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#### **RESEARCH ARTICLE**

# Investigation Into The Stress-Coping Levels of Parents of Children with Autism Who Receive Physical Education

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#### Abstract

The aim of the study is to evaluate the demographic characteristics, stress and coping with stress levels of families with children with autism who receive services from autism sports club associations depending on various factors. A total of 134 people, 97 women (49,65 $\pm$ 6,15) and 37 men (49,40 $\pm$ 6,28) participated in the study. Personal Information Form (PIS), Stress Coping Styles Scale (SCSS) and Parent Stress Scale (PSS) were used as data collection tools. SPSS 22 package program was used to analyze the data obtained. Percentage and frequency values were used to analyze demographic characteristics. The t-test was used for the gender variable of the SPSAS, One-Way Anova test was used for all other variables and Post Hoc Tukey test was used to determine the source of the difference. As a result of the study, there was no statistically significant difference between the sub-dimensions of the SBSAS according to the variables of gender, educational status and gender of the child with autism (p>0.05); when analyzed according to the age variable, a significant difference was found between the groups aged 25-35 years (2.66 $\pm$ 0.58) and 45 years and over (2.30 $\pm$ 0.71) in the helpless approach sub-dimension (p<0.05). A statistically significant difference was found in families with male children (50.29 $\pm$ 5.66) in the comparison of the PBSS according to gender variable (p<0.05). According to the results of the study, it was found that parents felt more helpless as they got older and parents with male children with autism experienced more stress than parents with female children with autism.

#### Keywords

Autism, Coping With Stress, Physical Education, Parenting Stress Level

### **INTRODUCTION**

Autism Spectrum Disorder (ASD) is a complex neurodevelopmental disorder that begins early in life and lasts throughout life, characterized by delayed social relationships, communication, behavioral and cognitive development, and stereotyped behaviors (APA, 2013). The difficulties experienced by individuals with ASD in communicating and maintaining communication skills cause them to perform lower than their peers with typical development as well as their peers with other developmental disabilities (Kizir, 2021). Studies have shown that the behaviors acquired in physical and psycho-social areas through sports and

games in individuals with ASD are transferred to similar situations that are necessary and relevant in daily life (Kaya & Alp, 2022).

While every parent is expecting a healthy baby, the birth of a baby with autism causes the family to be caught unprepared and causes their lives to be seriously negatively shaped. From the moment the child is diagnosed with autism, it affects both the family and the child and requires lifelong interventions (Töret et al. 2014). Considering that autism is a lifelong developmental condition that is characterized by language problems, introversion, repetitive movements and limitations in relationships in the first three years of life, it is known that both children and their families

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are significantly affected by this process (Arslan, 2020; Durukan et al. 2010). The diagnosis of autism in children causes traumatic effects on all family members, including parents (Atılgan & Kolburan, 2019), extreme stress and psychological problems (Köksal & Erciyes, 2021). Children with disabilities remain dependent on their parents to varying degrees because they are affected by disability in terms of certain developmental areas. This situation is a source of stress that requires constant coping for the family (Bilal & Dağ, 2005). Stress is a situation that needs to be coped with; if coping strategies fail, psychological health deteriorates and the emergence of psychopathological symptoms is inevitable (Korkmaz, et al. 2014). For parents with children with autism, stress is seen as an important health problem in the struggle to adapt to changing life conditions with their children, to develop themselves, to solve their problems, and to become an individual who can adapt to existing conditions (Cengiz et al. 2016).

In our country, it is seen that families with ASD children have started to have the awareness that physical activities are important in the development of their children, and that they have demands and searches for the necessity of physical activities within educational activities or after school (Aydın & Sarol, 2014).In a study, it was stated that the lifestyles of the parents of children with ASD attending sports schools were significantly differentiated (Sarvan Cengiz et al. 2016). In a study evaluating the views of parents of children with ASD on sports, parents of children with ASD who play sports stated that sports provide positive contributions to their children. Considering the contributions of sports to the life skills of individuals with ASD, it was emphasized that physical education teachers should be employed especially in special education centers and compulsory education, sports facilities should be brought to an adequate level in these centers, and disabled sports clubs should be increased (Ince, 2017). In a meta-analysis study on the importance of physical education and sports in children with ASD, it was observed that physical education and sports programs provided positive improvements in motor skills and motor performance of children with autism and behavioral problems related to autism. Therefore, they emphasized that individuals with ASD should take part in sports activity programs (Kaya & Alp, 2022).

Due to the positive effect of sports on individuals with autism, families are looking for their children to participate in active sports in many sports centers. One of the sports activity centers is the autism sports club associations, where children with autism are given the opportunity to practice various sports activities (table tennis, skill balance coordination, running, swimming, etc.), daily living skills and self-care skills under the guidance of a sports leader. These institutions provide 24 hour inpatient or daytime services to each child with ASD by a sports instructor. These services are preferred by families to reduce the burden on their children and individual education programs with individuals with ASD are preferred by families because they provide a decrease in autistic behavior problems and improvement in physical fitness.

In the literature studies on coping with stress in families with disabilities, there are studies on coping with stress and mental states of families with disabled and especially mentally disabled children (Şengül & Baykan, 2013; Ayyıldız et al. 2012; Korkmaz et al. 2014; Kaytez et al. 2015; Yıldırım & Conk, 2005) and studies on coping with stress in families with children with disabilities of parents with children with autism attending sports schools (Cengiz et al. 2016). It has been observed that there are no studies on the demographic characteristics of families with children with autism who receive services from autism sports club associations and whether these services have an effect on coping with stress.

Accordingly, the aim of this study is to examine the stress and coping with stress levels of families receiving services from autism sports club associations, parents of sports services provided to children with ASD in terms of various factors and to evaluate the relationship between them.

Our hypotheses in the study are; it will contribute positively to the stress and stress coping styles of families receiving services from sports training centers, stress and stress levels will increase as the age of parents increases, and there will be an increase in favor of women in terms of gender.

#### **MATERIALS AND METHODS**

In this study, the stress coping styles of families with children with autism who receive services from autism sports club associations and the stress status of parents were examined. In

addition, it was also examined whether the data obtained from the two measurement tools differed according to various variables. In the research, a descriptive study was conducted to determine the situation and the survey method was used. In survey research, a description is generally made by determining the existing situation related to the research subject (Büyüköztürk, 2016). With the data obtained from the research because of the screening method, the stress levels of the parents were described and the significance levels of their with different variables relationships were determined. This study followed ethical standards and received approval from the Halic University Non-invasive Clinical Research Ethics Committee, reference number (no: 145, date 26.06.2021) Participant provided informed consent, with the volunteer form covering research details, risks, benefits, confidentiality, and participant rights. The research strictly adhered to the ethical principles of Declaration prioritizing the of Helsinki. participant's rights and wellbeing in design, procedures, and confidentiality measures.

### Study Group

The population of the study consists of families receiving services from autism sports clubs in Turkey. The sample group of the study was determined by non-random convenience sampling method. The sample consists of parents living in the Marmara region and receiving services from autism sports clubs. A total of 134 volunteer parents participated in the study.

A total of 134 people, 97 women  $(49.65\pm6.15)$  and 37 men  $(49.40\pm6.28)$  participated in the study.

### **Collection Tools**

In the study, PIF, SCSS and PSS were used as data collection tools. Within the scope of the research, data were collected through online questionnaire forms.

#### **Personal Information Form**

The form was developed by the researchers within the scope of the literature and consisted of 4 questions to determine the demographic status of the parents included in the study (age, gender, gender of their children and years of practicing sports).

#### Stress Coping Styles Scale (SCSS)

Developed by Folkman and Lazarus (1985), the scale, whose Turkish validity and reliability study was conducted by Şahin and Durak (1995), measures the methods and thoughts that people use in stress situations. It is a 4-point Likert-type scale ranging from 0 to 3. It consists of a total of 30 items and has parameters in 5 subscales (self-confident approach, optimistic approach, helpless approach, submissive approach and approach to resort to social support). The increase in subscale scores indicates the frequency of using that method. Selfconfident approach, optimistic approach and approach of seeking social support are considered as active methods of coping with stress, while helpless approach and submissive approach are considered as passive methods.

#### Parent Stress Scale (PSS)

It was developed by Özmen and Özmen (2012) to measure the stress experienced by parents in their relationships with their children in daily life. It was deemed appropriate by the developer of the scale that the Parent Stress Scale can also be used to measure the stress levels of parents of children with problematic behaviors (Özmen & Özmen, 2012). The PSS has a single factor consisting of 16 items. Cronbach's alpha coefficient of the scale was measured as .85. The scale is a four-point Likert type (Always=4, Frequently=3, Sometimes=2, Never=1). The lowest score that can be obtained from the scale is 16 and the highest score is 64. A high score on the scale indicates a high level of parental stress.

#### Statistical analysis

SPSS 22 package program was used to analyze the data obtained. Percentage and frequency values were used to analyze demographic characteristics. The t-test was performed for the gender variable of the SBSAS, One-Way Anova test for all other variables and Post Hoc Turkey test was performed to determine the source of the difference.

#### **RESULTS**

In this section, the results of the statistical analyses applied to the data collected within the scope of the research are presented. In the first section, demographic variables (age, gender, marital status, education level, age of the child, gender of the child, diagnosis of the child) are analysed. Findings related to PSS and SCSS levels were included.

Table 1. Demographic characteristics of the rese	earch group
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Gender	Ν	%
Female	97	72.4
Male	37	27.6
AGE		
Between the ages of 25 and 35 years	35	26.1
Between the ages 36 and 45 years	73	54.5
At and over the age of 45 years	26	19.4
Academic background		
Primary School	23	17.2
Middle School	21	15.7
High School	39	29.1
Undergraduate	40	29.9
Postgraduate	11	8.2
Gender of the Child		
Girl	25	18.7
Boy	109	81.3
Age of the Child		
Between the ages of 1 and 5 years	27	20.1
Between the ages of 6 and 10 years	50	37.3
Between the ages of 11 and 15 years	23	17.2
Between the ages of 16 and 20 years	15	11.2
At and over the age of 21 years	19	14.2
Total	134	100.0

When the demographic characteristics of the research group are analyzed in Table 1, 72.4% of the participants are female and 27.6% are male. 26.1% of the participants were between the ages of 25-35, 54.5% were between the ages of 36-45 and 19.4%

were 45 years and over. In addition, 29.9% of the participants were undergraduate graduates, while 8.2% were postgraduate graduates. While 18.7% of the participants were parents of girls with autism, 81.3% were parents of boys with autism. While 37 e between the ages of 6-10, 11.2% were 16-20 years

.3% of the participants' children with autism were between the ages of 6-10, 11.2% were 16-20 years and older.

Tablo: 2. Reliability analysis results of the (SCSS) and (PSS)

Ölçek / Ölçek Alt Boyutları	Madde Sayısı	Cronbach's Alpha
Self-Confident Approach	7	0,862
Optimistic Approach	5	0,722
Helpless Approach	8	0,707
Submissive Approach	6	0,738
Social Support Seeking Approach	4	0,756
Stress Coping Styles Scale Total	30	0,769
Parental Stress Scale	16	0,891
0.05		

p<0.05

Cronbach's Alpha reliability analysis was performed to determine the reliability of the SCSS(SPSS) and (PSS) and the reliability of the PSSS was found to be  $\alpha$ =0.769 and the reliability of the PSS was found to be  $\alpha$ =0.891. In addition, the

reliability of the subscales of SPSS is respectively: Self-Confident Approach (7)  $\alpha$ =0.862, Optimistic Approach (5)  $\alpha$ =0.722, Helpless Approach (8)  $\alpha$ =0.707, Submissive Approach (6)  $\alpha$ =0.738 and Seeking Social Support. (4)  $\alpha$ =0.756 was found.

Table 3. Des	scriptive	statistical	results	of SCSS	sub-dimensions
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Dimensions	Ν	Min	Max	Ā	SS
Self-Confident A.	134	1.57	4.00	3.2463	.61249
Optimistic A.	134	1.60	4.00	2.8403	.57819
Helpless A.	134	1.25	4.00	2.4823	.58613
Submissive A.	134	1.00	3.50	2.2065	.57233
Social Support Seeking A.	134	1.25	4.00	2.8396	.57387

According to Table 4, in terms of the SCSS sub-dimensions of the participants, the highest value is "Self-Confident A."  $(3.24\pm0.61)$ . This value is followed by "Optimistic A."  $(2.84\pm0.57)$ ,

"Seeking Social Support A."  $(2.83\pm0.57)$ , "Helpless A."  $(2.48\pm0.58)$  and "Submissive A."  $(2.2\pm0.57)$ .

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Dimensions	Gender	n	Ā	SS	F	р
Salf Confident Annuash	Female	97	3.2563	.60290	052	761
Self-Confident Approach	Male	37	3.2201	.64470	.055	./01
Optimistic Approach	Female	97	2.8309	.57470	002	7(2
	Male	37	2.8649	.59452	.002	./03
Helpless Approach	Female	97	2.4923	.58430	.024	.751
	Male	37	2.4561	.59819		
Sector inside Americant	Female	97	2.1615	.59095	1 (20)	140
Submissive Approach	Male	37	2.3243	.50909	1.029	.142
Social Support Seeking	Female	97	2.8273	.55593	272	(01
Approach	Male	37	2.8716	.62534	.372	.091
0<0.05						

Statistically significant difference could not be found when SCSS sub-dimensions are examined depending on the parent gender variable (p>0.05).

Table 5. Comparison of SCSS sub-dimensions depending on the variable of age

Dimensions	Age	n	x	SS	р	Significance
	25-35	35	3.3061	.61897		
Self-Confident	36-45	73	3.2309	.59363	700	
Approach	46 and over	26	3.2088	.67277	.790	
	Total	134	3.2463	.61249		
	25-35	35	2.8000	.58209		
Optimistic	36-45	73	2.8795	.57902	602	
Approach	46 and over	26	2.7846	.58494	.092	
	Total	134	2.8403	.57819		
	25-35	35	2.6679	.58390		25-35 / at
Helpless	36-45	73	2.4572	.51464	047*	and over the
Approach	46 and over	26	2.3029	.71953	.047**	age of 45
	Total	134	2.4823	.58613		years
	25-35	35	2.1762	.53465		
Submissive	36-45	73	2.2260	.55651	007	
Approach	46 and over	26	2.1923	.67773	.907	
	Total	134	2.2065	.57233		
0	25-35	35	2.7714	.61945		
Social Support Seeking	36-45	73	2.8801	.54344	642	
	46 and over	26	2.8173	.60646	.042	
Арргоаст	Total	134	2.8396	.57387		

p<0.05

When the SCSS was analyzed according to the age variable, it was determined that the group between the ages of 25-35 ( $2.66\pm0.58$ ) scored

significantly higher than the group aged 45 years and over  $(2.30\pm0.71)$  in the Helpless approach subdimension (p<0.05). **Children with Autism and Parents Receiving Physical Education** 

Dimensions	Academic Background	n	Ā	SS	р
	Primary School	23	3.2547	.63736	
	Middle School	21	3.4286	.59074	
Self-Confident Approach	High School	39	3.2491	.50849	6
Self-Confident Approach	Undergraduate	40	3.1679	.71090	0
	Postgraduate	11	3.1558	.58364	5
	Total	134	3.2463	.61249	
	Primary School	23	2.8000	.57840	
	Middle School	21	3.1143	.62792	
Ontinuistia Annua alt	High School	39	2.7590	.52752	1
Optimistic Approach	Undergraduate	40	2.8650	.60492	0
	Postgraduate	11	2.6000	.42895	7
	Total	134	2.8403	.57819	
	Primary School	23	2.4728	.66460	
Helpless Approach	Middle School	21	2.5476	.66670	
	High School	39	2.5705	.56253	1
	Undergraduate	40	2.4906	.52378	0
	Postgraduate	11	2.0341	.41867	6
	Total	134	2.4823	.58613	
	Primary School	23	2.2246	.60220	
	Middle School	21	2.4603	.67062	
Secharization A surger ash	High School	39	2.1368	.50851	2
Submissive Approach	Undergraduate	40	2.1583	.58708	5
	Postgraduate	11	2.1061	.39632	4
	Total	134	2.2065	.57233	
	Primary School	23	2.9130	.53624	
	Middle School	21	2.5952	.61986	
Social Support Seeking	High School	39	2.8590	.53124	3
Approach	Undergraduate	40	2.8813	.62014	1
~ ~	Postgraduate	11	2.9318	.50114	9
	Total	134	2.8396	.57387	

Table 6. Comparison of SCSS sub-dimensions depending on the variable of academic background

p<0.05

Statistically significant difference could not be found when SCSS sub-dimensions are examined depending on the academic background variable (p>0.05).

Table 7. Comparison of SCSS sub-dimensions depending on the variable of child gender

Dimensions	Child's Gender	n	Ā	SS	F	р
Self-Confident	Girl	25	3.0857	.69620	2 060	147
Approach	Boy	109	3.2831	.58901	2.808	.14/
Ontimistic Annroach	Girl	25	2.6400	.62183	502	054
Optimistic Approach	Boy	109	2.8862	.56067	.502	.034
Halplass Approach	Girl	25	2.4050	.59978	280	167
Helpless Approach	Boy	109	2.5000	.58432	.280	.407
Submissive Ammesch	Girl	25	2.0933	.66158	1 660	275
Submissive Approach	Boy	109	2.2324	.54998	1.009	.275
Social Support Seeking	Girl	25	2.7800	.54160	212	567
Approach	Boy	109	2.8532	.58255	.315	.307

p<0.05

Statistically significant difference could not be found when SCSS sub-dimensions are examined depending on the child's gender variable (p>0.05).

When SCSS was examined according to the child's age variable, a significant difference was found in the optimistic approach and helpless approach sub-dimensions. It is observed that the difference in the sub-dimension of optimistic approach arises from the age of 1-5 years  $(2.57\pm0.47)$  and 11-15 years  $(3.08\pm0.60)$  and difference in the sub-dimension of helpless approach arises from 1-5 years of age  $(2.81\pm0.50)$  and 6-10 years of age  $(2.35\pm0.55)$ .

Children with Autism and Parents Receiving Physical Education

Dimensions	Child's Age	n	Ā	SS	р	
	1-5 years of age	27	3.1164	.64625		
C <sub>a</sub> lf	6-10 years of age	50	3.2829	.59464		
Sell- Confident	11-15 years of age	23	3.2547	.62561	722	
Approach	16-20 years of age	15	3.3714	.43128	.755	
Approach	21 and over	19	3.2256	.73512		
	Total	134	3.2463	.61249		
	1-5 years of age	27	2.5704	.47943		
	6-10 years of age	50	2.8320	.58044		
Optimistic	11-15 years of age	23	3.0870	.60250	015*	15/1115
Approach	16-20 years of age	15	3.0400	.47929	.015*	1-3/11-13
	21 and over	19	2.7895	.61273		
	Total	134	2.8403	.57819		
	1-5 years of age	27	2.8148	.50996		
	6-10 years of age	50	2.3500	.55097		
Helpless	11-15 years of age	23	2.4457	.48240	017*	15/610
Approach	16-20 years of age	15	2.4917	.64515	.017*	1-3 / 0-10
	21 and over	19	2.3947	.70988		
	Total	134	2.4823	.58613		
	1-5 years of age	27	2.2037	.54171		
	6-10 years of age	50	2.1233	.52360		
Submissive	11-15 years of age	23	2.3333	.56854	622	
Approach	16-20 years of age	15	2.1889	.68390	.033	
	21 and over	19	2.2895	.66630		
	Total	134	2.2065	.57233		
	1-5 years of age	27	2.7500	.50000		
Social	6-10 years of age	50	2.9250	.58521		
Support	11-15 years of age	23	2.5978	.58746	126	
Seeking	16-20 years of age	15	2.9167	.44987	.120	
Approach	21 and over	19	2.9737	.65561		
	Total	134	2.8396	.57387		

Tablo 8. Comparison of SCSS sub-dimensions depending on the variable of child's age

p<0.05

### Table 9. Values as to scores of PSS

Gender	n	ā	SS	F	Р
Female	97	49.6598	6.15069	002	022
Male	37	49.4054	6.28251	.002	.832
Age					
From 25 to 35 years	35	49.7429	5.27671		
From to 36-45 years	73	50.1644	6.21605	1.472	.233
At and over 45 years	26	47.7692	6.97027		
Academic Background					
Primary School	23	50.5652	7.35976		
Middle School	21	52.2381	7.79682	1.848	.124
High School	39	48.4872	5.04648		
Undergraduate	40	49.3250	5.48839		
Postgraduate	11	47.3636	4.80151		
Child's Gender					
Girl	25	46.5200	7.35482	174	005*
Boy	109	50.2936	5.66553	.174	.005*
Child's Age					
From 1 to 5 years	27	48.7037	4.27708		
From 6 to 10 years	50	49.5000	6.28653		
From 11 to 15 years	23	49.8261	7.16464	.259	.904
From 16 to 20 years	15	50.5333	6.66405		
At and over 21 years	19	50.0526	6.87567		
Total					
0<0.05					

When the PSS score was compared according to the gender of the child, a statistically significant difference was found (p<0.05). It has been observed that parents of boys with autism have higher stress levels. No significant difference was found **Table.10.** Correlations for the variables of SCSS and PSS

according to the variables of parent, age, academic background and child's age (p>0.05). Correlative analyses of variables for the scales SCSS and PSS are provided on Table 10.

	ī	SS	1	2	3	4	5	6
1 Self-Confident A.	3.246	0.612	1					
2 Optimistic A.	2.840	0.578	.714**	1				
3 Helpless A.	2.482	0.586	-0.082	0.013	1			
4 Submissive A.	2.206	0.572	0.168	.265**	.518**	1		
5 Social Support Seeking A.	2.839	0.573	.193*	0.031	-268**	-286**	1	
6 Stress Level	2.251	0.571	-504**	-367**	.475**	0.169	-248	1
** p<0.01, * p<0.05								

In table 10; a positive correlation was found between the optimistic approach variable and the self-confident approach (r=0.714, p<0.01) variable. A positive correlation was found between the submissive approach variable and the optimistic approach (r=0.265, p<0.01) and helpless approach (r=0.518, p<0.01). A negative correlation was found between the social support seeking approach variable and helpless approach (r=-0.268, p<0.01) and submissive approach (r=-0.286, p<0.01). Stress level variable was found to have negative relation with self-confident approach (r=-0.504, p<0.01), optimistic approach (r=-0.367, p<0.01), social support seeking approach (r=-0.248, p<0.01) and positive relation with helpless approach (r). =0.475, p<0.01).

# DISCUSSION

In this section, it was aimed to evaluate the stress levels and coping styles (self-confident approach, optimistic approach, self-blaming approach, submissive approach and social support seeking approach) of parents with children with autism receiving services from autism sports club associations. According to the findings, there was no statistically significant difference (p>0.05) when the sub-dimensions of the SCSS were analyzed according to the variables of gender, educational status and gender of the child with ASD; when analyzed according to the age variable of the parents, a significant difference (p=0.048) was found between the groups aged 25-35 years (2.66±0.58) and 45 years and over (2.30±0.71) in the helpless approach sub-dimension (p<0.05). In the study in which the relationship between sociodemographic characteristics and stress levels of families with children with ASD was examined, it was stated that the stress caused by living with ASD is an important indicator that different levels can be reached under different socio-demographic conditions. When the effect of the gender of the parent on the variables was examined in the study, the stress level of female parents was significantly higher. There was no significant difference in the sub-dimensions of coping styles with stress (Kochan, 2019). Similarly, Güneysucu (2010) found no significant difference in the parameters of age, educational status, occupational status, and gender of the child in the examination of stress coping styles of fathers with educable mentally disabled children.

In the study, no significant difference was found in the gender variable. In Kochan's (2019) study, no significant difference was measured between the scores of children of different genders in terms of parental stress, coping styles and wise awareness variables. In the study conducted to determine the stress coping styles of mothers of children with disabilities, it was found that mothers with healthy children had higher self-confident approach and optimistic approach styles, while mothers with disabilities had higher helpless approach and submissive approach styles among the subscales of stress coping styles. As a result of the same study, no significant difference was found in the subscales of stress coping styles of mothers with disabled and healthy children according to their education levels (Aydın, 2019). In another study, it was found that parents with mentally disabled children used self-confident approach and optimistic approach styles more than mothers with healthy children (Karadağ, 2017). It was observed that the results obtained in the study were in parallel with the studies conducted.

In the study, no significant difference was found in the education variable in the subdimensions of SCSS (p<0.05). In the literature review, it is seen that there are different results in educational status and stress levels. While some studies did not find significant differences, some studies found significant differences at certain levels of educational status. Aydın (2019) did not find a significant difference in the subscales of stress coping styles of mothers with disabled and healthy children according to their educational levels. Bilal and Dağ (2005) compared stress, coping with stress and locus of control in mothers of children with and without educable intellectual disabilities and found no significant difference in the total and sub-factor scores of SBTÖ. Kochan (2019) examined the effect of parents' education level in terms of scale scores in his study and found that the stress level of secondary school graduate parents was the highest. Kaytez et al. (2015) examined the needs and stress levels of families with disabled children in their study and showed that the highest stress level was in high school graduate parents. They interpreted this as the differentiation of the level of education, regardless of the level of education of the parent, the level of stress may be high due to the uncertainty of the future with the disability of the child or the effect of other problems. In the evaluation of the stress coping methods of mothers with mentally disabled children, a significant difference was found between the helpless approach score (p=0.028), submissive approach score (p=0.002) and seeking social support (p=0.004) scores of the SCSS according to the educational level of the mothers. In terms of helpless and submissive approaches, which are ineffective coping methods with stress, mothers who graduated from high school had higher scores than mothers who graduated from primary school (p=0.002 for helpless approach, p=0.001 for submissive approach) and illiterate mothers (p=0.005 for submissive approach). In the subdimension of seeking social support, high school graduate mothers scored lower than illiterate (p=0.001) and primary school graduate mothers (p=0.002) (Ayyıldız et al. 2012).

In the study, no significant difference was found in the parameters of gender change of the child. Cengiz et al. (2016) found a statistically significant difference (p<0.05) when the

comparison of families with children with autism attending sports schools was made according to the gender of the child in the SBSS. It was observed that the stress levels of parents with male autistic children were higher. In Kochan's (2019) study, a significant difference was found in the optimistic approach and helpless approach sub-dimensions of the coping styles with stress scale according to the age of the child. The difference was found in the optimistic approach sub-dimension in the 1-5 age  $(2.57\pm0.47)$  and 11-15 age  $(3.08\pm0.60)$  groups, and in the helpless approach sub-dimension in the 1-5 age  $(2.81\pm0.50)$  and 6-10 age  $(2.35\pm0.55)$  groups. In some studies, the difference in the gender variable may be due to the fact that ASD is more common in boys. However, in this study, some results were obtained to support the literature.

When the SCSS was analysed according to the age variable of the parents, a significant difference (p=0.048) was found between the groups aged 25-35 years  $(2.66\pm0.58)$  and 45 years and over  $(2.30\pm0.71)$  in the helpless approach sub-dimension (p<0.05). Güneysucu (2010) found no significant difference in the age variable in the examination of stress coping styles of fathers with educable mentally disabled children. In his study, Can Arslan (2010) showed that the scores obtained from SCSS did not create a significant difference in age and education level variables. However, families experience anxiety with their disabled children after their own deaths (Özmen & Cetinkaya, 2012). We think that this situation increases the future anxiety of their children with the advancing age of the families and this causes them to feel helpless. Meeting the needs and wishes of the child, trying to maintain the family order, overcoming different and unfamiliar behaviours, constantly supervising the child who is not aware of any danger around him/her and cannot protect himself/herself, and trying to meet his/her individual needs and the needs of other members of the family are tiring and stressful for every family. Coping with stress is necessary to protect the physical and mental health of autistic parents and to lead a quality life, but it does not mean the complete elimination of stress. What is important is to reduce the amount of stress and factors that negatively affect the lives of parents, to reduce or eliminate the emotional tension caused by stress factors, to resist the emotional tension and to keep the reactions strong (Cengiz et al. 2016).

In the study, no significant difference was found according to the variables of parents, age, educational status and age of the child (p>0.05). We think that this situation is due to the institution where they receive support in the care of their children and the development they see in the education they receive. A statistically significant difference was found when the comparison was made according to the variable of gender (p<0.05). It has been known for many years that the incidence of autism in males is higher than in females (Akçakın, 2002). In epidemiological studies, the male-female ratio in autism spectrum disorder (ASD) is approximately 4:1 in boys (Baio et al. 2018; Fombonne et al. 2011; Hiller et al. 2016; Holtmann et al. 2010), while some meta-analyses have found that the actual ratio is probably close to 3:1 (Ratto et al. 2018). It has been reported that autism leads to more severe disabilities in girls, girls have lower intellectual achievement (McLennan et al. 1993) and are more socially backward (Halladay et al. 2015). This may be thought to be due to the fact that boys are more likely to have autism and are more affected by autism.

## **Conclusions**

In the correlation results related to the variables of SCSS and PSS; positive correlation of Optimistic Approach variable with Self-Confident Approach variable (r=0.714, p<0.01) was found. Submissive Approach variable had a positive correlation with Optimistic Approach (r=0.265, p<0.01) and Helpless Approach (r=0.518, p<0.01). Social Support Seeking Approach variable had a negative correlation with Helpless Approach (r=-0.268, p<0.01) and Submissive Approach (r=-0.286, p<0.01). Stress Level Variable had a negative correlation with Confident Approach (r=-0.504, p<0.01), Optimistic Approach (r=-0.367, p<0.01) and Social Support Seeking Approach (r=-0.248, p<0.01) and a positive correlation with Helpless Approach (r=0.475, p<0.01).

# **Conflict of Interest:**

There is no personal or financial conflict of interest within the scope of the study.

## **Ethics of the Research**

This study followed ethical standards and received approval from the Mustansiriyah University Social Sciences Ethics Committee Commission with date number 13 January 2024.

### **Author Contributions**

Research Design: MAA, KU and AP; Statistical analysis: MAA, ABK and SK; Preparation of the article, MAA, KU, AP, ABK, SK ; Data Collection- Performed by MAA, KU, AP, ABK, SK

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