



## Evaluating the state of mind of sports leaders of children with autism (Case of the Anatolian area of Istanbul)

Menşure Aydın <sup>a \*</sup>, Hakan Akdeniz <sup>b</sup>, Gülşah Sekban<sup>c</sup>, Bergün Meriç Bingöl <sup>d</sup>, Irmak Toker<sup>e</sup>, Didem Çapraz<sup>f</sup>

<sup>a</sup> *Haliç University, Physical Education And Sports, İstanbul, Turkey*

<sup>b</sup> *Kocaeli University, Sports Sciences Faculty, Kocaeli, Turkey*

<sup>c</sup> *Kocaeli University, Sports Sciences Faculty, Kocaeli, Turkey*

<sup>d</sup> *Kocaeli University, Sports Sciences Faculty, Kocaeli, Turkey*

<sup>e</sup> *Kocaeli University, Sports Sciences Faculty, Kocaeli, Turkey*

<sup>f</sup> *Kocaeli University, Sports Sciences Faculty, Kocaeli, Turkey*

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### Abstract

This research was designed to assess the state of mind of sports leaders of children with autism. Their moods were analyzed using age and gender variables. Also, suggestions were made at the end of the research based on the results of the evaluation.

The population of the research comprised of sports leaders of children with autism; the sample of the research was 50 sports leaders (26 female, 24 male) of autistic children in the Anatolian area of Istanbul. The Symptoms Checklist-90 Revised (SCL-90-R) was used to determine the moods of the sports leaders. This scale was developed by Derogatis et al. (Derogatis, Lipman, Richels, 1974), and its validity and reliability studies were actualized by Kılıç (Kılıç, 2016) in Turkey.

Regarding the analysis of data, frequency and percentage analyses were utilized to specify the descriptive characteristics of the sports leaders that participated in the study. T-test and Tukey test were used to review the differences in psychological symptom levels based on the descriptive characteristics of the sample group.

There was no statistically significant difference in the gender variable of sports leaders of children with autism ( $p>0.05$ ). As age increases, the levels of obsessive-compulsive disorder, interpersonal sensitivity, depression, anxiety, anger-hostility, phobic anxiety, paranoid thought, and General Severity Index (GSI) also increase. However, a significant difference was found solely in the anxiety sub-dimension (ANX) ( $p<0.05$ ).

**Keywords:** Autism, Sports Leader, Psychological Symptoms, Sports

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\* Corresponding author Menşure Aydın  
E-mail address: [measureaydin@halic.edu.tr](mailto:measureaydin@halic.edu.tr)

## 1. Introduction

### 1.1. Introduce the problem

The word “autism” is made up of the words “autos” (own) in Greek and “ismus” (suffix relating to thought and process) in Latin (Kuhn and Cahn, 2004; cited by Çopuroğlu and Mengi, 2014). Autism is a disease that is related to the brain and is diagnosed in early childhood; it generally continues for life (Odabaş, 2016). In the early years, it was thought of as a disorder that affects the perception of reality and was described as childhood schizophrenia. It also was thought of as the onset of schizophrenia; however, these two diseases are different because of the absence of delusion and hallucinations in autism (Darıca, 2000; cited by Copuroğlu and Mengi, 2014).

Individuals with autism cannot generally achieve basic life skills. They lack skills in self-care, social domain, communication and academic areas. Therefore, their life is dependent on others (Çopuroğlu and Mengi, 2014). There is a need to create programs that enhance their basic skills to promote self dependence (Eichstaedt and Lavay, 1992; cited by Arslan and İnce, 2015). They may experience great difficulties in performing simple tasks in a social environment; the manifestation of such difficulties causes individuals with autism to be perceived as disabled and defective. In addition to these, shyness, communication disorders and anti-social behavior cause them to prefer isolation. As autistic children grow, such negative social interactions increase (Çopuroğlu and Mengi, 2014).

Regular sports activities positively affect gross motor skills in children with autism; gross locomotor movements become easy by increasing muscle force and strength due to sports activities (Namlı, 2012). A study indicates that aggressive and repetitive behaviors decreased in autistic children who performed jogging, lifting weight and cycling (Lang et al., 2010). Movement education programs affected all the developmental stages and aspects in children with autism (İlhan, 2009). The physical, mental and social developments of children with autism have a more complex structure in comparison with other disabled groups because individuals with autism have limited patterns to perform a specific behavior or movement (Apa, 2000; cited by Odabaş, 2016).

### 1.2. Describe relevant scholarship

Families with autistic individuals may not know the solution to this problem or the actions that need to be taken (Top, 2008). For this reason, affected families need to work with sports leaders to provide training for the multidimensional development of children with autism. Some families have started this process. Sports leaders under the name “children with autism sports club association” give personal education to children who visit the club daily, at night (24 hours) or on specific days of the week. Different sports

activities (skill-balance-coordination, table tennis, bicycling, swimming, cross, etc.), daily self-care activities and socializing activities are performed within the scope of personal education. These programs enable children with autism to become skillful in motor and physical aspects, increase muscle force and strength, improve gross locomotor movements, and provide personal education to improve their social aspects

Working with individuals with autism is quite difficult due to the problems associated with autistic behavior (hyperactivity, crying, pettishness, repetitive behavior, communication problems, etc.). The children could become aggressive if their energy or physical power is not canalized to a positive direction (Temel et al., 2017). Experts who provide training for individuals with autism may experience problems of low motivation, professional exhaustion and decrease in job satisfaction (Billingsley, 2004; Simpson, 2004, cited by Aslan and Özgüç, 2017). Sports leaders unwittingly develop mental problems because of the behavioral problems of children with autism. Leaders who cannot cope with such problems have difficulties in providing quality education to their students (Aslan and Özgüç, 2017).

### *1.3. State hypotheses and their correspondence to research design*

While there are several studies on the effects of sports on individuals with autism and on the state of mind of families with autistic children, there are fewer studies on the state of mind of sports leaders of autistic children. It is expected that this paper will provide a significant literature reference for the benefit of future studies.

## **2. Method**

. The descriptive survey model was utilized in this study to reveal the current situation. This research model aims to describe an existing situation as it is: individuals, events or objects as they are within their environment from past to present (Karasar, 2004). The sample consists of 50 (26 females, 24 males) sports leaders of children with autism. The Symptoms Checklist-90 Revised (SCL-90-R), whose reliability and validity studies were performed by Kılıç (Kılıç, 2016), was used as data collection tool to specify the moods of sports leaders of children with autism. The above checklist was developed by Derogatis et al. (Derogatis, Lipman, Richels, 1974).

This scale consists of 90 items; it is graded in five points Likert scale as “none=0, very few=1, reasonable=2, quite a little=3, on highest degree=4” by considering the mood of participants in the last 15 days. It is scored between 0 and 4. The scale is composed of 10 sub-dimensions: somatization, obsessive-compulsive disorder, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, psychoticism, and additional articles. The sub-dimension scores of the scale are computed by dividing the

total points of the questions of the dimension by the number of articles of its sub-dimension. The General Severity Index (GSI) is computed by dividing the score of each item by 90 after adding all 0-4. Increase in GSI means increase in discomfort arising from psychiatric symptoms in a person; it is the best index of this scale (Aydemir and Köroğlu 2007).

In the reliability and validity study of Kılıç, 0.82 was accepted for somatization, 0.84 for obsessive-compulsive disorder, 0.79 for interpersonal sensitivity, 0.78 for depression, 0.73 for anxiety, 0.79 for hostility, 0.78 for phobic anxiety, 0.63 for paranoid ideation, and 0.73 for psychotism.

In this study, 0.838 was accepted for somatization, 0.858 for obsessive-compulsive disorder, 0.882 for interpersonal sensitivity, 0.901 for depression, 0.825 for anxiety, 0.911 for hostility, 0.874 for phobic anxiety, 0.889 for paranoid ideation, 0.937 for psychotism, 0.936 for additional articles, and 0.983 for GSI.

Aştı et al. (2011) summarizes the articles of Symptoms Checklist-90 Revised (SCL 90-R);

- Somatization: Uneasiness relating to several bodily functions.
- Obsessive-compulsive disorder: Uneasiness relating to unwanted thoughts and behaviors that a person is not able to desist from thinking of and/or doing.
- Interpersonal sensitivity: Uneasiness arising from a feeling of inadequacy and self-abuse.
- Depression: Uneasiness arising from depressed mood and emotion such as decreasing interest in life, energy loss, suicidal ideas, etc.
- Hostility: Uneasiness arising from anger and irritation.
- Phobic-anxiety: Uneasiness arising from phobic behaviors such as escape and avoidance.
- Paranoid ideation: Uneasiness due to occurring illusions and losing autonomy, skepticism and hostility.
- Psychoticism: Isolation from the social circle, schizoid lifestyle and being clarified illusions.
- Additional Articles: It consists of 9 articles that can affect all the sub-dimensions.

IBM SPSS Statistics 21 software package was used to analyze the data. Frequency and percentage analyses were utilized to determine the descriptive characteristics of sports leaders. The relationship among the sub-dimensions of SCL-90-R was scrutinized by

Pearson Product-Moment analysis, and skewness-kurtosis values were used to determine whether the data showed normal distribution. T-test and Tukey test were utilized to analyze the differences in psychological symptom levels based on the descriptive characteristics of the sample group

### 3. Results

**Table 1.** Demographic Attributes and Descriptive Statistics

		<b>n</b>	<b>%</b>
<b>Age</b>	18-22	4	8.0
	23-27	23	46.0
	28-32	19	38.0
	33-37	4	8.0
<b>Gender</b>	FEMALE	26	52.0
	MALE	24	48.0
	Total	50	100.0

As shown in Table 1, 8% (n=4) of participants were in the age range of 18-22 years; 46% (n=23) were in the age range of 23-27 years; 28% (n=19) were in the age range of 28-32 years; 8% (n=4) were in the age range of 33-37 years.

Regarding the gender variable, 52% (n=26) of participants are females; while 48% (n=24) of participants are males.

**Table 2.** Cronbach Alpha Reliability Test Results of the Sub-Dimensions of SCL-90-R

<b>Scale</b>	<b>Cronbach's Alpha</b>
Somatization	0.838
Obsessive-Compulsive	0.858
Interpersonal Sensivity	0.882
Depression	0.901
Anxiety	0.825





Scl 90 r total	r	.858**	.893**	.892**	.859**	.831**	.910**	.908**	.910**	.882**	.890**	1
	p	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	

\*p< 0.05; \*\*p< 0.01; N=50

As shown in Table 3, there is a high level of positive significance between all the sub-dimensions ( $p<0.05$ ).

The somatization (SOM) sub-dimension has a high level of positive relationship with obsessive-compulsive disorder (OC) ( $r=.757$ ;  $p<0.05$ ), interpersonal sensitivity (INT) ( $r=.733$ ;  $p<0.05$ ), depression (DEP) ( $r=.738$ ;  $p<0.05$ ), anxiety (ANX) ( $r=.784$ ;  $p<0.05$ ), hostility (HOS) ( $r=.751$ ;  $p<0.05$ ), phobic anxiety (PHOB) ( $r=.755$ ;  $p<0.05$ ), paranoid ideation (PAR) ( $r=.769$ ;  $p<0.05$ ), psychotism (PSY) ( $r=.754$ ;  $p<0.05$ ), additional articles ( $r=.687$ ;  $p<0.05$ ) and GSI ( $r=.858$ ;  $p<0.05$ ).

The obsessive-compulsive disorder (OC) sub-dimension has a high level of positive relationship with interpersonal sensitivity (INT) ( $r=.750$ ;  $p<0.05$ ), depression (DEP) ( $r=.656$ ;  $p<0.05$ ), anxiety (ANX) ( $r=.656$ ;  $p<0.05$ ), hostility (HOS) ( $r=.803$ ;  $p<0.05$ ), phobic anxiety (PHOB) ( $r=.775$ ;  $p<0.05$ ), paranoid ideation (PAR) ( $r=.781$ ;  $p<0.05$ ), psychotism (PSY) ( $r=.826$ ;  $p<0.05$ ), additional articles ( $r=.804$ ;  $p<0.05$ ), and GSI ( $r=.893$ ;  $p<0.05$ ).

The interpersonal sensitivity (INT) sub-dimension has a high-level of positive relationship with depression (DEP) ( $r=.800$ ;  $p<0.05$ ), anxiety (ANX) ( $r=.733$ ;  $p<0.05$ ), hostility (HOS) ( $r=.774$ ;  $p<0.05$ ), phobic anxiety (PHOB) ( $r=.821$ ;  $p<0.05$ ), paranoid ideation (PAR) ( $r=.764$ ;  $p<0.05$ ), psychotism (PSY) ( $r=.752$ ;  $p<0.05$ ), additional articles ( $r=.761$ ;  $p<0.05$ ) and GSI ( $r=.892$ ;  $p<0.05$ ).

The depression sub-dimension has a high level of positive relationship with anxiety (ANX) ( $r=.783$ ;  $p<0.05$ ), hostility (HOS) ( $r=.706$ ;  $p<0.05$ ), phobic anxiety (PHOB) ( $r=.763$ ;  $p<0.05$ ), paranoid ideation (PAR) ( $r=.712$ ;  $p<0.05$ ), psychotism (PSY) ( $r=.637$ ;  $p<0.05$ ), additional articles ( $r=.738$ ;  $p<0.05$ ) and GSI ( $r=.859$ ;  $p<0.05$ ).

The anxiety (ANX) sub-dimension has a high-level of positive relationship with hostility (HOS) ( $r=.773$ ;  $p<0.05$ ), phobic anxiety (PHOB) ( $r=.812$ ;  $p<0.05$ ), paranoid ideation (PAR) ( $r=.660$ ;  $p<0.05$ ), psychotism (PSY) ( $r=.600$ ;  $p<0.05$ ), additional articles ( $r=.673$ ;  $p<0.05$ ) and GSI ( $r=.831$ ;  $p<0.05$ ).

The hostility (HOS) sub-dimension has a high-level of positive relationship with phobic anxiety (PHOB) ( $r=.820$ ;  $p<0.05$ ), paranoid ideation (PAR) ( $r=.723$ ;  $p<0.05$ ), psychotism (PSY) ( $r=.754$ ;  $p<0.05$ ), additional articles ( $r=.811$ ;  $p<0.05$ ) and GSI ( $r=.910$ ;  $p<0.05$ ).

The phobic anxiety (PHOB) sub-dimension has a high level of positive relationship with paranoid ideation (PAR) ( $r=.799$ ;  $p<0.05$ ), psychotism (PSY) ( $r=.780$ ;  $p<0.05$ ), additional articles ( $r=.693$ ;  $p<.005$ ) and GSI ( $r=.908$ ;  $p<0.05$ ).

The paranoid ideation (PAR) sub-dimension has a high level of positive relationship with psychotism (PSY) ( $r=.840$ ;  $p<0.05$ ), additional articles ( $r=.853$ ;  $p<0.05$ ) and GSI ( $r=.910$ ;  $p<0.05$ ).

The psychotism (PSY) sub-dimension has a high level of positive relationship with additional articles ( $r=.808$ ;  $p<0.05$ ) and GSI ( $r=.882$ ;  $p<0.05$ ).

There also is a positive relationship between additional articles and GSI ( $r=.890$ ;  $p<0.05$ ).

Table 4. Distribution of the Average Symptom Scores of the General and Sub-Scales of SCL-90-R with respect to Sports Leaders

Sub-Dimensions	$\bar{X}$	SS
Somatization	1.40	.78
Obsessive-Compulsive	1.27	.86
Interpersonal Sensitivity	1.15	.90
Depression	1.41	.96
Anxiety	1.33	.88
Hostility	1.35	1.05
Phobic anxiety	1.35	.98
Paranoid Ideation	1.35	1.03
Psychotism	1.32	1.08
Additional Articles	1.06	.99
Total	1.30	.84

Table 4 shows the calculation of symptom scores of the general and sub-scales of SCL-90-R. The sub-dimension averages are as follows: somatization ( $\bar{X}=1.40\pm.78$ ), obsessive-compulsive disorder ( $\bar{X}=1.27\pm.86$ ), interpersonal sensitivity ( $\bar{X}=1.15\pm.90$ ), depression ( $\bar{X}=1.41\pm.96$ ), anxiety ( $\bar{X}=1.33\pm.88$ ), hostility ( $\bar{X}=1.35\pm1.05$ ), phobic anxiety ( $\bar{X}=1.35\pm.98$ ), paranoid ideation ( $\bar{X}=1.35\pm1.03$ ), psychotism ( $\bar{X}=1.32\pm1.08$ ), additional articles ( $\bar{X}=1.06\pm.99$ ) and SCL-90-R total (GSI) ( $\bar{X}=1.30\pm.84$ )

Table 5. T-Test Results Relating to Gender Variable of the Sub-Dimensions of SCL-90-R

	<b>Gender</b>	<b>n</b>	<b>x</b>	<b>ss</b>	<b>t</b>	<b>p</b>
Somatization	FEMALE	26	1.1368	.78335	-2.616	.659
	MALE	24	1.6852	.69092		
Obsessive-Compulsive	FEMALE	26	.9103	.77429	-3.425	.486
	MALE	24	1.6667	.78636		
Interpersonal Sensitivity	FEMALE	26	.8077	.70452	-3.021	.063
	MALE	24	1.5231	.96000		
Depression	FEMALE	26	1.0769	.90200	-2.705	.996
	MALE	24	1.7731	.91711		
Anxiety	FEMALE	26	1.0726	.81586	-2.236	.813
	MALE	24	1.6111	.88708		
Hostility	FEMALE	26	1.0128	.99397	-2.509	.857
	MALE	24	1.7269	1.01728		
Phobic Anxiety	FEMALE	26	.9872	.88685	-2.916	.576
	MALE	24	1.7454	.95158		
Paranoid Ideation	FEMALE	26	1.0299	.96995	-2.402	.764
	MALE	24	1.6991	.99945		
Psychotism	FEMALE	26	1.0214	1.02561	-2.171	.516
	MALE	24	1.6620	1.06093		
Additional Articles	FEMALE	26	.8291	.90716	-1.737	.166
	MALE	24	1.3102	1.05102		
Total	FEMALE	26	.9885	.78117	-2.928	.909
	MALE	24	1.6403	.79218		

As shown in the t-test results based on gender variable regarding SCL-90-R (Table 5), there is no significant difference in any of the sub-dimensions and GSI ( $p>0.05$ ).

Table 6. One-Way ANOVA Results Relating to Age Variable of the Sub-Dimensions of SCL-90-R

Age		N	X	Ss	F	p	Significance Tukey
SOMATIZATION	18-22	4	1.0278	.82340	1.236	.207	
	23-27	23	1.2512	.75152			
	28-32	19	1.5789	.82534			
	33-37	4	1.7778	.60858			
	Total	50	1.4000	.78343			
OBSESSIVE-COMPULSIVE	18-22	4	.9444	.98758	2.828	.205	
	23-27	23	.9903	.66237			
	28-32	19	1.5322	.92190			
	33-37	4	2.0000	.96864			
	Total	50	1.2733	.86131			
INTERPERSONAL SENSITIVITY	18-22	4	.6944	.52411	1.897	.087	
	23-27	23	.9372	.77476			
	28-32	19	1.3743	.95955			
	33-37	4	1.7778	1.28940			
	Total	50	1.1511	.90344			
DEPRESSION	18-22	4	1.1389	.61781	.763	.520	
	23-27	23	1.2464	.93441			
	28-32	19	1.5789	1.11762			
	33-37	4	1.8333	.49275			
	Total	50	1.4111	.96610			
ANXIETY	18-22	4	1.1389	.53190	.763	.015	23-27 age - 28-32 age
	23-27	23	.9517	.76529			

	28-32	19	1.6842	.89754			
	33-37	4	2.0278	.88599			
	Total	50	1.3311	.88477			
HOSTILITY	18-22	4	1.0278	.68718	2.672	.058	
	23-27	23	.9758	.95461			
	28-32	19	1.7836	1.10397			
	33-37	4	1.8333	1.05214			
	Total	50	1.3556	1.05815			
PHOBIC ANXIETY	18-22	4	1.0833	.78764	2.738	.054	
	23-27	23	.9952	.82025			
	28-32	19	1.7018	1.03310			
	33-37	4	2.0000	1.23395			
	Total	50	1.3511	.98626			
PARANOID IDEATION	18-22	4	.8056	.50816	1.865	.149	
	23-27	23	1.1159	1.06494			
	28-32	19	1.6023	1.00090			
	33-37	4	2.0556	.94499			
	Total	50	1.3511	1.03098			
PSYCHOTISM	18-22	4	.7500	.35573	3.027	.052	
	23-27	23	.9855	.93522			
	28-32	19	1.6842	1.18244			
	33-37	4	2.1944	1.01176			
	Total	50	1.3289	1.08145			
ADDITIONAL ARTICLES	18-22	4	.4444	.32710	3.152	.129	
	23-27	23	.7826	.82340			
	28-32	19	1.3216	.75152			
	33-37	4	2.0278	.82534			

	Total	50	1.0600	.60858			
TOTAL	18-22	4	.9056	.78343	2.936	.059	
	23-27	23	1.0232	.98758			
	28-32	19	1.5842	.66237			
	33-37	4	1.9528	.92190			
	Total	50	1.3013	.96864			

Regarding the anxiety (ANX) sub-dimension, there is significant difference between the age ranges of 23-27 years ( $\bar{X} = .95 \pm .76$ ) and 28-32 years ( $\bar{X} = 1.68 \pm .89$ ) ( $F = .763$ ;  $p < 0.05$ ).

There is no statistically significant difference in other dimensions with respect to the age variable ( $p > 0.05$ ).

#### 4. Discussion

This study was designed for the purpose of making suggestions regarding sports leaders of autistic children. The moods of sports leaders of children with autism were studied by analysis based on age and gender variables.

In this study, 8% ( $n=4$ ) of sports leaders were in the age range of 18-22 years; 46% ( $n=23$ ) of them were in the age range of 23-27 years; 28% ( $n=19$ ) of them were in the age range of 28-32 years, and 8% ( $n=4$ ) of them were in the age range of 33-37 years. With respect to gender variable, 52% ( $n=26$ ) of participants were females, and 48% ( $n=24$ ) were males.

With respect to the gender variable of SCL-90-R, there is no statistically significant difference in any of the sub-dimensions based on the t-test table ( $p > 0.05$ ). A study that analyzed the level of burnout in teachers working with people with disabilities found no significant difference in gender variable (Şahin and Şahin, 2012). Akten (2007) researched the occupational burnout of counselors and pointed out that gender variable caused exhaustion in female counselors in the emotional exhaustion dimension. A study that reviewed the level of burnout in teachers in terms of various variables found that female teachers have higher desensitization average in comparison with male teachers (Şanlı and Tan, 2017). Another study emphasized that there is a statistically significant difference in the average scores of obsessive-compulsive disorder, paranoid ideation, depression, interpersonal sensitivity, and anxiety; the average scores of female students were higher than the average scores of male students in these sub-dimensions (Demirel et al., 2011). In a graduate study, Çitemel (2010) found that females exhibited symptoms of obsessive-compulsive disorder, interpersonal sensitivity, depression and paranoid ideation. This finding shows parallelism with our findings. Kapi et al. conducted a study on teenagers from different cultures and found that females have more anxiety and

depression symptoms in comparison with the males (Kapi et al., 2007). Concerning Saatçi and Akpınar's (2006) research results, somatization index was generally high among students; somatization symptoms were more frequent in females.

Regarding the ANOVA results related to the age variable of the sub-dimensions of SCL-90-R, there is a significant difference in the anxiety sub-dimension ( $p < 0.05$ ). As age increases in all the sub-dimensions, the levels of obsessive-compulsive disorder, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, psychoticism, and GSI increase at the same time; however, there is no significant difference in other dimensions except for anxiety sub-dimension. A study on nursing students found that the SCL-90-R average score of students was higher in the age group of 18; the difference between them was significant (Yıldırım et al., 2008).

Yorulmaz and Altınkurt (2018) analyzed the level of burnout of teachers in Turkey. With respect to the meta-analysis research, teachers with seniority of 11 years and above exhibited more emotional exhaustion in comparison with teachers who had seniority of 10 years and less. Also, teachers with seniority of 10 years and less exhibited higher desensitization in comparison with teachers who had seniority of 11 years and above. In Akten's (2007) study, with regards to the seniority variable, there were significant differences in the emotional exhaustion dimension of counselors who had seniority of 0-1 year, 2-5 years, as well as 6 years and above. A research which scrutinized the exhaustion and life satisfaction levels of special education teachers showed that the level of burnout of participants significantly varied by age, experience, and type of school; their life satisfaction level also significantly varied by their gender and age (Aydemir et al., 2015). With reference to the findings of another research, the level of burnout of special education teachers varied with the variables of age, gender, marital status, professional time, working field, graduation field, harmony with profession, being in cooperation with workmates, being appreciated by management, finding salary as enough, and voluntarily chosen profession in the emotional exhaustion, failure and insensitivity dimensions (Saraç, 2018).

Deniz (2015) conducted a study involving 60 women in Istanbul; a relationship could not be established between age variable and obsessive-compulsive disorder as well as anxiety symptoms (Deniz, 2015; cited by Keloğlu, 2017). The absence of a significant relationship in the anxiety sub-dimension shows parallelism with the findings of our research. Further, a mental health study by private school teachers pointed out that there is no relationship between mental health scores and age variable (Yiğit, 2007). Regarding the findings of another study, female teachers are affected more by absenteeism, exhaustion and depression levels (Toro and Ursúa, 2014).

Literature has no research relating to the psychological problems of physical education teachers and sports leaders of children with disabilities. Studies generally focus on teachers who work in private teaching institutions and their families. A study that assessed the level of burnout of teachers in special education schools revealed that

teachers who work in special education schools experience a very high level of burnout. Significant differences were found in all the sub-dimensions when the level of burnout was analyzed in relation to the type of school (Küçüksüleymanoğlu, 2011). Studies on education of the handicapped show that caregivers who care for a person with autism have a higher psychological distress in comparison with caregivers who look after a person with another disease (Erdem and Akel, 2014; Green et al., 2009). A study that analyzed the level of burnout of teachers in private teaching institutions in Al-Riyadh found that there is a high level of exhaustion in teachers who work in private schools (Atiyat, 2017). In a similar study by Sarçam and Sakız (2014), teachers of children with autism experience more exhaustion. A study was conducted on the level of burnout of teachers of mentally handicapped students in İzmir Province. The research findings indicate that special education teachers experience burnout syndrome in the emotional exhaustion and desensitization dimensions based on gender, socio-economic level perception, being supported by workmates, and being appreciated by superiors (Girgin and Baysal, 2005).

It is clear that having a child with a disability has crucial effects on the mental health of parents. Dependency, special care, education need of the child and continuous future anxiety establish important dimensions of stress (Akkök, 2003). Mothers who have disabled children display less happiness, self-respect, and self-sufficiency in comparison with mothers with normal children (Avşaroğlu and Okutan, 2018). It is also suggested that mothers who have disabled children have more frequent somatic complaints in comparison with mothers of normal children (Duran, 2018).

Mothers who have children with autism employ the services of sports leaders to ease the stress of childcare and provide children with physical, mental and social development. It is clear that the levels of obsessive-compulsive disorder, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, psychoticism and GSI increase with respect to sports leaders of children with autism. The significant difference in the anxiety (ANX) sub-dimension is due to increased age and experience.

## **5. Conclusions**

This study was performed to evaluate the moods of sports leaders of children with autism. It was found that there is no statistically significant difference with respect to the gender variable. Regarding the age variable, as age increases, the levels of all the sub-dimensions (obsessive-compulsive disorder, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, psychoticism, and GSI) also increase. However, a significant difference was found only in the anxiety sub-dimension ( $p < 0.05$ ).

This study makes the following suggestions:

- The levels of anxiety, hopelessness and depression of sports leaders of children with disability should be monitored.
- Sports leaders should receive education and consultancy relating to anxiety during career; risk groups with mental symptoms should be followed up with psychological services.
- While this study focused on gender and age variables, future studies could consider other variables such as chronic illness, problem sharing, and the reason for choosing a profession.
- Studies could also involve leaders who work with different disabled groups.
- Same or similar studies could be performed by enlarging the population across Turkey.
- Studies could involve comparisons between sports leaders in countries with different socio-cultural structures.

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