome, special learning disability, mitochondrial myopathy constituted the group of mental disability, parents of the children diagnosed with fragile x syndrome, cerebral palsy, tibia hemimelia, DMD muscle disorder, hypotonia (some part) chromosomal anomaly, spina bifida, down syndrome, troxinhydroxylase constituted the group of physical disability, and parents of children diagnosed with epilepsy, hydrocephalus epilepsy, general growth retardation, hypothyria (some part), cri dve chat syndrome, thin motor retardation, Williams syndrome constituted the group of mental and physical disability.

1.7. The Aim Of The Study

The aim of the study was to examine the psychological symptoms and alexithymia levels of parents having children with special needs according to the differences between these three groups and the variables included in the socio-demographic information form. The aim of the study is also to examine the psychological symptoms seen in parents having children with special needs according to the level of alexithymia. Taking care of a child with special needs for many years can cause emotional blunting over time. For example, alexithymic people cannot perceive and describe emotional aspects of depression and anxiety; these individuals notice and explain the somatic symptoms of depression and the autonomic symptoms of anxiety (Öztürk, Uluşahin, 2015, p.129).

The study with all of these aims searched for answers to the following questions:

Are the psychological indications and alexithymia levels of parents having children with special needs differentiated according to these three diagnostic groups?

Is there a significant difference between socio-demographic variables and psychological symptoms and alexithymia levels?

In the SCL-90 psychological symptom screening scale, are somatization (SOM) score and alexithymia score directly proportional??

In children of parents with a high level of alexithymia, does the mental disability group, which is predominant in ASD diagnosis, differ from the other two groups?

Do the psychological symptoms of parents who receive psychological support differ compared to other parents?

2. METHOD OF THE STUDY

2. 1. The Importance of the Study

Parents having children with special needs may experience various psychological pressure, psychological symptoms and alexithymic characteristics after learning the diagnosis of their children. It is necessary those children's developments are adequately well-maintained, functionally and permanently trained so that they are as close as possible to their peers with normal development. Therefore, the mental state of the parents is of primary importance in the care and education of children. In this respect, the psychological support of the parents having children with special needs is of importance for at least two people compared to the other parents.

2. 2. The Purpose and Problem Statements of the Study

Many studies have mentioned the difficulty of having a child with special needs and the mental health of families being negatively affected. The aim of the study was to determine psychological indications and alexithymia levels of parents having children with special needs, to determine whether the subscales of The Symptom Checklist-90-Revised (SCL-90-R) and Toronto Alexithymia Scale-20 (TAS-20) vary between these three groups which were mentally, physically, mentally and physically separated, and to investigate the relationship of all these with socio-demographic variables.

The ethics committee approved this study and later the sampling that constituted the study was obtained. A total of 90 participants were planned for the three groups formed within the scope of the study, but the volunteer participants were limited to 84.

Explanation of the study to the participants by talking face to face, answering of TAS-20, SCL-90-R, socio-demographic information form and informed consent took about 30 minutes as planned.

2. 3. Population and Sample

The present study was included 84 parents (66 mothers, 18 fathers) of handicapped children. 29 in the mental group, 26 in the physical group and 29 in the mental and physical group agreed to voluntarily a special school parents in the research.

2. 4. Instruments and Measures

SCL-90-R and TAS-20 are used to determine of psychological symptoms and alexithymic levels of parents having children with special needs. Also, socio-demographic information form is used to determine patients' age, gender, marital status, level of education, occupation, style of working, living place, family unit, number of children, number of handicapped children, diagnose of child, date of diagnoses, SES, mental illness in the past, getting of psychological counseling, using of psychiatric drug, mental illness in the family.

And the material used as paper and pencil.

2. 4. 1. Socio – Demographic Variables

The socio – demographic variables include, age, gender, marital status, level of education, occupation, style of working, living place, family unit, number of children, number of handicapped children, diagnose of the handicapped children, date of diagnosis, SES (socio-economic status), mental illness in the past, getting of psychological counselling, using of psychiatric drug, mental illness in the family.

2. 4. 2. The Symptom Checklist-90-Revised (SCL – 90 – R)

The Symptom Checklist-90-Revised (SCL-90-R) is an instrument for measuring of psychiatric symptoms and the levels of symptoms for 17 and over age people. The instrument developed by Derogatis in 1977; the Turkish standardization was conducted by Dağ in 1991 which has a Cronbach's alpha of 0.97 (Dağ, 1991, s. 7-11). SCL-90-R is a self-report symptoms inventory and it is consist of 90 items; each of all items is rated on a five-point Likert scale of distress, ranging from "not at all" (0) to "extremely" (4) (Schmitz, Kruse, Heckrath, Alberti, Tress, 1999, s.360-366). The items consist of totally 10 subscales: 9 subscales and 1 additional items.

According to subscales, reliability coefficients of SCL-90-R are somatization (SOM) .82, obsessive-compulsive (O-C) .84, interpersonal sensitivity (INS) .79, depression (DEP) .78, anxiety (ANX) .73, hostility (HOS) .79, phobic anxiety (FHOB) .78, paranoid ideation (PAR) .63, psychoticism (PSY) .73, additional items .77'dir (Kılıç, 1991). The validity of SCL-90-R determined with validity of similar instruments of method and the validity of MMPI was taken criteria; alteration of pearson correlation

coefficient is between 0.50 and 0.59 and median value is .42 (Kılıç, 1991, s.1). The symptoms of each test and the levels of these symptoms are determined by dividing the sum of the numerical values given to the items by the number of items in that subtest. Interpretation of points is considered as "normal" between 0.000 - 1.50, "high" between 1.51 – 2.50, and "very high" between 2.51– 4.00.

2. 4. 3. Toronto Alexithymia Scale (TAS-20)

The instrument developed by Bagby and colleagues in 1994, the Turkish standardization was conducted by Sayar and colleagues in 2001 (Sayar and colleagues, 2001). Alexithymia is a personality characteristics in which the individual is unable to identify and describe their own emotions; TAS-20 investigate the alexithymia (Güleç, Sayar, Özkorumak, 2005, s. 93). TAS-20 is a self-report inventory and it consists of 20 items; each of all items is rated on a five-point Likert scale, ranging from “strongly disagree” (1) to “strongly agree” (5); and the high scores indicate alexithymia (Sayar and colleagues, 2005). If the score is between 52 and 60, there is a possible alexithymia: If the score is 61 or greater than 61, there is a alexithymia: If the score is 51 or less than 51, there is not alexithymia (Bagby and colleagues, 1994).

TAS-20 has 3 subscales which are “Difficulty Describing Feelings” , “Difficulty Identifying Feeling”, “Externally-Oriented Thinking” (Bagby and colleagues, 1994). The “Difficulty Describing Feelings” subscale has 5 items which are 2, 4, 11, 12, 17; “Difficulty Identifying Feeling” subscale has 7 items which are 1, 3, 6, 7, 9, 13, 14; “Externally-Oriented Thinking” subscale has 8 items which are 5, 8, 10, 15, 16, 18, 19, 20 (Bagby and colleagues, 1994).

The instrument has a Cronbach’s alpha of 0.78, cronbach’s alpha is between 0.57-0.80 of the subscales; and the 3 factor structure was found to be theoretically consistent with the alexithymia construct about validity and reliability (Kemerli, Çelik, 2015).

2.5. Procedure

In the present study, the sample of this study consisted of parents of children who were trained in a special education and rehabilitation center in İstanbul. In March-June 2017, participants were attended voluntarily randomly. The data was obtained after a face-to-face interview was conducted and the informed consent form was

signed. Data collection was carried out by researcher. An informed consent form was used to give the participants before the questionnaires.

2.6. Statistical Analysis

The participants were categorized three main groups according to their diagnoses of children (mental disability, physical disability, mental and physical disability) by researchers. The participants were examined the psychological symptoms and alexithymia levels according to the differences between these three groups and variables included in the socio-demographic informations.

All statistical analyses were carried out using SPSS 21.00 package program. Since scale scores had normal distribution, independent two-sample t-test was used to compare the variables of gender, family type, psychiatric disease history, family history of psychiatric disease, current psychological support status, current psychiatric drug use. The ANOVA test was used for comparison of age, education level, occupation, type of working, economic status, number of children, diagnosis of the child with special needs and duration of diagnosis. When differences were detected among groups in the ANOVA test, the Tukey HSD post hoc test was used in binary comparisons. Pearson's correlation analysis was used for the relationship between alexithymia and psychological symptoms. The level of significance was determined as 0.05 ($p < 0.05$) in the analyses.

3. RESULTS

All statistical analyses were carried out using SPSS 21.00 package program. The socio-demographic characteristics of the participants were expressed in frequency and percentages, and the means of scale and its subdomains and standard deviation were shown in descriptive statistics table. The skewness coefficient was used in the normality test of the scale scores. When the skewness coefficient, which is used in the normal distribution feature of the scores obtained from a continuous variable, stays between the limits of ± 1 , it can be interpreted that the scores do not show a significant deviation from the normal distribution (Buyukozturk, 2011: 40). Since scale scores had normal distribution, independent two-sample t-test was used to compare the variables of gender, family type, psychiatric disease history, family history of psychiatric disease, current psychological support status, current psychiatric drug use. The ANOVA test was used for comparison of age, education level, occupation, type of working, economic status, number of children, diagnosis of the child with special needs and duration of diagnosis. When differences were detected among groups in the ANOVA test, the Tukey HSD post hoc test was used in binary comparisons. Pearson's correlation analysis was used for the relationship between alexithymia and psychological symptoms. The level of significance was determined as 0.05 ($p < 0.05$) in the analyses.

Table 1. The distribution according to the demographic characteristics of the participants

Socio-demographic variables	Groups	n	%
Gender	Female	66	78,6
	Male	18	21,4
Age (36,78±6,81)	30 years and under	16	19,0
	31-35 years	29	34,5
	36-40 years	14	16,7
	41 years and over	25	29,8
Level of education	Primary school graduate	21	25,0
	Graduate of secondary school	19	22,6
	High-school graduate	12	14,3
	Bachelor's degree	32	38,1
Occupation	Officers	12	14,3
	Private sector employees	24	28,6
	Layman	48	57,1
Style of working	Full time	25	29,8
	Shift work	7	8,3
	Non-working/retired	52	61,9
SES	Bad	9	10,7
	Middle-class	50	59,5
	Good	25	29,8
Family unit	Nuclear family	75	89,3
	Extended family	9	10,7
Number of children	1 child	24	28,6
	2 children	40	47,6
	3 children and over	20	23,8
Mental illness in the past	Yes	8	9,5
	No	76	90,5
Mental illness in the family	Yes	6	7,1
	No	78	92,9
Getting of psychological counselling in present	Yes	3	3,6
	No	81	96,4
Using of psychiatric drug in present	Yes	3	3,6
	No	81	96,4
Diagnose of child	Mental	29	34,5
	Physical	26	31,0
	Mental and physical	29	34,5
Elapsed time since diagnosis	Less than 3 years	27	32,1
	3-5 years	28	33,3
	More than 5 years	29	34,5

Of 84 participants, 78.6% were female and 21.4% were male. The mean age of the participants was found to be 36.78 ± 6.81 years and 19% of them aged below 30 years, 34.5% of them below 31-35 years, 16.7% of them in the range of 36-40 years, 31.1% of them over 41 years. The education level was at primary school level for

25% of the participants, at secondary school level for 22.6% of them, at high school level for 14.3% of them and at university level for 38.1% of them. Of the participants, 14.3% were civil servants, 28.6% were private sector employee / self employed and 57.1% were housewives. Of the participants, 29.8% were working full-time, 8.3% were working in shifts and 61.9% were not working / retired. Of the participants, 10.7% had bad economic status, 59.5% had moderate economic status and 29.8% had good economic status. Of the participants, 89.3% were living in nuclear family and 10.7% were living in large family. Of the participants, 28.6% had one child, 47.6% had two children and 23.8% had three or more children.

Personal history of psychiatric disease was present in 9.5 % of the participants and family history of psychiatric disease was present in 7.1% of them. Of the participants, 3.6% were currently receiving psychological support and using medication. Of the participants having child with special needs, 34.5% had mental diagnosis, 31% had physical diagnosis, and 34.5% had both mental and physical diagnosis. The diagnosis duration of the children with special needs was less than three years in 32.1% of them, between 3-5 years in 33.3% of them and more than 5 years in 34.5% of them.

Table 2. Descriptive statistics belonging to the scales

Scales and sub-scales	Min.	Max.	Mean	Sd
Toronto Alexithymia Scale				
Difficulty Describing Feelings	1	4	2,15	0,67
Difficulty Identifying Feeling	1	4	2,34	0,67
Externally-Oriented Thinking	2	4	2,81	0,44
Alexithymia Total	29	67	49,15	9,06
The Symptom Checklist-90-Revised (SCL – 90 – R)				
Somatization	0	3	0,93	0,80
Obsessive-compulsive	0	3	1,08	0,71
Interpersonel sensitivity	0	4	0,87	0,75
Depression	0	4	1,08	0,82
Anxiety	0	3	0,67	0,63
Hostility	0	4	0,77	0,73
Phobic anxiety	0	3	0,28	0,49
Paranoid ideation	0	3	0,83	0,72
Psychotism	0	3	0,44	0,50
Additional items	0	3	0,89	0,67

The total alexithymia score of the participants was found to be 49.15 ± 9.06 and they were detected not to be alexithymic (<61).

In the scale of psychological symptoms, the mean scores in the dimentions of obsessive compulsive symptom (1.08 ± 0.71) and depression (1.08 ± 0.82) were found to be over one point and they were below one point in the dimensions of other psychology symptoms.

Table 3. The comparison of the alexithymia scores according to the child's diagnosis with the ANOVA test results

Scales and sub-scales	Diagnosis	n	Mean	Sd	F	p
Difficulty Describing Feelings	Mental	29	2,18	0,71	0,06	0,941
	Physical	26	2,12	0,54		
	Mental and	29	2,14	0,75		
	Physical	29	2,23	0,73		
Difficulty Identifying Feelings	Mental	26	2,40	0,59	0,51	0,604
	Physical	29	2,38	0,68		
	Mental and	29	2,78	0,39		
	Physical	26	2,80	0,52		
Externally-Oriented Thinking	Mental	29	2,84	0,40	0,14	0,873
	Physical	29	48,66	10,22		
	Mental	26	49,27	8,50		
	Physical	29	49,55	8,61		
ALEXITHYMIA TOTAL	Mental and	29	49,55	8,61	0,07	0,930
	Physical	29	49,55	8,61		

It was determined that the total scores of alexithymia did not show any significant difference according to the diagnosis of the children with special needs ($p > 0,05$).

Table 4. The comparison of the psychological symptoms' (SCL-90-R) scores of the children belonging to the ANOVA test results according to the child's diagnosis

Scales and sub-scales	Diagnosis	n	mean	Sd	F	p
Somatization	Mental	29	1,05	0,92	0,45	0,638
	Physical	26	0,89	0,72		
	Mental and	29	0,86	0,77		
	Physical	29	1,19	0,77		
Obsessive-compulsive	Physical	26	1,05	0,66	0,55	0,577
	Mental and	29	1,00	0,69		
	Physical	29	0,80	0,80		
	Physical	26	0,94	0,66		
Interpersonal sensitivity	Mental and	29	0,88	0,79	0,23	0,799
	Physical	29	1,18	0,84		
	Physical	26	1,04	0,81		
	Mental and	29	1,00	0,81		
Depression	Physical	29	0,70	0,64	0,39	0,677
	Physical	26	0,69	0,59		
	Mental and	29	0,61	0,67		
	Physical	29	0,74	0,67		
Anxiety	Physical	26	0,79	0,66	0,18	0,833
	Mental and	29	0,61	0,67		
	Physical	29	0,74	0,67		
	Physical	26	0,79	0,66		
Hostility	Mental and	29	0,78	0,88	0,04	0,964
	Physical	29	0,25	0,34		
	Physical	26	0,30	0,47		
	Mental and	29	0,30	0,63		
Phobic anxiety	Physical	29	0,84	0,69	0,08	0,925
	Physical	26	0,86	0,74		
	Mental and	29	0,79	0,76		
	Physical	29	0,43	0,44		
Paranoid Ideation	Physical	26	0,44	0,54	0,07	0,931
	Mental and	29	0,44	0,55		
	Physical	29	0,87	0,72		
	Physical	26	0,91	0,59		
Psychotism	Mental and	29	0,44	0,55	0,01	0,990
	Physical	29	0,87	0,72		
	Physical	26	0,91	0,59		
	Mental and	29	0,91	0,71		
Addition Items	Physical	29	0,87	0,72	0,04	0,964
	Physical	26	0,91	0,59		

It was determined that the scores of psychological symptoms did not show any significant difference according to the diagnosis of the children with special needs ($p > 0,05$).

Table 5. The comparison of the relationship between alexithymia scores and gender with t test's results

	Gender	n	mean	Sd	t	p
Difficulty Describing Feelings	Female	66	2,13	0,66	-0,53	0,599
	Male	18	2,22	0,71		
Difficulty Identifying Feeling	Female	66	2,30	0,67	-1,02	0,312
	Male	18	2,48	0,65		
Externally-Oriented Thinking	Female	66	2,81	0,42	0,07	0,944
	Male	18	2,80	0,50		
ALEXITHYMIA TOTAL	Female	66	48,83	8,83	-0,62	0,537
	Male	18	50,33	10,04		

It was determined that the total scores of alexithymia did not show any significant difference according to gender ($p > 0,05$).

Table 6. The comparison of the relationship between the scores of psychological symptoms (SCL-90-R) and gender with t test's results

	Gender	n	mean	Sd	t	p
Somatization	Female	66	1,05	0,86	2,59	0,011
	Male	18	0,51	0,32		
Obsessive-compulsive	Female	66	1,13	0,73	1,28	0,203
	Male	18	0,89	0,58		
Interpersonal sensitivity	Female	66	0,93	0,79	1,31	0,193
	Male	18	0,67	0,54		
Depression	Female	66	1,17	0,85	2,00	0,049
	Male	18	0,74	0,60		
Anxiety	Female	66	0,73	0,68	1,89	0,062
	Male	18	0,42	0,34		
Hostility	Female	66	0,82	0,76	1,22	0,226
	Male	18	0,58	0,62		
Phobic anxiety	Female	66	0,32	0,54	1,59	0,116
	Male	18	0,12	0,19		
Paranoid Ideation	Female	66	0,89	0,76	1,44	0,153
	Male	18	0,61	0,52		
Psychotism	Female	66	0,43	0,52	-0,27	0,787
	Male	18	0,47	0,46		
Additional Items	Female	66	0,95	0,71	1,58	0,118
	Male	18	0,67	0,48		

*p< 0.05

The somatization scores were determined to show significant difference according to gender ($t = 2.59$, $p < 0.05$). The somatization score of the female participants (1.05 ± 0.86) was significantly higher than the scores of male participants (0.51 ± 0.32). The somatization symptoms of the women having children with special needs were significantly higher than that of the men.

The depression scores were determined to show significant difference according to gender ($t = 2.00$; $p < 0.05$). The depression score of the female participants ($1.17 \pm$

0.85) was significantly higher than that of the male participants (0.74 ± 0.60). The depression symptoms of the women having children with special needs were observed significantly more compared to the men.

Obsessive-compulsive, interpersonal sensitivity, anxiety, hostility, phobic-anxiety, paranoid thought, psychotic and additional scores did not show significant difference according to gender ($p > 0,05$).

Table 7. The comparison of the relationship between alexithymia scores and age groups with ANOVA test's results

	Age groups	n	mean	Sd	F	p	Significant differences
Difficulty Describing Feelings	A-30 years and under	16	1,96	0,66	1,73	0,166	
	B-31-35 years	29	2,07	0,65			
	C-36-40 years	14	2,48	0,71			
	D-41 years and over	25	2,17	0,65			
Difficulty Identifying Feeling	A-30 years and under	16	2,11	0,76	2,67	0,052	
	B-31-35 years	29	2,28	0,56			
	C-36-40 years	14	2,76	0,67			
	D-41 years and over	25	2,30	0,66			
Externally-Oriented Thinking	A-30 years and under	16	2,70	0,42	1,68	0,178	
	B-31-35 years	29	2,83	0,45			
	C-36-40 years	14	3,01	0,44			
	D-41 years and over	25	2,73	0,41			
ALEXITHYMIA TOTAL	A-30 years and under	16	45,88	6,98	3,08	0,032	C>A
	B-31-35 years	29	48,55	8,95			
	C-36-40 years	14	55,21	9,02			
	D-41 years and over	25	48,56	9,30			

It was determined that the score of difficulty in recognizing feelings, in expressing feeling and externally-oriented thinking did not show any significant difference according to age groups ($p > 0.05$). The total scores of alexithymia were determined to show significant difference according to age groups ($t = 3.08$, $p < 0.05$). According to the results of the Tukey HSD post hoc test, the participants in the age group of 36-40 years had significantly higher alexithymia total scores (55.21 ± 9.02) than the participants in the age group of 30 years and below (45.88 ± 6.98).

Table 8. The comparison of the scores of psychological symptoms according to the age groups

	Age Groups	n	mean	Sd	F	p
Somatization	A-30 years and under	16	0,95	0,89	2,18	0,097
	B-31-35 years	29	0,74	0,79		
	C-36-40 years	14	1,39	0,72		
	D-41 years and over	25	0,90	0,74		
Obsessive-compulsive	A-30 years and under	16	1,25	0,72	1,87	0,141
	B-31-35 years	29	0,88	0,80		
	C-36-40 years	14	1,35	0,63		
	D-41 years and over	25	1,05	0,57		
International sensitivity	A-30 years and under	16	1,00	0,97	2,09	0,108
	B-31-35 years	29	0,72	0,81		
	C-36-40 years	14	1,25	0,53		
	D-41 years and over	25	0,74	0,52		
Depression	A-30 years and under	16	1,23	1,06	2,18	0,097
	B-31-35 years	29	0,85	0,82		
	C-36-40 years	14	1,48	0,56		
	D-41 years and over	25	1,01	0,69		
Anxiety	A-30 years and under	16	0,87	0,91	1,55	0,208
	B-31-35 years	29	0,52	0,51		
	C-36-40 years	14	0,85	0,58		
	D-41 years and over	25	0,60	0,54		
Hostility	A-30 years and under	16	0,95	0,95	1,69	0,176
	B-31-35 years	29	0,54	0,58		
	C-36-40 years	14	0,98	0,73		
	D-41 years and over	25	0,81	0,71		
Phobic anxiety	A-30 years and under	16	0,54	0,84	2,67	0,053
	B-31-35 years	29	0,14	0,22		
	C-36-40 years	14	0,36	0,43		
	D-41 years and over	25	0,23	0,40		
Paranoid Ideation	A-30 years and under	16	0,97	0,96	2,16	0,099
	B-31-35 years	29	0,60	0,58		
	C-36-40 yeras	14	1,14	0,74		
	D-41 years and over	25	0,83	0,63		
Psychotism	A-30 years and under	16	0,46	0,66	1,40	0,250
	B-31-35 years	29	0,30	0,43		
	C-36-40 years	14	0,62	0,42		
	D-41 years and over	25	0,48	0,50		
Additional Items	A-30 years and under	16	1,13	0,84	2,67	0,053
	B-31-35 years	29	0,67	0,68		
	C-36-40 years	14	1,15	0,55		
	D-41 years and over	25	0,86	0,52		

It was determined that the scores of psychological symptoms did not show any significant difference according to the age groups ($p > 0,05$).

Table 9. The comparison of the relationship between alexithymia scores and education level with ANOVA test's results

	Education level	n	mean	Sd	F	p
Difficulty Describing Feeling	A-Primary school graduate	21	2,27	0,62	0,47	0,702
	B-Graduate of secondary school	19	2,15	0,60		
	C-High-school graduate	12	1,99	0,65		
	D-Bachelor's degree	32	2,13	0,76		
Difficulty Identifying Feeling	A- Primary school graduate	21	2,49	0,70	0,55	0,648
	B- Graduate of secondary school	19	2,32	0,73		
	C- High-school graduate	12	2,35	0,57		
	D- Bachelor's degree	32	2,24	0,66		
Externally-Oriented Thinking	A- Primary school graduate	21	2,94	0,42	2,36	0,078
	B- Graduate of secondary school	19	2,83	0,41		
	C- High-school graduate	12	2,93	0,43		
	D- Bachelor's degree	32	2,66	0,43		
ALEXITHYMIA TOTAL	A- Primary school graduate	21	51,86	8,94	1,05	0,374
	B- Graduate of secondary school	19	49,26	7,56		
	C- High-school graduate	12	49,08	7,59		
	D- Bachelor's degree	32	47,34	10,31		

It was determined that the scores of alexthymia did not show any significant difference according to the education levels ($p > 0,05$).

Table 10. The comparison of the relationship between the scores of psychological symptoms and education level with anova

	Education Level	n	mean	Sd	F	p
Somatization	A-Primary school graduate	21	1,20	0,89	1,11	0,349
	B-Graduate of secondary school	19	0,92	0,96		
	C-High-school graduate	12	0,81	0,73		
	D-Bachelor's degree	32	0,82	0,65		
Obsessive-compulsive	A- Primary school graduate	21	1,10	0,76	0,38	0,770
	B- Graduate of secondary school	19	1,15	0,74		
	C- High-school graduate	12	0,88	0,62		
	D- Bachelor's degree	32	1,09	0,70		
Interpersonal sensitivity	A- Primary school graduate	21	0,97	0,89	2,10	0,107
	B- Graduate of secondary school	19	1,16	0,90		
	C- High-school graduate	12	0,57	0,55		
	D- Bachelor's degree	32	0,74	0,54		
Depression	A- Primary school graduate	21	1,10	0,76	0,75	0,528
	B- Graduate of secondary school	19	1,28	1,00		
	C- High-school graduate	12	0,85	0,77		
	D- Bachelor's degree	32	1,03	0,76		
Anxiety	A- Primary school graduate	21	0,71	0,60	0,57	0,636
	B- Graduate of secondary school	19	0,79	0,79		
	C- High-school graduate	12	0,51	0,52		
	D- Bachelor's degree	32	0,63	0,59		
Hostility	A- Primary school graduate	21	0,82	0,72	1,36	0,261

Phobic Anxiety	B- Graduate of secondary school	19	1,01	0,94	1,00	0,397
	C- High-school graduate	12	0,50	0,59		
	D- Bachelor's degree	32	0,70	0,63		
	A- Primary school graduate	21	0,24	0,34		
Paranoid Ideation	B- Graduate of secondary school	19	0,43	0,77	0,92	0,437
	C- High-school graduate	12	0,13	0,25		
	D- Bachelor's degree	32	0,28	0,42		
	A- Primary school graduate	21	0,78	0,72		
Psychotism	B- Graduate of secondary school	19	1,04	0,86	1,04	0,378
	C- High-school graduate	12	0,61	0,72		
	D- Bachelor's degree	32	0,82	0,63		
	A- Primary school graduate	21	0,42	0,38		
Additional items	B- Graduate of secondary school	19	0,54	0,64	1,58	0,200
	C- High-school graduate	12	0,23	0,28		
	D- Bachelor's degree	32	0,47	0,54		
	A- Primary school graduate	21	1,04	0,67		
	B- Graduate of secondary school	19	1,06	0,80		
	C- High-school graduate	12	0,63	0,56		
	D- Bachelor's degree	32	0,80	0,60		

It was determined that the scores of psychological symptoms did not show any significant difference according to the education levels ($p > 0,05$).

Table 11. The comparison of the relationship between alexithymia scores and occupation with ANOVA test's results

Scales and subscales	Occupation	n	mean	Sd	F	p
Difficulty Describing Feelings	Officers	12	2,38	0,86	1,34	0,268
	Private sector employees	24	2,00	0,55		
	Layman	48	2,16	0,67		
	Officers	12	2,45	0,79		
Difficulty Identifying Feelings	Private sector employees	24	2,20	0,53	0,75	0,477
	Layman	48	2,38	0,70		
	Officers	12	2,74	0,51		
	Private sector employees	24	2,72	0,40		
Extra-Oriented Thinking	Layman	48	2,86	0,44	0,96	0,388
	Officers	12	50,83	11,79		
	Private sector employees	24	46,79	7,58		
	Layman	48	49,92	8,96		
ALEXITHYMIA TOTAL						

It was determined that the scores of alexithymia did not show any significant difference according to the occupation ($p > 0,05$).

Table 12. The comparison of the relationship between the scores of psychological symptoms and occupation with ANOVA test's results

Scales and subscales	Occupation	n	mean	Sd	F	p
Somatization	Officers	12	0,81	0,58	2,54	0,084
	Private sector employees	24	0,67	0,63		
	Layman	48	1,10	0,90		
Obsessive-compulsive	Officers	12	1,21	0,67	1,07	0,348
	Private sector employees	24	0,90	0,66		
	Layman	48	1,13	0,74		
Interpersonal sensitivity	Officers	12	0,70	0,48	1,26	0,290
	Private sector employees	24	0,73	0,60		
	Layman	48	0,98	0,85		
Depresssion	Officers	12	1,09	0,77	0,80	0,455
	Private sector employees	24	0,90	0,79		
	Layman	48	1,16	0,84		
Anxiety	Officers	12	0,63	0,46	0,78	0,460
	Private sector employees	24	0,55	0,59		
	Layman	48	0,74	0,68		
Hostility	Officers	12	0,78	0,74	0,34	0,711
	Private sector employees	24	0,67	0,69		
	Layman	48	0,82	0,76		
Phobic Anxiety	Officers	12	0,24	0,29	0,23	0,793
	Private sector employees	24	0,24	0,43		
	Layman	48	0,31	0,56		
Paranoid Ideation	Officers	12	0,74	0,65	0,22	0,800
	Private sector employees	24	0,78	0,65		
	Layman	48	0,87	0,78		
Psychotism	Officers	12	0,45	0,41	0,01	0,996
	Private sector employees	24	0,44	0,56		
	Layman	48	0,44	0,50		
Additional items	Officers	12	0,76	0,61	1,31	0,274
	Private sector employees	24	0,76	0,57		
	Layman	48	1,00	0,72		

It was determined that the scores of psychological symptoms did not show any significant difference according to the occupation ($p > 0,05$).

Table 13. The comparison of the relationship between the scores of alexithymia and style of working with ANOVA test's results

Scales and subscales	Style of working	n	mean	Sd	F	p
Difficulty Describing Feeling	Full time	25	2,22	0,73	1,00	0,372
	Shift work	7	1,82	0,59		
	Non-working/retired	52	2,16	0,65		
Difficulty Identifying Feeling	Full time	25	2,38	0,63	2,00	0,142
	Shift work	7	1,86	0,41		
	Non-working/retired	52	2,38	0,70		
Extra-Oriented Thinking	Full time	25	2,73	0,48	0,54	0,582
	Shift work	7	2,80	0,34		
	Non-working/retired	52	2,84	0,43		
ALEXITHYMIA TOTAL	Full time	25	49,24	9,82	1,07	0,349
	Shift work	7	44,43	7,46		
	Non-working/retired	52	49,75	8,84		

It was determined that the scores of alexithymia did not show any significant difference according to the style of working ($p > 0,05$).

Table 14. The comparison of the relationship between the scores of psychological symptoms and style of working with ANOVA test's results

Scales and subscales	Style of working	n	mean	Sd	F	p	Significant differences
Somatization	A-Full time	25	0,80	0,67	2,66	0,076	
	B-Shift work	7	0,42	0,42			
	C-Non working/retired	52	1,07	0,87			
Obsessive-compulsive	A- Full time	25	1,10	0,65	1,18	0,312	
	B- Shift work	7	0,69	0,85			
	C- Non working/retired	52	1,12	0,71			
Interpersonal sensitivity	A- Full time	25	0,80	0,54	1,74	0,181	
	B- Shift work	7	0,43	0,59			
	C- Non working/retired	52	0,96	0,83			
Depression	A- Full time	25	1,10	0,81	2,00	0,142	
	B- Shift work	7	0,49	0,67			
	C- Non working/retired	52	1,14	0,82			
Anxiety	A- Full time	25	0,66	0,61	1,74	0,180	
	B- Shift work	7	0,26	0,26			
	C- Non working/retired	52	0,73	0,66			
Hostility	A- Full time	25	0,80	0,79	1,36	0,261	
	B- Shift work	7	0,33	0,35			
	C- Non working/retired	52	0,81	0,74			
Phobic anxiety	A- Full time	25	0,29	0,45	0,93	0,398	
	B- Shift work	7	0,04	0,07			
	C- Non working/retired	52	0,31	0,54			
Paranoid Ideation	A- Full time	25	0,87	0,67	0,67	0,512	
	B- Shift work	7	0,52	0,69			
	C- Non working/retired	52	0,85	0,75			
Psychotism	A- Full time	25	0,54	0,57	2,16	0,122	
	B- Shift work	7	0,10	0,14			
	C- Non working/retired	52	0,43	0,49			
Additional items	A- Full time	25	0,87	0,61	3,13	0,049	C>B
	B- Shift work	7	0,33	0,41			
	C- Non working/retired	52	0,98	0,70			

The symptom scores of additional items (sleep, appetite disturbance, etc.) were found to be significantly different according to working style ($F = 3.13$; $p < 0.05$). According to the results of Tukey HSD post hoc test, the symptom scores of additional items (0.98 ± 0.70) for housewives / unemployed participants were significantly higher than the scores for the participants working in shifts (0.33 ± 0.41).

Other psychological symptom scores were determined not to show any significant difference according to working style ($p > 0.05$).

Table 15. The comparison of the relationship between the scores of alexithymia and socio-economic status with ANOVA test's results

Scales and subscales	SES	n	mean	Sd	F	p
Difficulty Describing Feeling	Bad	9	2,33	0,52	0,41	0,662
	Middle-class	50	2,11	0,62		
	Good	25	2,15	0,81		
Difficulty Identifying Feeling	Bad	9	2,67	0,78	1,34	0,267
	Middle-class	50	2,27	0,62		
	Good	25	2,34	0,71		
Extra-Oriented Thinking	Bad	9	3,10	0,36	2,66	0,076
	Middle-class	50	2,80	0,46		
	Good	25	2,72	0,39		
ALEXITHYMIA TOTAL	Bad	9	54,44	7,07	1,74	0,181
	Middle-class	50	48,52	8,61		
	Good	25	48,52	10,20		

It was determined that the scores of alexithymia did not show any significant difference according to the socio-economic status ($p > 0,05$).

Tablo 16. The comparison of the relationship between the scores of psychological symptoms and socio-economic status with ANOVA test's results

Scales and subscales	SES	n	mean	SS	F	p	Significant differences					
Somatization	A-Bad	9	1,41	1,27	1,78	0,174	A>B,C					
	B-Middle-class	50	0,87	0,70								
	C-Good	25	0,89	0,77								
Obsessive-compulsive	A-Bad	9	1,48	0,85	1,70	0,189		A>B,C				
	B- Middle-class	50	1,05	0,62								
	C- Good	25	0,99	0,80								
Interpersonal sensitivity	A-Bad	9	1,65	1,27	6,35	0,003			A>B,C			
	B- Middle-class	50	0,80	0,57								
	C- Good	25	0,74	0,67								
Depression	A- Bad	9	1,38	1,24	0,79	0,457				A>B,C		
	B- Middle-class	50	1,06	0,75								
	C- Good	25	0,99	0,78								
Anxiety	A- Bad	9	1,11	1,04	2,62	0,079					A>B,C	
	B- Middle-class	50	0,60	0,54								
	C- Good	25	0,64	0,57								
Hostility	A- Bad	9	1,06	1,09	1,43	0,243						A>B,C
	B- Middle-class	50	0,67	0,60								
	C- Good	25	0,87	0,82								
Phobic Anxiety	A- Bad	9	0,75	1,04	4,99	0,009	A>B,C					
	B- Middle-class	50	0,23	0,37								
	C- Good	25	0,21	0,32								
Paranoid Ideation	A- Bad	9	1,37	1,03	3,00	0,055		A>B,C				
	B- Middle-class	50	0,77	0,64								
	C- Good	25	0,74	0,71								
Psychotism	A- Bad	9	0,92	0,80	5,16	0,008			A>B,C			
	B- Middle-class	50	0,38	0,44								
	C- Good	25	0,37	0,40								
Additional items	A- Bad	9	1,33	0,82	2,24	0,113				A>B,C		
	B- Middle-class	50	0,85	0,64								
	C- Good	25	0,82	0,65								

The symptom scores of interpersonal sensitivity were found to be significantly different according to the economic status ($F = 6.35$, $p < 0.05$). According to the results of Tukey HSD post hoc test, the interpersonal sensitivity scores of the participants with poor economic status was significantly (1.65 ± 1.27) higher than those of the participants with moderate (0.80 ± 0.57) and good economic status (0.74 ± 0.67).

The scores of phobic anxiety symptom were found to show significant difference according to the economic status ($F = 4.99$, $p < 0.05$). According to the results of the Tukey HSD post hoc test, the phobic anxiety symptom scores of the participants with

poor economic status (0.75 ± 1.04) was significantly higher than those of the participants with moderate (0.23 ± 0.37) and good economic status (0.21 ± 0.32).

The scores of psychotism symptom were determined to show significant difference according to economic status ($F = 5.16$; $p < 0.05$). According to the results of the Tukey HSD post hoc test, the psychotism symptom scores of the participants with bad economic status (0.92 ± 0.80) was significantly higher than those of the participants with moderate (0.38 ± 0.44) and good economic status (0.37 ± 0.40).

The scores of other psychological symptom were determined not to show any significant difference according to economic status ($p > 0.05$).

Table 17. The comparison of the relationship between the scores of alexithymia and family unit with t-test's results

	Family unit	n	mean	Sd	t	p
Difficulty Describing Feeling	Nuclear family	75	2,16	0,67	0,40	0,691
	Extended family	9	2,06	0,69		
Difficulty Identifying Feeling	Nuclear family	75	2,37	0,67	1,28	0,203
	Extended family	9	2,07	0,64		
Externally-Oriented Thinking	Nuclear family	75	2,81	0,43	0,20	0,844
	Extended family	9	2,78	0,50		
ALEXITHYMIA TOTAL	Nuclear family	75	49,41	8,97	0,75	0,454
	Extended family	9	47,00	10,05		

It was determined that the scores of alexithymia did not show any significant difference according to the family unit ($p > 0,05$).

Table 18. The comparison of the relationship between the scores of psychological symptoms and family unit with t-test's results

	Family unit	n	mean	Sd	t	p
Somatization	Nuclear family	75	0,94	0,83	0,32	0,746
	Extended family	9	0,85	0,62		
Obsessive-compulsive	Nuclear family	75	1,10	0,72	0,75	0,458
	Extended family	9	0,91	0,56		
Interpersonal sensitivity	Nuclear family	75	0,90	0,76	1,13	0,261
	Extended family	9	0,60	0,59		
Depression	Nuclear family	75	1,12	0,83	1,43	0,156
	Extended family	9	0,71	0,61		
Anxiety	Nuclear family	75	0,68	0,65	0,40	0,693
	Extended family	9	0,59	0,51		
Hostility	Nuclear family	75	0,77	0,75	-0,11	0,910
	Extended family	9	0,80	0,61		
Phobic anxiety	Nuclear family	75	0,29	0,51	0,27	0,785
	Extended family	9	0,24	0,28		
Paranoid Ideation	Nuclear family	75	0,84	0,72	0,30	0,766
	Extended family	9	0,76	0,74		
Psychotism	Nuclear family	75	0,45	0,52	0,59	0,557
	Extended family	9	0,34	0,38		
Additional items	Nuclear family	75	0,92	0,69	0,85	0,397
	Extended family	9	0,71	0,43		

It was determined that the scores of psychological symptoms did not show any significant difference according to the family unit ($p > 0,05$).

Table 19. The comparison of the relationship between the scores of alexithymia and number of children with ANOVA test's results

Scales and subscales	Number of children	n	mean	Sd	F	p
Difficulty Describing Feeling	1 child	24	2,15	0,79	0,93	0,399
	2 children	40	2,06	0,63		
	3 children and over	20	2,31	0,57		
Difficulty Identifying Feeling	1 child	24	2,16	0,76	1,43	0,246
	2 children	40	2,37	0,65		
	3 children and over	20	2,49	0,56		
Externally-Oriented Feeling	1 child	24	2,84	0,45	0,15	0,858
	2 children	40	2,78	0,46		
	3 children and over	20	2,82	0,40		
ALEXITHYMIA TOTAL	1 child	24	48,54	9,90	0,66	0,518
	2 children	40	48,50	9,15		
	3 children and over	20	51,20	7,90		

It was determined that the scores of alexithymia did not show any significant difference according to the number of children ($p > 0,05$).

Table 20. The comparison of the relationship between the scores of psychological symptoms and number of children with ANOVA test's results

Scales and subscales	Number of children	n	mean	Sd	F	p
Somatization	1 child	24	0,81	0,67	0,69	0,504
	2 children	40	0,93	0,75		
	3 children and over	20	1,10	1,04		
Obsessive-compulsive	1 child	24	1,10	0,77	0,22	0,799
	2 children	40	1,03	0,57		
	3 children and over	20	1,16	0,88		
Interpersonal sensitivity	1 child	24	0,78	0,66	0,64	0,528
	2 children	40	0,85	0,63		
	3 children and over	20	1,03	1,03		
Depression	1 child	24	1,08	0,84	0,29	0,751
	2 children	40	1,02	0,70		
	3 children and over	20	1,19	1,02		
Anxiety	1 child	24	0,67	0,62	0,32	0,724
	2 children	40	0,62	0,54		
	3 children and over	20	0,76	0,82		
Hostility	1 child	24	0,56	0,59	1,45	0,241
	2 children	40	0,86	0,63		
	3 children and over	20	0,85	1,02		
Phobic anxiety	1 child	24	0,35	0,40	0,70	0,497
	2 children	40	0,21	0,39		
	3 children and over	20	0,33	0,73		
Paranoid Ideation	1 child	24	0,81	0,73	0,09	0,911
	2 children	40	0,86	0,69		
	3 children and over	20	0,78	0,79		
Psychotism	1 child	24	0,43	0,45	0,20	0,816
	2 children	40	0,41	0,46		
	3 children and over	20	0,50	0,65		
Additional items	1 child	24	0,86	0,62	0,58	0,562
	2 children	40	0,84	0,62		
	3 children and over	20	1,04	0,83		

It was determined that the scores of psychological symptoms did not show any significant difference according to the number of children ($p > 0,05$).

Table 21. The comparison of the relationship between the scores of alexithymia and elapsed time since diagnosis with ANOVA test's results

Scales and subscales	Elapsed time since diagnosis	n	mean	Sd	F	p
Difficulty Describing Feeling	Less than 3 years	27	2,01	0,65	1,03	0,363
	3-5 years	28	2,26	0,71		
	More than 5 years	29	2,17	0,65		
Difficulty Identifying Feeling	Less than 3 years	27	2,26	0,70	1,29	0,280
	3-5 years	28	2,24	0,62		
	More than 5 years	29	2,50	0,68		
Externally-Oriented Thinking	Less than 3 years	27	2,84	0,46	0,66	0,520
	3-5 years	28	2,73	0,45		
	More than 5 years	29	2,85	0,41		
ALEXITHYMIA TOTAL	Less than 3 years	27	48,04	9,35	0,53	0,593
	3-5 years	28	48,86	9,67		
	More than 5 years	29	50,48	8,30		

It was determined that the scores of alexithymia did not show any significant difference according to the elapsed time since diagnosis ($p > 0,05$).

Table 22. The comparison of the relationship between the scores of psychological symptoms and elapsed time since diagnosis with ANOVA test's results

Elapsed time since		n	mean	Sd	F	p
Scales and subscales	diagnosis					
Somatization	Less than 3 years	27	0,90	0,79	0,11	0,894
	3-5 years	28	0,99	0,86		
	More than 5 years	29	0,91	0,79		
Obsessive-compulsive	Less than 3 years	27	0,98	0,75	0,69	0,504
	3-5 years	28	1,20	0,76		
	More than 5 years	29	1,05	0,61		
Interpersonal sensitivity	Less than 3 years	27	0,75	0,80	1,02	0,364
	3-5 years	28	1,03	0,82		
	More than 5 years	29	0,83	0,61		
Depression	Less than 3 years	27	0,99	0,82	0,60	0,553
	3-5 years	28	1,21	0,91		
	More than 5 years	29	1,03	0,72		
Anxiety	Less than 3 years	27	0,57	0,56	0,51	0,600
	3-5 years	28	0,74	0,78		
	More than 5 years	29	0,69	0,53		
Hostility	Less than 3 years	27	0,68	0,69	0,31	0,733
	3-5 years	28	0,80	0,83		
	More than 5 years	29	0,83	0,69		
Phobic anxiety	Less than 3 years	27	0,29	0,39	0,81	0,450
	3-5 years	28	0,36	0,67		
	More than 5 years	29	0,20	0,36		
Paranoid Ideation	Less than 3 years	27	0,67	0,67	1,66	0,196
	3-5 years	28	1,02	0,82		
	More than 5 years	29	0,79	0,65		
Psychotism	Less than 3 years	27	0,30	0,37	1,52	0,224
	3-5 years	28	0,48	0,56		
	More than 5 years	29	0,53	0,53		
Additional items	Less than 3 years	27	0,75	0,57	1,10	0,337
	3-5 years	28	1,01	0,83		
	More than 5 years	29	0,92	0,58		

It was determined that the scores of psychological symptoms did not show any significant difference according to the elapsed time since diagnosis ($p > 0,05$).

Table 23. The comparison of the relationship between the scores of alexithymia and mental illness in the past with t-test's results

Mental illness in the past		n	mean	Sd	t	p
Difficulty Describing Feeling	Yes	8	2,11	0,76	-0,18	0,857
	No	76	2,15	0,66		
Difficulty Identifying Feeling	Yes	8	2,60	0,68	1,18	0,242
	No	76	2,31	0,67		
Externally-Oriented Thinking	Yes	8	2,92	0,40	0,79	0,429
	No	76	2,79	0,44		
ALEXITHYMIA	Yes	8	51,13	8,64	0,64	0,521
TOTAL	No	76	48,95	9,13		

It was determined that the scores of alexithymia did not show any significant difference according to the mental illness in the past ($p > 0,05$).

Table 24. The comparison of the relationship between the scores of psychological symptoms and mental illness in the past with t-test's results

Mental illness in the past		n	mean	Sd	t	p
Somatization	Yes	8	0,88	0,61	-0,22	0,827
	No	76	0,94	0,82		
Obsessive- compulsive	Yes	8	0,94	0,52	-0,59	0,559
	No	76	1,09	0,72		
Interpersonal sensitivity	Yes	8	0,60	0,38	-1,09	0,279
	No	76	0,90	0,77		
Depression	Yes	8	1,10	0,54	0,08	0,939
	No	76	1,07	0,84		
Anxiety	Yes	8	0,44	0,13	-1,09	0,280
	No	76	0,69	0,66		
Hostility	Yes	8	0,65	0,31	-0,50	0,618
	No	76	0,78	0,76		
Phobic anxiety	Yes	8	0,07	0,08	-1,27	0,207
	No	76	0,30	0,51		
Paranoid Ideation	Yes	8	0,40	0,33	-1,80	0,075
	No	76	0,87	0,74		
Psychotism	Yes	8	0,18	0,18	-1,57	0,120
	No	76	0,47	0,52		
Additional items	Yes	8	0,77	0,52	-0,56	0,578
	No	76	0,91	0,69		

It was determined that the scores of psychological symptoms did not show any significant difference according to the mental illness in the past ($p > 0,05$).

Table 25. The comparison of the relationship between the scores of alexithymia and getting of psychological counselling in present with t-test's results

	Getting of psychological counselling in		n	mean	Sd	t	p
	present						
Difficulty Describing	Yes	3	1,62	0,54	-1,40	0,165	
Feeling	No	81	2,17	0,67			
Difficulty Identifying	Yes	3	2,13	0,42	-0,53	0,597	
Feeling	No	81	2,34	0,68			
Externally-Oriented	Yes	3	2,79	0,26	-0,05	0,957	
Thinking	No	81	2,81	0,44			
ALEXITHYMIA	Yes	3	44,33	4,51	-0,94	0,351	
TOTAL	No	81	49,33	9,15			

It was determined that the scores of alexithymia did not show any significant difference according to getting of psychological counselling in present ($p > 0,05$).

Table 26. The comparison of the relationship between the scores of psychological symptoms and getting of psychological counselling in present with t-test's results

	Getting of psychological counselling in		n	mean	Sd	t	p
	present						
Somatization	Yes	3	0,61	0,79	-0,71	0,481	
	No	81	0,95	0,81			
Obsessive- compulsive	Yes	3	0,50	0,53	-1,45	0,150	
	No	81	1,10	0,71			
Interpersonal sensitivity	Yes	3	0,30	0,23	-1,37	0,176	
	No	81	0,89	0,75			
Depression	Yes	3	0,64	0,62	-0,94	0,352	
	No	81	1,09	0,82			
Anxiety	Yes	3	0,63	0,76	-0,10	0,924	
	No	81	0,67	0,63			
Hostility	Yes	3	0,89	1,25	0,28	0,777	
	No	81	0,77	0,72			
Phobic anxiety	Yes	3	0,00	0,00	-1,01	0,316	
	No	81	0,29	0,50			
Paranoid Ideation	Yes	3	0,11	0,10	-1,77	0,080	
	No	81	0,85	0,72			
Psychotism	Yes	3	0,07	0,12	-1,31	0,194	
	No	81	0,45	0,51			
Additional items	Yes	3	0,52	0,58	-0,97	0,333	
	No	81	0,91	0,67			

It was determined that the scores of psychological symptoms did not show any significant difference according to getting of psychological counselling in present ($p > 0,05$).

Table 27. The comparison of the relationship between the scores of alexithymia and using of psychiatric drug in present with t-test's results

	Using of psychiatric drug in present	n	mean	Sd	t	p
Difficulty Describing	Yes	3	1,57	0,52	-1,53	0,130
Feeling	No	81	2,17	0,67		
Difficulty Identifying	Yes	3	2,20	0,53	-0,36	0,723
Feeling	No	81	2,34	0,68		
Externally-Oriented	Yes	3	3,04	0,31	0,96	0,342
Thinking	No	81	2,80	0,44		
ALEXITHYMIA	Yes	3	46,33	6,51	-0,55	0,586
TOTAL	No	81	49,26	9,16		

It was determined that the scores of alexithymia did not show any significant difference according to using of psychiatric drug in present ($p > 0,05$).

Table 28. The comparison of the relationship between the scores of psychological symptoms and using of psychiatric drug in present with t-test's results

	Using of psychiatric drug in present	n	mean	Sd	t	p
Somatization	Yes	3	0,86	0,65	-0,16	0,873
	No	81	0,94	0,81		
Obsessive- compulsive	Yes	3	0,90	0,53	-0,44	0,660
	No	81	1,08	0,71		
Interpersonal sensitivity	Yes	3	0,70	0,36	-0,39	0,696
	No	81	0,88	0,76		
Depression	Yes	3	1,21	0,58	0,28	0,781
	No	81	1,07	0,83		
Anxiety	Yes	3	0,43	0,12	-0,65	0,515
	No	81	0,68	0,64		
Hostility	Yes	3	0,50	0,33	-0,65	0,520
	No	81	0,78	0,74		
Phobic anxiety	Yes	3	0,05	0,08	-0,84	0,406
	No	81	0,29	0,50		
Paranoid Ideation	Yes	3	0,28	0,19	-1,35	0,181
	No	81	0,85	0,73		
Psychotism	Yes	3	0,03	0,06	-1,43	0,156
	No	81	0,45	0,50		
Additional items	Yes	3	0,62	0,59	-0,72	0,473
	No	81	0,90	0,68		

It was determined that the scores of psychological symptoms did not show any significant difference according to using of psychiatric drug in present ($p > 0,05$).

Table 29. The comparison of the relationship between the scores of alexithymia and mental illness in the family with t-test's results

	Mental illness in the family	n	mean	Sd	t	p
Difficulty Describing Feeling	Yes	6	2,36	0,58	0,79	0,430
	No	78	2,13	0,68		
Difficulty Identifying Feeling	Yes	6	2,50	0,47	0,62	0,536
	No	78	2,32	0,68		
Externally-Oriented Thinking	Yes	6	2,96	0,23	0,89	0,375
	No	78	2,79	0,45		
ALEXITHYMIA	Yes	6	52,67	5,09	0,99	0,328
TOTAL	No	78	48,88	9,26		

It was determined that the scores of alexithymia did not show any significant difference according to mental illness in the family ($p > 0,05$).

Table 30. The comparison of the relationship between the scores of psychological symptoms and mental illness in the family with t-test's results

	Mental illness in the family	n	mean	Sd	t	p
Somatization	Yes	6	1,15	0,62	0,69	0,493
	No	78	0,92	0,82		
Obsessive- compulsive	Yes	6	1,10	0,54	0,08	0,936
	No	78	1,08	0,72		
Interpersonal sensitivity	Yes	6	0,74	0,57	-0,44	0,661
	No	78	0,88	0,76		
Depression	Yes	6	1,18	0,55	0,32	0,747
	No	78	1,07	0,84		
Anxiety	Yes	6	0,70	0,60	0,13	0,898
	No	78	0,67	0,64		
Hostility	Yes	6	0,92	0,86	0,51	0,614
	No	78	0,76	0,73		
Phobic anxiety	Yes	6	0,21	0,39	-0,34	0,733
	No	78	0,29	0,50		
Paranoid Ideation	Yes	6	0,94	1,10	0,41	0,683
	No	78	0,82	0,69		
Psychotism	Yes	6	0,30	0,32	-0,70	0,488
	No	78	0,45	0,51		
Additional items	Yes	6	0,76	0,46	-0,50	0,619
	No	78	0,90	0,69		

It was determined that the scores of psychological symptoms did not show any significant difference according to mental illness in the family ($p > 0,05$).

Table 31. The results of correlations analysis between alexithymia (TAS-20) and psychological symptoms (SCL-90-R)

	2	3	4	5	6	7	8	9	10	11	12	13	14
1-Difficulty Describing Feeling	0,71 **	0,22 **	0,87 **	0,32 **	0,44 **	0,47 **	0,42 **	0,48 **	0,31 **	0,32 **	0,34 **	0,53 **	0,33 **
2-Difficulty Identifying Feeling		0,31 **	0,85 **	0,31 **	0,31 **	0,37 **	0,33 **	0,37 **	0,22 *	0,17	0,15	0,38 **	0,26 *
3-Externally-Oriented Thinking			0,58 **	0,01	0,09	0,21	0,11	0,11	0,1	0,04	0,1	0,11	0,02
4-ALEXITHYMIA TOTAL				0,32 **	0,39 **	0,49 **	0,4 **	0,44 **	0,31 **	0,24 **	0,3 **	0,49 **	0,31 **
5-Somatization					0,72 **	0,64 **	0,75 **	0,79 **	0,64 **	0,59 **	0,57 **	0,66 **	0,76 **
6-Obsessive-compulsive						0,76 **	0,81 **	0,83 **	0,59 **	0,6 **	0,77 **	0,79 **	0,67 **
7-Interpersonal sensitivity							0,8 **	0,78 **	0,68 **	0,62 **	0,83 **	0,81 **	0,64 **
8-Depression								0,83 **	0,71 **	0,58 **	0,71 **	0,69 **	0,72 **
9-Anxiety									0,77 **	0,68 **	0,71 **	0,78 **	0,76 **
10-Hostility										0,51 **	0,61 **	0,63 **	0,68 **
11-Phobic anxiety											0,57 **	0,64 **	0,6 **
12-Paranoid Ideation												0,78 **	0,56 **
13-Psychotism													0,69 **
14-Additional items													

*: p<0,05

**: p<0,01

There was a significant and positive correlation between the scores of difficulty describing feeling and the symptom scores of somatization ($r = 0.32$, $p < 0.01$), obsessive compulsive ($r = 0.44$, $p < 0.01$), interpersonal sensitivity ($r = 0.47$, $p < 0.01$), depression ($r = 0.42$, $p < 0.01$), anxiety ($r = 0.48$, $p < 0.01$), hostility ($r = 0.31$, $p < 0.01$), phobic anxiety ($r = 0.32$, $p < 0.01$), paranoid ideation ($r = 0.34$, $p < 0.01$), psychotism ($r = 0.53$, $p < 0.01$), additional items ($r = 0.33$; $p < 0.01$).

There was a significant and positive correlation between the scores of difficulty identifying feeling and the symptoms scores of somatization ($r = 0.31$; $p < 0.01$), obsessive compulsive ($r = 0.31$; $p < 0.01$), interpersonal sensitivity ($r = 0.37$; $p < 0.01$), depression ($r = 0.33$; $p < 0.01$), anxiety ($r = 0.37$; $p < 0.01$), hostility ($r = 0.22$; $p < 0.01$), psychotism ($r = 0.38$; $p < 0.01$), additional items ($r = 0.26$; $p < 0.01$). There was no any significant differences between the scores of difficulty identifying feeling and the symptoms scores of phobic anxiety and paranoid ideation ($p > 0.05$).

There was no any significant differences between the scores of externally-oriented thinking and psychological symptoms ($p > 0.05$).

4. DISCUSSION

The participants in this study were not found to be alexithymic and showed no significant difference according to the diagnosis group. Therefore, the mental group in which the majority of the parents having children with autistic spectrum disorder were included was not different from other groups and did not have alexithymia. In a conducted study, no significant relationship was found between the subtest and total scores of the Gillis Autistic Disability Rating Scale administered to children with autism and the subtest and total scores of the Toronto Alexithymia Scale administered to the parents of these children (Aydin, Sarac, 2014). In another study, no alexithymic features could be found in the parents of the children with the diagnoses of asperger syndrome and high-functioning autism (Allik, Larsson, Hans Smedje, 2006). However, the alexithymia levels of 439 parents of the children with the diagnosis of autism (ASD) (experimental group) and parents of the children with the diagnosis of Prader Willi syndrome (PW) (control group) were examined with TAS-20 and the alexithymia score of the parents of the children with ASD was found to be higher compared to the control group (Szatmari, Georgiades, Duku, Zwaigenbaum, Goldberg, Bennett, 2008).

When the psychological symptoms of the parents having children with special needs were examined, the highest scores were observed in the obsessive compulsive and depression subtests whereas the scores were found to be below one point for all other psychological symptoms. In a study, Seker examined psychopathologic symptoms of the parents having children with special needs and found that the highest means were obtained for obsessive-compulsive and depression symptoms while the least means were obtained for phobic anxiety and psychotism (Seker, 2005).

The psychological symptoms of the participants in this study did not differ according to the diagnosis group of their children. The researchers examined the psychological distress of the mothers having children with special needs in a study in which the participants were 40 mothers of the children with Down syndrome, cerebral palsy, mental retardation, epilepsy, myopathy and other diagnose (experimental group) and 20 mothers of the normally developed children (control group). The researchers used SCL-90-R and found that there were significant differences in somatization, depression, anxiety, hostility, phobic anxiety subscales. Also, the researchers hypothesized that if the child had more severe disability, the

mother would have more several psychological symptom, however, no significant difference was detected (Yim, Moon, Rah, Lee, 1996).

As a result of the research, the psychological symptom scores (especially anxiety scores) of the parents having children with both physical and mental retardation were expected to be higher than those of two other groups, however, no significant difference was found among the groups. But, in the study by Blacher et al, they found that maternal anxiety levels were high, as a result of the increased maternal dependence caused by increased developmental retardation of the child (Blacher, Nihira, Meyers, 1987).

In this study, a significant difference was detected between total alexithymia scores and only the age variable from the socio-demographic variables of the participants. The total alexithymia score of the participants in the age range of 36-40 years was significantly higher than the participants aged 30 years or below. Significant findings were obtained among the psychological symptoms of the study participants and gender, working style and SES. The somatization and depression symptoms of the female participants were found significantly higher than the male participants. The subscale scores of additional items were found to be significantly higher than those of the unemployed / unable to work people. Considering that the subscale of additional items reflect the symptoms such as sleep, appetite and guilt feelings, the sleep patterns of the participants who work even in shifts were positively affected and also having other responsibilities such as going to work other than caring for their children with special needs may cause decrease in negative feelings and thoughts such as guilt. The individual may not have these symptoms because of both a financial gain and a busy lifestyle. Significant differences were found among SES and interpersonal sensitivity, phobic anxiety, psychotism subscales. The scores of these subscales of the participants with bad economic status were found significantly higher than those of the participants with moderate and good economic status. However, evaluating the psychological symptoms of the parents of the children with special needs with limited socio-demographic variables, as in this study, may limit many data. For example, in another study, the researchers used SCL-90-R and found that depression score was significantly correlated with several parameters such as maternal age, child's IQ, maternal FMR1 gene, challenging behaviour of child, family characteristics, income level of the parents having children with Fragile x Syndrome. Also, anxiety score was found to be correlated with maternal FMR1 and child's IQ of the parents of the children with Fragile x Syndrome (Seltzer, Abbeduto, Greenberg, Almeida, Hong, Witt, 2009).

One of the hypotheses in the research was the presence of a direct and proportional relationship between alexithymia and somatization subscale. Besides, there was a quite significant and proportional relationship between the scores of difficulty describing feelings and difficulty identifying feelings and the subscale of somatization ($p < 0.01$). Also, there was a positive and significant correlation between the subdimension of difficulty describing feeling and the scores of obsessive compulsive ($p < 0.01$), interpersonal sensitivity ($p < 0.01$), depression ($p < 0.01$), anxiety ($p < 0.01$), hostility ($p < 0.01$), phobic anxiety ($p < 0.01$), paranoid thought ($p < 0.01$), psychotism ($p < 0.01$), additional items ($p < 0.01$). There was also a positive and significant correlation between the scores of difficulty describing feelings and the scores of obsessive compulsive ($p < 0.01$), interpersonal sensitivity ($p < 0.01$), depression ($p < 0.01$), anxiety ($p < 0.01$), hostility ($p < 0.01$), psychotic ($p < 0.01$), additional items ($p < 0.01$). No significant correlation was found between the scores of difficulty describing feelings and the scores of phobic anxiety and paranoid ideation ($p > 0.05$). There was no significant relationship between the scores of externally-oriented thinking and psychological symptoms ($p > 0.05$). In the conducted studies, the relationship between alexithymic personality and somatization was examined (Grabe, Spitzer, Freyberger 2001; Lipsanen, Saarijarvi, Lauerma, 2004) and alexithymia score was found to be high in the people with asperger syndrome (Porkka-Heiskanen, 2004).

In this study, the number of people receiving psychological support was very low. Therefore, no significant difference was detected between the psychological symptoms of the participants and receiving psychological support. However, receiving psychological support by the parents, especially those having children with special needs, holds importance for at least two people. The psychologically well-being status of the parent who cares for the child with special needs positively affects the level of education and development. Especially, the rehabilitation of the children with cerebral palsy is multicentral and families are the most important part of the treatment since physiotherapy applications should be continued at home. (Mutlu, Tarsuslu, Gunel, Livanelioglu, 2007) Considering that infancy and childhood periods are the golden ages of development, high motivations of parents, psychological well-being, physiotherapy applications at home, especially in these periods, are of great importance for the education and development of the child. In the study by Mutlu et al., they found that, when physiotherapy applications were regularly administered by parents at home in addition to the rehabilitation center, the motor development levels increased and disability levels decreased in the children (Mutlu et al., 2007).

Many studies stated that with the diagnosis of the child, the situations such as inability to accept and denying occurred in parents. The sense of loneliness experienced by the family due to health and behavior problems of the child which originate from mental and physical development difficulties are important factors in increasing the anxiety levels of parents (Blacher, Nihira, Meyers 1987). So, receiving psychological counselling is very important for the parents. This situation creates quite negative effects on the development and education of the child. In the study conducted by Kasuto, it was found that the social and cognitive development of children rejected by their mothers was quite low when compared to the children accepted by their mothers (Kasuto, 2005). In the study conducted by Coskun and Akkas, the sample of the research, which was determined randomly among 780 persons and consisted of 167 different diagnosis, included 150 mothers of the children with special needs. As a result of the study, it was observed that as the social support received by the mothers of the children with special needs increased, the level of continuous anxiety decreased. (Coskun, Akkas, 2009).

It is very important for psychologists to perform their jobs in special education and rehabilitation centers due to numerous reasons such as the stages of inability to accept the fact that their children have special needs, disturbance of relations within the family due to following losses of self esteem, psychological symptoms of parents, accusing each other and the importance of having high motivation since they play a major role in the development of their children. Experiencing anxiety and stress by family members negatively affect meeting the needs of the children with special needs (Mutlu et al., 2007). If the stages of shock and inability to accept coincides with the early childhood stage of the child, this most productive stage should be overcome without pain and working continuously with high motivation is required for reducing the symptoms of diagnosis.

Psychological counseling groups provides the parents to recognize that they are not alone and they cause significant reduction in anxiety levels (Akkok, 2003). Structured interviews were carried out with the parents of the children who were diagnosed with autism in the study conducted by Rasmussen (2000). Because of the support received from professional mental health employees, they found that these parents had a significant decrease in stress levels and developed positive relations with their children (Karpat & Girli, 2012, pp. 69-85).

It is suggested that the frequency of the studies having vital importance for at least two people such as family education, group psychotherapy for parents, psychological counseling,

conducting psychotherapy for parents should be increased and clinical psychologists specialized in the field of adult psychopathology should be obligatory staff of rehabilitation.

5.CONCLUSION

The aim of the study is examined that psychological symptoms and alexithymia traits of parents having children with special needs. The study consist of 84 parents have children with special needs. SCL-90-R was used for determine that psychological symptoms and TAS-20 was used for determine that alexithymic traits. Socio-demographic information form was used to learn that socio-demographic variables of participants by researchers. In the conclusion of the study, obsessive-compulsive and depression symptoms of parents was found that 1 of over. Somatization and depression scores of female participants than in male participants were found to be higher, significantly. The total scores of alexithymia were determined to show significant difference according to age groups. The scores of additional items were found significant difference according to the working style. The scores of interpersonal sensitivity, phobic anxiety, psychotism symptoms were determined to show significant difference according to economic status. There was a significant and positive correlation between the scores of difficulty describing feeling and the symptom scores of somatization, obsessive-compulsive, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, psychotism, and additional items. There was a significant and positive correlation between the scores of difficulty identifying feeling and the symptoms scores of somatization, obsessive compulsive, interpersonal sensitivity, depression, anxiety, hostility, psychotism, additional items.

In conclusion, psychological symptoms were found in parents of children with special needs. Mental well-being of parents is very important for education and development of children with special needs. Likely, compenent and adequate psychologists about adult psychopathology should work in special education and rehabilitation centers.

6. REFERENCES

- Akkök, F. (2003). Farklı Özelliğe Sahip Olan Çocuk Aileleri Ve Ailelerle Yapılan Çalışmalar. A. Ataman içinde, *Özel Eğitime Giriş*. Ankara: Güngüz Eğitim Yayıncılık.
- Allik, H., Larsson, J.-O., & Smedje, H. (2006). Health-Related Quality Of Life In Parents Of School-Age Children With Asperger Syndrome Or High-Functioning Autism. *Health And Quality Of Life Outcomes*, 1477-7525.
- Amerikan Psikiyatri Birliği. (2014). *Ruhsal Hastalıkların Tanısal ve Sayımsal El Kitabı (DSM - 5)*. (E. Köroğlu, Çev.) Ankara: Hekimler Yayın Birliği.
- Aydın, A., & Saraç, T. (2014). Investigation Of Autistic Individuals' Characteristics And Their Parents' Broad Autism Phenotype And Alexithymia Characteristics. *The Journal Of Academic Social Science Studies*, 183-209.
- Babgy, Parker, & Taylor. (1994). The Twenty-Item Toronto Alexithymia Scale-I. Item Selection And Cross-Validation Of The Factor Structure. *Journal Of Psychosomatic Research*, 38, 23-32.
- Blacher, J., Nihira, K., & Meyers, C. (1987). Characteristics Of Home Environment Of Families With Mentally Retarded Children: Comparison Across Levels Of Retardation. *Am J Men Defic*, 14, 313-320.
- Büyüköztürk, Ş. (2002). *Sosyal Bilimler İçin Veri Analizi El Kitabı*. İstanbul: Pegem A Yayıncılık.
- Cameron, S., Dodson, L., & Day, D. (1991). Stress In Parents Of Developmentally Delayed And Non-Delayed Preschool Children. *Canada's Mental Health*, 39, 13-17.
- Castle, J. (1998). Parantel feelings and grief experience: having a child diagnosed with autism or other pervaise developmental disorder. *Yayımlanmamış Yüksek Lisans Tezi*. California, Amerika Birleşik Devletleri: California State University.

- Çoşkun, & Akkaş. (2009). Engelli Çocuğu Olan Annelerin Sürekli Kaygı Düzeyleri İle Sosyal Destek Algıları Arasındaki İlişki. *KEFAD*, 10(1), 213-227.
- Dağ, İ. (1991). Reliability And Validity Of The Symptom Checklist (SCL-90-R) For University Students. *Turkish Journal Of Psychiatry*, 2, 5-12.
- Danış, M. Z. (2006). Zihin engelli çocuğa sahip annelerin yaşadığı duygular, çocuklarının geleceğe ilişkin düşünceleri ve umutsuzluk düzeyleri. *Toplumsal Ve Sosyal Hizmet*, 17, 2-101.
- Dereli, F., & Okur, S. (2008). Engelli çocuğa sahip olan ailelerin depresyon durumunun belirlenmesi. *Yeni Tıp Dergisi*, 25, 164-168.
- Dünya Sağlık Örgütü. (2011). *Dünya Engellilik Raporu*. Amerika Birleşik Devletleri: WHO.
- Fırat, S., Diler, R. S., Avcı, A., & Seydaoğlu, G. (2002). Comparison Of Psychopathology In The Mothers Of Autistic And Mentally Retarded Children. *J Korean Med Sci*, 17, 679-685.
- Freud, S. (1917). *Felsefe Dizisi: Yas ve Melankoli*. (A. Emirsoy, Çev.) İstanbul: Telos Yayıncılık.
- Grabe, H., Spitzer, C., & Freyberger, H. (2001). Alexithymia And The Temperament And Character Model Of Personality. *Psychother Psychosom*, 70, 261-267.
- Güleç, H., Sayar, K., & Özkorumak, E. (2005). Depresyonda bedensel belirtiler. *Türk Psikiyatri Dergisi*, 16(2), 90-96.
- İçmeli, C., Ataoğlu, A., Canan, F., & A, Ö. (2008). Zihinsel Özürlü Çocukları Olan Ebeveynler İle Sağlıklı Çocuklara Sahip Ebeveynlerin Çocuk Yetiştirme Tutumlarının Karşılaştırılması. *Düzce Tıp Fakültesi Dergisi*, 3, 21-28.
- Kahraman, Ö., & Çetin, A. (2015). Gelişimsel Geriliği Olan Bebeğe Sahip Annelerin Tanı Sonrası Yaşadıkları Sürece İlişkin Görüşlerinin Ve Gereksinimlerinin Belirlenmesi .

- Annelerin Tanı Sonrası Yaşadıkları Sürece İlişkin Görüşleri ve Gereksinimleri*, 97-128.
- Karadağ, G. (2009). Engelli çocuğa sahip annelerin yaşadıkları güçlükler ile aileden algıladıkları sosyal destek ve umutsuzluk düzeyleri. *TAF Prev Med Bull*, 8(4), 315-322.
- Karpat, D., & Girli, A. (2012). Yaygın Gelişimsel Bozukluk tanısı alan çocukların ebeveynlerinin yaşadığı yas tepkilerinin, evlilik uyumlarının ve sosyal destek algılarının incelenmesi. *Ankara Üniversitesi Eğitim Bilimleri Fakültesi Özel Eğitim Dergisi*, 13(2), 69-85.
- Kasuto, S. (2005). Özel Anaokullarına Devam Eden 6 Yaş Çocuklarının Cinsiyet Özelliklerine İlişkin Kalıp Yargıları İle Annenin Sosyal Uyumları Arasındaki İlişkinin İncelenmesi. *Yüksek Lisans Tezi*.
- Kemerli, B., & Çelik, T. (2015). Aleksitimi ölçeğinin geçerlik ve güvenirliği. *JEE ISSN*, 5(2), 2146-2674.
- Khamis, V. (2007). Psychological distress among parents of children with mental retardation in the United Arab Emirates. *Social Science And Medicine*, 64(4), 850-857.
- Kılıç, M. (1991). Belirti Tarama Listesi (SCL-90-R)'nin geçerlik ve güvenirliği. *Psikolojik Danışma Ve Rehberlik Dergisi*, 1(2), 1.
- Köroğlu, E., Aydemir, & Ömer. (2009). *Psikiyatride Kullanılan Klinik Ölçekler* (4 b.). Ankara: Hekimler Yayın Birliği.
- Kozub, M. L. (2008). The diagnosis of Autism Spectrum Disorders in the U.S: Trends And Family Experiences. *Yayımlanmamış Doktora Tezi*. Indiana University.
- Leonard, J. H. (1986). Families and autism: an ethnographic approach. *Yayımlanmamış Doktora Tezi*. Columbia University.

- Lipsanen, T., Saarijarvi, S., & Lauerma, H. (2004). Exploring The Relations Between Depression, Somatization, Dissociation And Alexithymia-Overlapping Or Independent Constructs? *Psychopathology*, 37, 200-206.
- MacGregor, P. (1994). Grief: The unrecognized parental response to mental illness in a child. *Social Work*, 39(2), 160-166.
- Mccubbin, A. M., & Huang, S. T. (1989). Family strengths in the care of handicapped children: targets for intervention. *Family Relations*, 38, 436-443.
- Milli Eğitim Bakanlığı Özel Eğitim Yönetmeliği. (2000). *Resmi Gazete, Genel Hükümler*, Birinci Kısım.
- Minners, P. (1998). Family resources and stress associated with having a mentally retarded child. *American Journal Of Mental Retardation*, 93(2), 184-192.
- Mutlu, A., Tarsuslu, T., Günel, M., & Livanelioğlu, A. (2007). Serebral Parazili Çocuklarda Ev Egzersiz Programının Etkinliğinin İncelenmesi. *Türk Pediatri Arşivi*, 42, 112-116.
- Sarısoy, M. (2000). Otistik ve zihinsel çocuğa sahip ebeveynlerin evlilik uyumları. *Yayımlanmamış Yüksek Lisans Tezi*. İzmir, Türkiye: Ege Üniversitesi, Sosyal Bilimler Enstitüsü.
- Sayar, K., Güleç, H., & Ak, İ. (2001). Yirmi soruluk Toronto Aleksitimi Ölçeği'nin geçerlik ve güvenilirliği. *37.Ulusal Psikiyatri Kongresi Kitabı* (s. 130). İstanbul: Dergah Kitabevi.
- Şeker, Ş. (2015). Engelli Çocuğu Olan Anne-Babaların Psikopatolojik Semptomlarının Belirlenmesine Yönelik Bir Araştırma (Amasya İli Örneği). *Hitit University Journal Of Social Sciences Institute*, 8(1), 385-419.
- Seltzer, M., Abbeduto, L., Greenberg, J., Almeida, D., Hong, J., & Witt, W. (2009). Biomarkers In The Study Of Families Of Children With Developmental Disabilities. *International Review Of Research In Mental Retardation*, 37(09), 74-7750.

- Şenelmiş, H. (2006). Ankara Üniversitesi Kriz Merkezi'ne başvuran yas olguları üzerine bir çalışma. *Kriz Dergisi*, 14(1), 1-20.
- Stucki, G. (2005). International Classification of Functioning, Disability, Health (ICF): A promising framework and classification for rehabilitation medicine. *American Journal of Physical Medicine & Rehabilitation*, 84, 733-740.
- Szatmari, P., Georgiades, S., Duku, E., Zwaigenbaum, L., Goldberg, J., & Bennett, T. (2008). Alexithymia In Parents Of Children With Autism Spectrum Disorders. *Journal Of Autism And Developmental Disorders*, 38(10), 1859-1865.
- Tani, P., Lindberg, N., Joukamaa, M., Wendt, T. N.-v., Wendt, L. v., Appelberg, B., . . . Porkka-Heiskanen, T. (2004). Asperger Syndrome, Alexithymia And Perception Of Sleep. *Neuropsychobiology*, 49, 64-70.
- Uğuz, Toros, İnanç, & Çolakkadıoğlu. (2004). Zihinsel ve/veya bedensel engelli çocukların annelerinin anksiyete, depresyon ve stres düzeylerinin belirlenmesi. *Klinik Psikiyatri*, 7, 42-47.
- Uluşahin, N. A., & Öztürk, M. O. (2015). *Ruh Sağlığı ve Bozuklukları* (13 b.). Ankara, Türkiye: Bayt Yayın.
- Wong, M. K. (2005). Children with autism: parental grief and personal growth. *Unpublished Master's Thesis*. Houston: University of Houston.
- Yıldırım, Aşlar, & Karakurt. (2012). Engelli Çocukların Annelerinin Ruhsal Durumlarının Belirlenmesi. *İ.Ü.F.N. Hem Dergisi*, 20(3), 200-209.
- Yıldırım, Hacıhasanoğlu, Aşlar, & Karakurt. (2012). Engelli çocukların annelerinin ruhsal durumlarının belirlenmesi. *Florence Nightingale Hemşirelik Dergisi*, 20(3), 202-207.
- Yim, S. Y., Moon, H. W., Rah, U. W., & Lee, I. W. (1996). Psychological Characteristics Of Mothers Of Children With Disabilities. *Yonsei Medical Journal*, 37, 380-384.

Yurdakul, A., Girli, A., Özekes, M., & Sarısoy, M. (2000). Otistik ve zihinsel engelli çocuęu olan ailelerin stresle baş etme yolları: anne-baba farklılıkları. *Saray Rehabilitasyon Dergisi*, 7, 6-17.

SOSYO-DEMOGRAFİK BİLGİ FORMU

Yaş:.....

Cinsiyet:

- ☐ Kadın
- ☐ Erkek

Medeni durum:

- ☐ Bekar
- ☐ Evli
- ☐ Boşanmış
- ☐ Dul

Eğitim düzeyi:

- ☐ Okuma-yazma bilmiyor
- ☐ Okuma-yazma biliyor
- ☐ İlkokul
- ☐ Ortaokul
- ☐ Lise
- ☐ Ön lisans
- ☐ Üniversite
- ☐ Yüksek lisans

Meslek:.....

Çalışma düzeni:

- ☐ Tam zamanlı
- ☐ Yarı zamanlı
- ☐ Vardiyalı
- ☐ Emekli

Yaşanılan yer:

- ☐ Köy
- ☐ Kasaba
- ☐ Şehir

Kimlerle yaşıyorsunuz?

- ☐ Yalnız
- ☐ Eşle
- ☐ Eş ve çocuklarla
- ☐ Çocuklarla
- ☐ Kendi kök ailenizle
- ☐ Eşin kök ailesiyle

Çocuk sayısı:

Özel gereksinimli çocuk sayısı:.....

Özel gereksinimli çocuğun tanısı:.....

Tanının konduğu yıl:.....

Ekonomik durumunuzu nasıl tanımlarsınız?

- ☐ Çok kötü
- ☐ Kötü
- ☐ Orta
- ☐ İyi
- ☐ Çok iyi

Ruhsal hastalık geçmişiniz var mı?

Şuan psikolojik destek alıyor musunuz?_.....

Şuan kullandığınız psikiyatrik ilaç var mı?

Ailede ruhsal hastalık geçmişi:

SCL-90-R

AÇIKLAMA: Aşağıda zaman zaman herkeste olabilecek yakınmaların ve sorunların bir listesi vardır. Lütfen her birini dikkatle okuyunuz. Sonra bu durumun bu gün de dahil olmak üzere son üç ay içerisinde sizi ne ölçüde huzursuz ve tedirgin ettiğini gösterilen şekilde numaralandırarak işaretleyiniz

Örnek: 1. (2) Baş ağrısı

Hiç : 0

Çok az : 1

Orta derecede : 2

Oldukça fazla : 3

İleri derecede: 4

1. () Baş ağrısı
2. () Sinirlilik ya da içinin titremesi
3. () Zihinden atamadığınız tekrarlayan, hoş gitmeyen düşünceler
4. () Baygınlık ya da baş dönmesi
5. () Cinsel arzu ve ilginin kaybı
6. () Başkaları tarafından eleştirilme duygusu
7. () Herhangi bir kimsenin düşüncelerinizi kontrol edebileceği fikri
8. () Sorunlarınızdan pek çoğu için başkalarının suçlanması gerektiği duygusu
9. () Olayları anımsamada güçlük
10. () Dikkatsizlik ya da sakarlıkla ilgili düşünceler
11. () Kolayca gücenme, rahatsız olma hissi
12. () Göğüs ya da kalp bölgesinde ağrılar
13. () Caddelerde veya açık alanlarda korku hissi

14. () Enerjinizde azalma veya yavaşlama hali
15. () Yaşamınızın sonlanması düşünceleri
16. () Başka kişilerin duymadıkları sesleri duyma
17. () Titreme
18. () Çoğu kişiye güvenilmemesi gerektiği hissi
19. () İştah azalması
20. () Kolayca ağlama
21. () Karşı cinsten kişilerle utangaçlık ve rahatsızlık hissi
22. () Tuzağa düşürülmüş veya yakalanmış olma hissi
23. () Bir neden olmaksızın aniden korkuya kapılma
24. () Kontrol edilemeyen öfke patlamaları
25. () Evden dışarı yalnız çıkma korkusu
26. () Olanlar için kendisini suçlama
27. () Belin alt kısmında ağrılar
28. () İşlerin yapılmasında erteleme duygusu
29. () Yalnızlık hissi
30. () Karamsarlık hissi
31. () Her şey için çok fazla endişe duyma
32. () Her şeye karşı ilgisizlik hali
33. () Korku hissi

- 34. () Duygularınızın kolayca incitilebilmesi hali
- 35. () Diğer insanların sizin özel düşüncelerinizi bilmesi
- 36. () Başkalarının sizi anlamadığı veya hissedemeyeceği duygusu
- 37. () Başkalarının sizi sevmediği ya da dostça olmayan davranışlar gösterdiği hissi
- 38. () İşlerin doğru yapıldığından emin olmak için çok yavaş yapmak
- 39. () Kalbin çok hızlı çarpması
- 40. () Bulantı ve midede rahatsızlık hissi
- 41. () Kendini başkalarından aşağı görme
- 42. () Adale (kas) ağrıları
- 43. () Başkalarının sizi gözlediği veya hakkınızda konuştuğu hissi
- 44. () Uykuya dalmada güçlük
- 45. () Yaptığınız işleri bir ya da birkaç kez kontrol etme
- 46. () Karar vermede güçlük
- 47. () Otobüs, tren, metro gibi araçlarla yolculuk etme korkusu
- 48. () Nefes almada güçlük
- 49. () Soğuk veya sıcak basması
- 50. () Sizi korkutan belirli uğraş, yer veya nesnelerden kaçınma durumu
- 51. () Hiç bir şey düşünmeme hali
- 52. () Bedeninizin bazı kısımlarında uyuşma, karıncalanma olması
- 53. () Boğazınıza bir yumru takınmış hissi

- 54. () Gelecek konusunda ümitsizlik
- 55. () Düşüncelerinizi bir konuya yoğunlaştırmada güçlük
- 56. () Bedeninizin çeşitli kısımlarında zayıflık hissi
- 57. () Gerginlik veya coşku hissi
- 58. () Kol ve bacaklarda ağırlık hissi
- 59. () Ölüm ya da ölme düşünceleri
- 60. () Aşırı yemek yeme
- 61. () İnsanlar size baktığı veya hakkınızda konuştuğu zaman rahatsızlık duyma
- 62. () Size ait olmayan düşüncelere sahip olma
- 63. () Bir başkasına vurmak, zarar vermek, yaralamak dürtülerinin olması
- 64. () Sabahın erken saatlerinde uyanma
- 65. () Yıkanma, sayma, dokunma, gibi bazı hareketleri yineleme hali
- 66. () Uykuda huzursuzluk, rahat uyuyamama
- 67. () Bazı şeyleri kırıp dökme hissi
- 68. () Başkalarının paylaşıp kabul etmediği inanç ve düşüncelerin olması
- 69. () Başkalarının yanında kendini çok sıkılgan hissetme
- 70. () Çarşı, sinema gibi kalabalık yerlerde rahatsızlık hissi
- 71. () Her şeyin bir yük gibi görünmesi
- 72. () Dehşet ve panik nöbetleri
- 73. () Toplum içinde yer, içerken huzursuzluk hissi

74. () Sık sık tartışmaya girme
75. () Yalnız bırakıldığınızda sinirlilik hali
76. () Başkalarının sizi başarılarınız için yeterince takdir etmediği duygusu
77. () Başkalarıyla birlikte olunan durumlarda bile yalnızlık hissetme
78. () Yerinizde duramayacak ölçüde rahatsızlık hissetme
79. () Değersizlik duygusu
80. () Size kötü bir şey olacakmış hissi
81. () Bağırma ya da eşyaları fırlatma
82. () Topluluk içinde bayılacağınız korkusu
83. () Eğer izin verirsiniz insanların sizi sömüreceği duygusu
84. () Cinsiyet konusunda sizi çok rahatsız eden düşüncelerin olması
85. () Günahlarınızdan dolayı cezalandırılmanız gerektiği düşüncesi
86. () Korkutucu türden düşünce ve hayaller
87. () Bedeninizde ciddi bir rahatsızlık olduğu düşüncesi
88. () Başka bir kişiye karşı asla yakınlık duymama
89. () Suçluluk duygusu
90. () Aklınızda bir bozukluğun olduğu düşüncesi

TORONTO ALEKSİTİMİ ÖLÇEĞİ-20 (TAÖ-20)

Lütfen aşağıdaki maddelerin sizi ne ölçüde tanımladığını ilgili kısmı işaretleyerek belirleyiniz.

	Hiç Katılmıyorum	Katılmıyorum	Kararsızım	Katılıyorum	Tamamen Katılıyorum
1. Ne hissettiğimi çoğu kez tam olarak bilmem.					
2. Duygularım için uygun kelimeleri bulmak benim için zordur.					
3. Bedenimde doktorların bile anlamadığı durumlar oluyor.					
4. Duygularımı kolayca tanımlayabilirim.					
5. Sorunları yalnızca tanımlamaktansa onları çözümlemeyi yeğlerim.					
6. Keyfim kaçtığında, üzgün mü, korkmuş mu yoksa kızgın mı olduğumu bilemem.					
7. Bedenimdeki duyular çoğu kez kafamı karıştırır.					
8. Neden öyle sonuçlandığını anlamaya çalışmaksızın, işleri olurluna bırakmayı yeğlerim.					
9. Tam olarak tanımlayamadığım duygularım var.					
10. İnsanların duygularını tanıması zorunludur.					
11. İnsanlar hakkında ne hissettiğimi tanımlamak benim için zordur.					
12. İnsanlar duygularım hakkında daha çok konuşmamı isterler.					
13. İçimde ne olup bittiğini bilmiyorum.					

14. Çoğu zaman neden öfkeli olduğumu bilmem.					
15. İnsanlarla, duygularından çok günlük uğraşları hakkında konuşmayı yeğlerim.					
16. Psikolojik dramalar yerine eğlence programları izlemeyi yeğlerim.					
17. İçimdeki duyguları yakın arkadaşlarıma bile açıklamak bana zor gelir.					
18. Sessizlik anlarında bile kendimi birisine yakın hissedebilirim.					
19. Kişisel sorunlarımı çözerken duygularımı incelemeyi yararlı bulurum.					
20. Film ya da tiyatro oyunlarında gizli anlamlar aramak, onlardan alınacak hazzı azaltır.					

AYDINLATILMIŞ ONAM

Bu çalışma, Yakın Doğu Üniversitesi Sosyal Bilimler Enstitüsü Uygulamalı (Klinik) Psikoloji yüksek lisans öğrencisi Gizem Bozalp Akgün tarafından gerçekleştirilen bir çalışmadır.

Bu çalışmanın amacı özel gereksinimli çocuğa sahip ebeveynlerin psikolojik belirtileri ve aleksitimi düzeylerini araştırmaktır. Çalışma sonucunda elde edilen veriler doğrultusunda yüksek lisans tezinin yazılması amaçlanmaktadır.

Anket tamamen bilimsel amaçlarla düzenlenmiştir. Anket formunda kimlik bilgileriniz yer almayacaktır. Size ait bilgiler kesinlikle gizli tutulacaktır. Çalışmadan elde edilen veriler yalnızca istatistik veri olarak kullanılacaktır. Yanıtlarınızı içten ve doğru olarak vermeniz bu anket sonuçlarının toplum için yararlı bir bilgi olarak kullanılmasını sağlayacaktır.

Telefon numaranız anketörün denetlemesi ve anketin uygulandığının belirlenmesi amacıyla istenmektedir.

Yardımanız için çok teşekkür ederim.

Psikolog

Gizem Bozalp Akgün

Yukardaki bilgileri ayrıntılı biçimde tümünü okudum ve anketin uygulanmasını onayladım.

İsim:

İmza:

Telefon:

BİLGİLENDİRME FORMU

ÖZEL GEREKSİNİMLİ ÇOCUĞA SAHİP EBEVEYNLERİN PSİKOLOJİK BELİRTİLERİ VE ALEKSİTİMİ DÜZEYLERİNİN BELİRLENMESİ

Bu çalışmanın amacı özel gereksinimli çocuğa sahip ebeveynlerin psikolojik belirtileri ve aleksitimi düzeylerini araştırmaktır. Çalışma sonucunda elde edilen veriler doğrultusunda Bu çalışmanın amacı özel gereksinimli çocuğa sahip ebeveynlerin psikolojik belirtileri ve aleksitimi düzeylerini belirlemek amaçlanmaktadır.

Bu çalışmada size bir demografik bilgi formu ve bir dizi ölçek sunduk. Demografik bilgi formu sizin yaş cinsiyet gibi demografik özellikleriniz hakkındaki soruları içermektedir. Ölçekler ise psikolojik belirtileri ve aleksitimi düzeylerini ölçmektedir.

Daha önce de belirtildiği gibi, ölçeklerde ve görüşmelerde verdiğiniz cevaplar kesinlikle gizli kalacaktır. Eğer çalışmayla ilgili herhangi bir şikayet, görüş veya sorunuz varsa bu çalışmanın araştırmacılarından biri olan Psk. Gizem Bozalp Akgün ile iletişime geçmekten lütfen çekinmeyiniz (gizembzlp@gmail.com/ 05320683791).

Eğer bu çalışmaya katılmak sizde belirli düzeyde stres yaratmışsa ve bir danışmanla konuşmak istiyorsanız, ülkemizde ücretsiz hizmet veren şu kuruluşlar bulunmaktadır:

Eğer üniversite öğrencisiyseniz, devam ettiğiniz üniversitede Psikolojik Danışmanlık, Rehberlik ve Araştırma Merkezine (PDRAM) başvurabilirsiniz.

Eğer öğrenci değilseniz, Barış Sınır ve Ruh Hastalıkları Hastanesine başvurabilirsiniz.

Eğer araştırmanın sonuçlarıyla ilgileniyorsanız, araştırmacıyla iletişime geçebilirsiniz.

Katıldığınız için tekrar teşekkür ederim.

Psikolog
Gizem Bozalp Akgün
Psikoloji Bölümü,
Yakın Doğu Üniversitesi,
Lefkoşa.

Uzm. Psk. Gizem BOZALP AKGÜN

24 Ocak 1986

0532 068 37 91/ gizembzlp@gmail.com

Bahçeşehir / İstanbul



EĞİTİM:

*Yakın Doğu Üniversitesi, **Klinik Psikoloji Yüksek Lisans Programı**, KKTC – Şeref öğren ciliği derecesi

*Doğu Akdeniz Üniversitesi, Fen Edebiyat Fakültesi, **Psikoloji Bölümü (%100 İngilizce)**, K KTC

İŞ TECRÜBELERİ:

* **Detay Psikoloji Merkezi, Uzman Klinik Psikolog, İstanbul (Halen)**

* **Özel Başak Öztürk Özel Eğitim ve Rehabilitasyon Merkezi, Psikolog, Ankara**

***Kale Endüstri Holding A.Ş., İnsan Kaynakları, Eğitim Departmanı, İnsan Kaynakları u zman yardımcısı, İstanbul**

STAJLAR:

***Uzmanlık stajı ve Süpervizyon;** Ankara Üniversitesi Tıp Fakültesi Hastanesi, Psikiyatri An abilim Dalı, Ankara

***Lisans stajı;** GATA, Çocuk Ruh Sağlığı ve Hastalıkları Bölümü, Ankara

***Gönüllü danışmanlık;** Lindgren Preschool, New Jersey, ABD, Volunteer Counseling

***Gönüllü eğitimci;** Magosa Özel Eğitim Merkezi, Bedensel ve zihinsel engelli çocukların Dü nya Atletizm Yarışlarına hazırlık projesi, KKTC

***Gönüllü asistanlık;** Doğu Akdeniz Üniversitesi, Psikoloji Bölüm Başkanlığı, Gönüllü Asist an, KKTC

TEKNİK YETKİNLİKLER:

* Ms Office Programs (Word, Excel, PowerPoint, Outlook, Publisher)

* SPSS

* İyi derecede İngilizce

* Yetişkin Psikopatolojisi

- * Bireysel psikoterapi
- * Yetişkin danışmanlığı
- * Aile danışmanlığı
- * Bilişsel Davranışçı Terapi
- * MMPI
- * TAT
- * Louisa Duss Hikaye Tamamlama Testi
- * WISC-R
- * Beier Cümle Tamamlama
- * Objectif testler (tümü)
- * GOPTÖ
- * Gesell Gelişim Testi
- * Goodenough Harris Bir İnsan Çiz Testi
- * Draw A Person
- * Koppitz İnsan Çizim Testi
- * Aile Çiz Testi
- * Ağaç Çiz Testi
- * Catell 2A Zeka Testi
- * Peabody Kelime Testi
- * Metropolitan Okul Olgunluğu Testi
- * AGTE Ankara Gelişim Tarama Envanteri
- * Kurumsal danışmanlık
- * Kurumsal psiko-eğitim
- * Kişilik ve yetkinlik bazlı, bilimsel ölçme ve değerlendirme işe alım teknikleri
- * Endüstriyel Psikoloji/İnsan Kaynakları Test Bataryası
- * Çalışan Memnuniyeti ve Bağlılığını saptama ve memnuniyeti arttırma
- * Çalışan Algısı ve iş doyumu
- * Görev tanımları

KURSLAR VE SERTİFİKALAR:

- * Çocuk Resimlerinin Psiko-pedagojik Analizi & Çocuk Testleri Eğitimi, PsikoTerap-İST Eğitim ve Danışmanlık Merkezi, Ekim 2016
- * Endüstriyel Psikoloji-İnsan Kaynakları Test Bataryası Uygulayıcı Sertifikası, İstanbul Psikoloji Enstitüsü, Aralık 2013
- * Evlilik ve Aile Danışmanlığı Sertifikası, Kıbrıs Türk Psikologlar Derneği, Nisan 2013
- * 5. Psikoloji Günleri Aktif Katılımcı, Doğu Akdeniz Üniversitesi, Nisan 2011
- * 14.Ulusal Psikoloji Öğrencileri Kongresi, İstanbul Üniversitesi, Temmuz 2009

YAYINLAR:

Bahçeşehir 4Mevsim Dergisi, Mart 2017 sayısı, *Panik Atak röportajı*, s.73 ,<http://www.4mevsimbahcesehir.com/S73/>

ORIGINALITY REPORT

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PUBLICATIONS

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www.eurodisney.com

Internet Source

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3

Taymur, Ibrahim, Ersin Budak, Hakan Demirci, Hatice Alkan Akdağ, Buket Belkız Güngör, and Kadir Özdel. "A study of the relationship between internet addiction, psychopathology and dysfunctional beliefs", Computers in Human Behavior, 2016.

Publication

<%1

4

Aydın, Aydan. "A Comparison of the Alexithymia, Self-compassion and Humour Characteristics of the Parents with Mentally Disabled and Autistic Children", Procedia - Social and Behavioral Sciences, 2015.

Publication

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5

thejournalofheadacheandpain.springeropen.com

Internet Source

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6

Jessica Ezzell Hunter. "Is there evidence for neuropsychological and neurobehavioral phenotypes among adults without FXTAS

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