

Stress and Exam anxiety in the Undergraduate Among High School Students During Covid 19 Period: How is Sports Affecting?

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ABSTRACT

This study aims to examine the relationship between the stress and anxiety states with the sports of undergraduate high school students during Covid 19 period. The research is a descriptive model of quantitative research methods. The research group consists of a total of 299 students. The Perceived Stress Scale (PSS) developed by Cohen, Kamarck & Mermelste (1983) and Exam Anxiety Inventory adapted into Turkish by Kısa (1996) were used as data collection tools. According to the results of the research, it is understood that the students participating in the research have mid level of exam anxiety and stress level above the mid level. In terms of the relationship, it was concluded that there is a statistically significant positive relationship between sports and test anxiety score and stress score, and there is a statistically significant positive relationship between exam anxiety score and stress score.

KEYWORDS: Sports, Stress, Exam Anxiety, Student, High School

INTRODUCTION

Stress is one of the concepts that negatively affect people's daily lives. Experiencing a certain level of stress can be beneficial, but excessive stress can cause many negative situations. Stress, in other words, is the threat of "the physical and mental limits of people". It is a situation that occurs when people push their psychological limits (Alpertonga et al., 2016). Although there are many definitions of stress in different ways, researchers have not been able to find a common definition. However, when all definitions are examined, the common features of stress can be listed as follows (Gökler et al., 2012);

- Stress occurs as a result of people's interaction with the environment.
- There is a sense of danger at an uncomfortable level in stress.
- Stress affects the whole organism of the individual.
- Stress cannot be controlled under normal conditions.

- Stress activates the individual in a situation that arises out of acceptance.

In addition to these features, it is stated in different studies that stress is associated with concepts such as "discomfort", "tension", "fatigue", "resistance" and "distorted balance" (Gökler et al., 2012).

One of the best ways to deal with stress is sports. Regular sports and exercise make a significant contribution to the elimination or minimization of stress. In his views, Altıparmak stated that exercise is a helpful factor in coping with stress, and stated that exercise facilitates the fight against stress with the following elements (Altıparmak, 1994);

- As a result of directing the attention of the individual to another area, it reduces the thought of stress in the mind of the individual.
- Its risky and challenging nature helps to overcome feelings of worthlessness or inadequacy in the individual.
- It accustoms the individual to the physiological consequences of stress.
- Prevents sleep disorders.
- Increased social communication due to its occurrence in a social environment reduces the negative effects of stress.

Anxiety is the vague fear of not knowing what will happen in the end. It may include sadness, distress, fear, feeling unsuccessful, helplessness, and being judged (Alpertonga et al., 2016). Anxiety, in a broad sense, is an emotional reaction of a person to events occurring in the external environment; In a narrow sense, it can be defined as a condition in which physiological changes such as sweating and differentiation in breathing are observed in the person, although its origin and onset are not consciously felt (Kartopu, 2012).

In cases of anxiety and stress, the amount of blood going to the cells decreases. With physical exercises, the amount of blood going to the cells increases and the cells burn more oxygen. In this case, while the muscles are relaxed, there is also a mental relaxation (Brody, 1995).

Transition from secondary education to higher education has been carried out in our country with the examination system since 1974, and high school students are placed in the limited quotas of higher education institutions by being eliminated through examination. This fact that high school students in Turkey experience during their adolescence is the subject of many studies for this reason, and it is emphasized in studies that it is extremely

important to reveal the dynamics affecting high school students with scientific methods (Palti, 2012). High school students generally lead an education life free from stress and anxiety in the first years of school. Exam anxiety, which starts in high school 3, increases even more in the last year of high school. Especially as the exam approaches, this anxiety gradually increases and negatively affects the daily life of the students.

Exam anxiety is defined as intense anxiety that prevents the use of previously acquired information during the exam and causes a decrease in the success of the individual (Cetinkaya, 2018). Students who experience test anxiety wear out more than students who experience less test anxiety because it is always more difficult for them to organize and explain what they know in the exam (Otrar, 2003). The intense anxiety experienced due to exam anxiety can cause serious damage to the mental life of the student, and the person may experience negative emotions such as hopelessness, unhappiness, helplessness, intense anger towards himself or others, even having nightmares about the exam, as well as anxiety. These negative feelings will disappear after the exam, and the opposite effects may last for months or even years (Akçakaya, 2012).

Physical education and sports are not only closely related to high school students in adolescence, but also closely related to the Turkish education system, which includes secondary education institutions aiming at the physical, mental, social, emotional and moral development of their students (Boke, 2018). In this period, it is seen that individuals who do sports are emotionally, mentally and psychologically strong even if they enter the exam process. Because, due to the nature of sports, they have learned to win and lose, to take responsibility, and to make the right decisions in a stressful environment. This brings them one step ahead in the examination process without realizing it.

The strong psychological health of the students is an indication of the fulfillment of one of the aims of the education system. Because psychological health and participation in sports contribute to the development of mental skills and abilities of people. Particularly, it is stated that participation in sports has an important place in supporting one's ability to concentrate attention, to use agile intelligence in difficult times, and to control one's self (Aytan, 2010). In addition, participation in sports activities can improve individuals' perception, focusing on decision making, concentration, problem solving, compliance with rules, adapting to changing conditions, being productive, using imagination and using

practical intelligence. These features enable students who will take the university exam to be more comfortable and confident in the exam, while minimizing exam anxiety and stress. Because the only problem of the students who enter one of the most important exams of their lives in this period is not the questions to be asked in the exam. The main problem is the stress and anxiety they will experience in the exam. Managing this stress and anxiety in the best way is a very important element for them.

Physical activity is an excellent way to reduce the tension that causes stress in the muscles in situations such as exam stress and anxiety. While it calms us down, it also reduces anxiety. In addition, it removes emotional tension. Physical activity helps reabsorb cortisol, also known as the stress hormone. Studies show that those who exercise regularly are much less likely to have problems with depression, anxiety, and anger control than those who do not exercise regularly. In studies conducted with people experiencing depression and anxiety, it is seen that the symptoms of the group who do sports decrease much faster than those who do not do sports (Mollaoğulları et al., 2019).

There are many studies in the literature that the stress and anxiety levels of students who do sports are lower than those who do not. Cress and Lampman (2007) stated in their study that students who exercise regularly are composed of students with lower stress, and students who do not exercise have higher stress levels. In addition, in the study conducted by Mumcu (2019), it was stated that the stress average score of the students who actively do sports is positively low. In the study conducted by Öznur (2014), it was found that the anxiety of individuals with high physical activity level is lower than those with low physical activity level. In the study conducted by Dalkıran (2012), it was determined that the exam anxiety levels of physically active students were significantly lower. In addition, in the study conducted by Canan and Ataoğlu (2010), it was stated that doing sports regularly has a positive effect on anxiety (Cited by Mollaoğulları et al., 2019).

The reason that makes this carry important is the seven non-essential sports that naturally eliminate stress and anxiety for a person. In the light of these researches, our study was carried out to examine the stress and anxiety levels of students living in Karaman taking the university entrance exam, according to their sports status. For this purpose, it is thought that the study lights on the students preparing for the exam in the coming years and stay away from sports because of the exam, and the parents who keep their children away from

sports with the excuse of exams. Thanks to this study, they will be encouraged to do sports in the environments and they will get rid of the psychological problems they are in.

In the other parts of the study, method, results, discussion and conclusion parts will be included.

METHODS

Research Model and Design

The research was designed according to the quantitative research model. Relational screening design was used as the research design. Relational screening design is a screening approach that aims to determine the existence of variation among more than one variable. In this context, whether the variables change together; If there is a change, it aims to determine how it happens (Karasar, 2011; Büyükoztürk et al., 2016).

Universe and Sample

The universe of the research; 2020-2021 Education in Science High School (N=28), Anatolian High School (N=180), Vocational High School (N=18), Imam Hatip High School (N=58) and Sports High School (N=15) affiliated to the Directorate of National Education in Karaman Province - A total of 299 students who are studying in the academic year and who voluntarily accept to participate in the study who will take the YKS exam.

16 out of 315 scales applied were not evaluated due to incomplete and incorrect filling in, and statistical operations were performed on 299 scales. The sample group consists of 299 people, 183 (61.2%) girls and 116 (38.8%) boys. Permission was obtained from the students' physical education teachers and principals for the study.

Table 1. Descriptive Statistics of Participants' Personal Information

Groups		N	%
Gender	Female	183	61,2
	Male	116	38,8
Age	18	237	79,3
	19	48	16,1
	20	14	4,7
High School	Science High School	28	9,4
	Anatolian High School	180	60,2
	Vocational High School	18	6,0
	Imam Hatip High School	58	19,4
	Sports High School	15	5,0
Active Doing Sports	Yes	140	46,8

	No	159	53,2
Sport Type	No	159	53,2
	Individual Sports	68	22,7
	Team Sports	72	24,1
Difficulty In Leisure Time	Always	42	14,0
	Sometimes	189	63,2
	Never	68	22,7

In Table 1, it is seen that 61.2% of the students who make up the sample of the study are girls (183) and 38.8% are boys (116). 79.3% of the students in the sample fall into the 18 age group. 16.1% are in the 19 age group, 4.7% are in the 20 age group. The rate of students attending science high school is 9.4%, the rate of students attending Anatolian high schools is 60.2%, the rate of students attending vocational high schools is 6.0%, while the rate of students attending Imam Hatip high school is 19.4%, The rate of continuing students is 5.0%. The main reason for the difference in the number of students is the low number of high schools in the province. As seen in Table 1, the rate of those who do active sports is 46.8%, while the rate of those who do not do active sports is 53.2%. In terms of sports type, 22.7% of the sample group of the research does individual sports, 24.1% does team sports, and 53.2% does not do active sports. It can be said that the reason for the high rate of not doing sports is due to the fact that they are preparing for an important exam. While the rate of students participating in the research is always 14.0%, sometimes 63.2%, in making use of their spare time during this period, the rate of never having difficulty is 22.7%.

Data collection tool

Perceived Stress Scale (PSS); In the reliability study developed by Cohen, Kamarck & Mermelste in 1983, the Cronbach Alpha value was found to be 0.86. In this study, the scale adapted to Turkish by Bilge, Öğce, Genç, and Oran (2007) was used, and the Cronbach Alpha value was found to be 0.81 in the reliability study. Three items of the scale prepared in a 5-point Likert type (0 never, 4 very often) are reversed (4th, 5th, 6th items), and five items are plain (1st, 2nd, 3rd, 7th, 8th items).). It has two subscales: perceived stress and perceived coping. The scale is evaluated on both the total score and the subscale scores.

As a result of the reliability analysis for the total perceived stress scale used in the research, the alpha value was found to be 0.58, the Perceived Stress sub-dimension alpha value was 0.60 and the Coping with Stress sub-dimension alpha value was 0.55.

Test Anxiety Inventory: The reliability, homogeneity, internal consistency and invariance of the Turkishized Test Anxiety Inventory were determined by Kisa (1996), and the Cronbach Alpha value was found to be 0.86 in the reliability study. It was also determined by the generalized form of the Kuder Richardson 20 (KR 20) formula. The highest and lowest alpha values. with 89. It was found among 73. The highest reliability coefficients (.89 to .84) were obtained in all test (SKE-T) scores and in the university sample. It consists of 20 sentence questions. There are four answer choices for each statement. Three types of points are calculated in the inventory. The whole test score (SCI-T) is the Delusion subtest (SCI-F) and Affectiveness subtest (SCI-D), which are the subtests of the inventory.

As a result of the reliability analysis for the total Test Anxiety scale used in the study, the alpha value was found to be 0.93, the delusion anxiety sub-dimension alpha value was 0.87, and the affective anxiety sub-dimension alpha value was 0.89.

Analysis of Data

The data were evaluated in SPSS 25 Package program. The normality distributions of the analyzed data were tested with Skewness & Kurtosis. As a statistical method for the analysis of data; independent groups t-test, one-way ANOVA for multiple comparisons and Pearson correlation analysis were used. The significance level was taken as 0.05.

RESULTS

In this part of the study, the analysis and results of the data obtained are included.

Table 2. Results of Participants' Test Anxiety and Perceived Stress Scale and Mean and Standard Deviation Values of Sub-Dimensions of the Scale

	N	\bar{x}	ss	Skewness	Kurtosis	Levene Test	Min.	Max.
Delusion Anxiety	299	18,35	5,56	,27	-,61	,968	8,00	32,00
Affective Anxiety	299	28,30	7,80	,27	-,72	,962	12,00	48,00
Total Anxiety	299	46,65	12,87	,26	-,68	,142	20,00	80,00
Perceived Stress	299	13,78	4,41	-,81	,34	,086	,00	20,00
Coping with Stress	299	8,02	3,31	-,53	-,81	,079	,00	12,00
Total Stress	299	21,80	5,91	-,61	,87	,059	,00	32,00

In Table 2, the exam anxiety and perceived stress scale and the mean scores of the sub-dimensions belonging to the scales were examined. As a result of this review; It is understood that the average score of the participants included in the study from the total anxiety dimension is Average = 46.65, the average score of Delusional Anxiety from the

sub-dimensions of the test anxiety scale is Mean = 18.35, and the mean score of Affective Anxiety is Mean = 28.30.

Perceived stress scale and the mean scores of the sub-dimensions of the scale were examined. As a result of this review; It is understood that the mean score of the participants included in the study from the total stress dimension is Mean=21.80, the mean perceived stress score from the stress scale sub-dimensions is Mean = 13.78, and the mean for coping with stress is Mean = 8.2. .

Table 3. Results of the Independent Group t-Test to Determine whether Participants' Test Anxiety and Perceived Stress Scale and Sub-Dimension Scores of the Scales Differ According to Gender Variable

	Groups	N	\bar{x}	ss	T Test		
					Sd	t	p Value
Delusion Anxiety	Male	183	19,14	5,432	297	3,132	,002*
	Female	116	17,10	5,564			
Affective Anxiety	Male	183	29,99	7,762	297	4,891	,000*
	Female	116	25,63	7,119			
Total Anxiety	Male	183	49,14	12,666	297	4,315	,000*
	Female	116	42,73	12,249			
Perceived Stress	Male	183	14,20	3,861	297	2,094	,037*
	Female	116	13,11	5,110			
Coping with Stress	Male	183	7,80	3,396	297	-1,448	,149
	Female	116	8,37	3,147			
Total Stress	Male	183	22,00	5,302	297	,744	,457
	Female	116	21,48	6,775			

*p<,05

As seen in the table, the results of the independent group t-test, which was conducted to determine whether the scores of the students in the sample on the Exam Anxiety Scale and the Perceived Stress Scale and the sub-dimensions of the scales differ significantly according to the gender variable of the students were examined. According to the results of the examination, the difference between the total dimension of the test anxiety scale and the arithmetic mean of the gender groups was found to be statistically significant ($t=4.132$; $p<.05$). This difference was found to be statistically significant in favor of those in the female student group. This situation reveals that the students in the female student group have a higher level of total test anxiety than the male student group.

The difference between the arithmetic means of the groups was found to be statistically significant ($t=3,132$; $p<.05$) as a result of the independent group t-test, which was performed to determine whether there was a significant difference between the delusion anxiety sub-dimensions of the test anxiety scale and the gender variable. A statistically significant difference was found between male students and female students in favor of those in the female student group. This situation reveals that the students in the male student group have higher delusional anxiety than the female student group.

The difference between the arithmetic means of the groups was found to be statistically significant ($t=4.891$; $p<.05$) as a result of the independent group t-test, which was conducted to determine whether there was a significant difference between the affective anxiety dimension, one of the sub-dimensions of the test anxiety scale, and the gender variable. A statistically significant difference was found between male students and female students in favor of those in the female student group. This situation reveals that the students in the male student group have higher affective anxiety than the female student group.

The difference between the arithmetic means of the groups was found to be statistically significant ($t=2.094$; $p<.05$) as a result of the independent group t-test, which was conducted to determine whether there was a significant difference between the perceived stress dimension, one of the sub-dimensions of the perceived stress scale, and the gender variable. A statistically significant difference was found between male students and female students in favor of those in the female student group. This situation reveals that the students in the male student group perceive higher stress than the female student group.

Table 4. Results of One Way Analysis of Variance (One Way ANOVA) to Determine Whether Participants' Test Anxiety and Perceived Stress Scale and Sub-Dimension Scores of the Scales Differ According to High School Variable

F, x ve ss Values					One Way ANOVA						
	Grup	N	\bar{x}	ss	Var.K.	KT	S d	KO	F	p	
Delusion Anxiety	Science High School	28	19,68	6,06	1,145	80,657	4	20,164	,648	,629	-
	Anatolian High School	180	18,22	5,73	,427						
	Vocational High School	18	17,33	5,05	1,191						
	Imam Hatip High School	58	18,60	5,40	,709						
	Sports High School	15	17,73	3,65	,943						
	Science High School	28	30,82	7,54	1,424	418,72	4	104,68	1,73	,142	-
	Anatolian High School	180	28,27	8,06	,601	7	2	6			

Affective Anxiety	Vocational High School	18	24,78	7,39	1,742						
	Imam Hatip High School	58	28,53	7,65	1,005						
	Sports High School	15	27,33	4,62	1,194						
Total Anxiety	Science High School	28	50,50	13,02	2,460	842,268	4	210,567	1,276	,280	-
	Anatolian High School	180	46,48	13,33	,993						
	Vocational High School	18	42,11	11,98	2,823						
	Imam Hatip High School	58	47,14	12,49	1,640						
	Sports High School	15	45,07	7,61	1,965						
Perceived Stress	Science High School	28	15,61	3,43	,649	237,995	4	59,499	3,144	,015*	1-3
	Anatolian High School	180	13,87	4,28	,318						
	Vocational High School	18	11,00	6,62	1,561						
	Imam Hatip High School	58	13,57	4,39	,576						
	Sports High School	15	13,47	3,00	,773						
Coping with Stress	Science High School	28	8,53	2,97	,562	108,024	4	27,006	2,518	,041*	3-4
	Anatolian High School	180	7,86	3,40	,253						
	Vocational High School	18	6,22	3,95	,930						
	Imam Hatip High School	58	8,83	2,81	,369						
	Sports High School	15	8,06	3,01	,777						
Total Stress	Science High School	28	24,14	4,33	,819	553,544	4	138,386	4,126	,003*	1-3 3-2 3-4
	Anatolian High School	180	21,72	5,67	,422						
	Vocational High School	18	17,22	9,76	2,301						
	Imam Hatip High School	58	22,39	5,29	,695						
	Sports High School	15	21,53	5,14	1,326						

*p<,05

As can be seen in the table, as a result of the one-way analysis of variance (One-Way ANOVA), which was conducted to determine whether the arithmetic mean of the Test Anxiety Scale and Perceived Stress Scale and its sub-dimensions showed a significant difference according to the variable of the high school they studied, the perceived stress scale dimensions of the high school groups they studied in were determined. The difference between stress dimensions was statistically significant ($F=3.144$; $p<.05$). As a result of the post hoc Bonferroni test after one-way analysis of variance, which was carried out to determine between which groups the perceived stress dimension scores, one of the perceived stress scale dimensions, differ according to the variable of the high school they studied; A statistically significant difference was found between the Science High School student group and the Vocational high school student group, to the detriment of the Science High School student group. This situation reveals that the perceived stress levels of science high school students are higher than vocational high school students.

The difference between the dimension of coping with stress, one of the perceived stress scale dimensions of the high school groups they studied, was found to be statistically significant ($F=2.518$; $p<.05$). As a result of post hoc Bonferroni test after one-way analysis of variance, which was conducted to determine between which groups the scores of coping with stress, one of the perceived stress scale dimensions, differ according to the variable of

high school they studied; A statistically significant difference was found between the Science High School student group and the Vocational high school student group, against the Science High School student group. This situation reveals that Imam Hatip high school students have a higher level of coping with stress than vocational high school students.

The difference between the perceived stress scale dimensions of the total stress dimension of the high school groups they studied was statistically significant ($F=4.126$; $p<.05$). As a result of the post hoc Bonferroni test after one-way analysis of variance, which was conducted to determine between which groups the total stress dimension scores, one of the perceived stress scale dimensions, differ according to the variable of high school they studied; Between the Science High School student group and the Vocational High School student group against those who were in the Science High School student group, between the Anatolian high school group and the vocational high school student group against those who were in the Anatolian high school student group, and between the Imam Hatip High School student group and the Vocational high school student group against those who were in the Imam Hatip High School student group. A statistically significant difference was found against. This situation reveals that the total stress levels of vocational high school students are higher than the students of Science High School, Anatolian High School and Imam Hatip High School.

Table 5. One Way Analysis of Variance (One Way ANOVA) Results to Determine Whether Participants' Test Anxiety and Perceived Stress Scale and Sub-Dimension Scores of the Scales Differ According to the Variable of Having Difficulty in Making Leisure Time

F, x ve ss Values					One Way ANOVA						
	Group	N	\bar{x}	ss	Var.K.	KT	Sd	KO	F	p	
Delusion Anxiety	Always	42	21,95	6,12	,945	806,133	2	403,067	14,170	,000*	1-2
	Sometimes	189	18,25	4,92	,358						1-3
	Never	68	16,39	5,89	,714						2-3

Affective Anxiety	Always	42	33,50	8,14	1,256	1768,85 5	2	884,428	15,98 4	,000 *	1-2 1-3 2-3
	Sometimes	189	28,24	6,97	,507						
	Never	68	25,25	8,21	,995						
Total Anxiety	Always	42	55,45	13,6 2	2,102	4960,64 3	2	2480,322	16,53 4	,000 *	1-2 1-3 2-3
	Sometimes	189	46,49	11,3 7	,827						
	Never	68	41,64	13,6 4	1,655						
Perceived Stress	Always	42	14,30	3,74	,577	218,121	2	109,060	5,782	,003 *	1-3 2-3
	Sometimes	189	14,22	4,03	,293						
	Never	68	12,20	5,38	,652						
Coping with Stress	Always	42	6,11	3,32	,512	177,211	2	88,605	8,505	,000 *	1-2 1-3 2-3
	Sometimes	189	8,33	3,20	,233						
	Never	68	8,33	3,22	,391						
Total Stress	Always	42	20,42	4,78	,738	295,654	2	147,827	4,324	,014 *	2-3
	Sometimes	189	22,56	5,54	,403						
	Never	68	20,54	7,11	,862						

*p<,05

As can be seen in the table, as a result of one-way analysis of variance (One-Way ANOVA) to determine whether the arithmetic averages of the Test Anxiety Scale, Perceived Stress Scale and its sub-dimensions show a significant difference according to the variable of "Having Difficulty in Evaluating Leisure Time", "Difficulty in Evaluating Leisure Time" The difference between the Delusion Anxiety dimension, which is one of the test anxiety scale sub-dimensions of the "withdrawal" groups, was statistically significant ($F=14.170$; $p<.05$). As a result of the post hoc Bonferroni test, after the one-way analysis of variance performed to determine which groups the delusional anxiety dimension scores differed according to the variable of "Having Difficulty in Evaluating Leisure Time"; It is understood that the group of students who always have difficulties are more in delusional anxiety than the groups of students who sometimes have difficulties and never have difficulties, and that the group of students who sometimes have difficulties is more in delusional anxiety than the group of students who never have difficulties.

The difference between Affective Anxiety, one of the test anxiety scale sub-dimensions of the "Having Difficulty in Evaluating Leisure Time" groups, was statistically significant ($F=15,984$; $p<.05$). As a result of the post hoc Bonferroni test, after the one-way analysis of variance to determine which groups the affective anxiety dimension scores, one of the dimensions of the Exam Anxiety Scale, differ according to the variable of "Having

Difficulty in Evaluating Leisure Time"; It is understood that the group of students who always have difficulties is more emotionally anxious than the group of students who sometimes have difficulties and never have difficulties, and the group of students who sometimes have difficulties is more emotionally anxious than the group of students who never have difficulties.

The difference between the test anxiety scale total anxiety dimensions of the "Having Difficulty in Evaluating Leisure Time" groups was found to be statistically significant ($F=16.534$; $p<.05$). As a result of the post hoc Bonferroni test after the one-way analysis of variance, which was conducted to determine which groups the total anxiety dimension scores, one of the Examination Anxiety scale dimensions, differ according to the variable of "Having Difficulty in Evaluating Leisure Time"; It is understood that the group of students who always have difficulties are more anxious than the groups of students who sometimes have difficulties and never have difficulties, and the group of students who sometimes have difficulties are more anxious than the group of students who have never had difficulties.

The difference between the Perceived stress scale sub-dimension of the "Having Difficulty in Evaluating Leisure Time" groups was found to be statistically significant ($F=5.782$; $p<.05$). As a result of the post hoc Bonferroni test, after the one-way analysis of variance performed to determine between which groups the Perceived Stress sub-dimension scores differ according to the variable of "Having Difficulty in Evaluating Leisure Time"; It is understood that the group of students who always have difficulties perceive more stress than the group of students who never have difficulties, and the group of students who sometimes have difficulties perceive more stress than the students who never have difficulties.

The difference between the stress coping sub-dimensions of the "Having Difficulty in Evaluating Leisure Time" groups was statistically significant ($F=8.505$; $p<.05$). As a result of the post hoc Bonferroni test, after the one-way analysis of variance performed to determine which groups the scores of the coping with stress sub-dimension differ according to the variable of "Having Difficulty in Evaluating Leisure Time"; it is understood that the group of students who always have difficulties can bestow with less stress than the students who sometimes have difficulties and never have difficulties, and that the students who

sometimes have difficulties can bestow with less stress than the students who have never had difficulties.

The difference between the total stress dimension of the “Having Difficulty in Evaluating Leisure Time” groups was found to be statistically significant ($F=4.324$; $p<.05$). As a result of post hoc Bonferroni test, after one-way analysis of variance to determine between which groups the total stress dimension scores differ according to the variable of “Having Difficulty in Evaluating Leisure Time”; it is understood that the group of students who always have difficulties are more stressed than the students who sometimes have difficulties and never have difficulties, and students who sometimes have difficulties are more stressed than those who never have difficulties.

Table 6. Correlation results of anxiety total score and stress total score

		Sports	Total Exam Anxiety	Total Stress
Sports	r	1	,083	,006
	p		,154	,916
	n	299	299	299
Total Exam Anxiety	r	,083	1	,210**
	p	,154		,000
	n	299	299	299
Total Stress	r	,006	,210**	1
	p	,916	,000	
	n	299	299	299

** . Correlation is significant at the 0.01 level (2-tailed).

When Table 9 was examined, it was found that there was no statistically significant positive correlation between sports and anxiety total score and stress total score. However, it is seen that there is a statistically significant positive correlation between the anxiety total score and the stress total score.

DISCUSSION

The results of the research on the Stress and Anxiety levels of the study conducted to evaluate the Stress and Anxiety of the Students Preparing for the University Exam on Doing Sports;

- The average score of the students included in the study from the total anxiety dimension, Delusional Anxiety levels from the test anxiety scale sub-dimensions, and Affective Anxiety levels are above the medium level.

- It is understood that the average score of the participants included in the study from the total stress dimension, perceived stress levels from the stress scale sub-dimensions, and Coping with Stress levels are above the medium level.

While these results are in line with similar research results in the literature, it is understood that they do not overlap with some studies.

- When the stress and anxiety levels and sub-dimension levels of the students participating in the research were examined; No significant difference was found between the variables of age, active sports and type of sports.

In the literature review, some studies supporting these results were found. When the relevant literature is examined, there are also studies that found that the studies did not differ significantly according to age, duration of doing sports and leisure time variables.

According to this;

- In the study conducted by Erten (2020), when the age group variable was examined, it was found that the exam anxiety of the students participating in the study did not differ according to age. The reason why it shows results in this way may be due to the similarity of the level of preparation for the exams by the age groups of the students.

When the stress and anxiety scale and sub-dimension levels of the students participating in the research were examined; A significant difference was found in terms of gender, high school education and Difficulty in Evaluating Leisure Time variables. According to this difference,

a) In terms of Gender;

- The students in the male student group have a higher level of total test anxiety than the female student group, the male student group has higher delusional anxiety than the female student group, the male student group has higher affective anxiety than the female student group conclusion can be reached. These situations can be explained by the higher values that male students attribute to exams in terms of feeling competent and strong by revealing their personal competences and being successful. In addition, due to the high expectations of families and society from men, it can be stated that exams become more meaningful and important for them, and that the thoughts of being unsuccessful mean that future plans cannot be realized

and that these individuals will be more likely to experience anxiety in the context of negative consequences and tension.

- It can be concluded that the students in the male student group perceive higher stress than the female student group.

In the literature review, some studies supporting these results were found. According to the studies that support and do not support the current study;

- Ersöz (2004) found that male students exhibit more delusional attitudes than female students in the evaluation made in terms of genders.
- Conducted by Musch et al. (1999), in this study, it was concluded that male students showed more Affectiveness than female students.
- Ozhan et al. (2016) and Guler et al. (2013), in similar studies they conducted, it was found that test anxiety in high school students differed according to the gender variable,
- Cabuk et al. (2015) and Eraslan (2010) found that women generally have more test anxiety than men.
- In the studies of Aral et al. (1996), Guida et al. (1989), the conclusion that girls show more test anxiety than boys supports the present study.
- In the study conducted by Erten (2020), when the variable of the type of high school education was taken into account, it was found that the exam anxiety of the students participating in the study did not differ according to the type of high school attended.
- It can be concluded that the studies conducted by Tekbaş (2009) and Çiçek and Tanhan did not find any significant difference in terms of high school difference and does not support the present study.
- The study by Musch and Bröder (1999) does not support the present study, as female students exhibit more delusional attitudes than male students.

b) In terms of High School where they studied;

- Science high school students have higher perceived stress levels than vocational high school students, Imam Hatip High School students have higher levels of coping with stress than Vocational High School students, Vocational High School students have higher total stress levels compared to Science High School and Anatolian High School and Imam Hatip High School students. conclusion can be reached. The fact that

individuals studying at a science high school successfully pass through similar situations when entering high school, the course, study and trial exam programs at school are more intense and in parallel, they are faced with more exam life, in addition, the science high school is richer in terms of study opportunities. It can be said that the rate of students working in groups and using libraries is much higher than the others, and the opportunities of schools to benefit from social and cultural opportunities are different from each other.

In the literature review, some studies that support and do not support these results were found. According to these studies;

- According to Ersöz's (2004) research, there was no statistically significant difference between the places where education was conducted on delusional attitudes towards test anxiety, and there was a significant relationship between affective attitudes and places where education was conducted. Again, a statistical difference was found between the departments on active planning related to stress coping attitudes.

c) In Terms of Difficulty in Making Use of Their Leisure Time;

- The students who always have difficulties are more delusional anxiety than the students who sometimes have difficulties and never have difficulties, and the students who sometimes have difficulties are more delusional anxiety than the students who never have difficulties, The students who always have difficulties sometimes have more difficulties are more emotionally anxious than students who have difficulties and never have difficulties, and students who sometimes have difficulties are more emotionally anxious than students who never have difficulties, The group of students who always have difficulty is more likely to have difficulties than students who sometimes have difficulty and never have difficulty. The students who have difficulties are more anxious than the students who never have difficulties, the students who always have difficulties perceive more stress than the students who never have difficulties, and the students who sometimes have difficulties never have difficulties The students who always have difficulty perceive more stress than the students who have difficulties, that the group of students who always have difficulty can deal with less stress than the students who sometimes have difficulty and never have difficulty, that the students who sometimes have difficulty cope with less stress

than the students who never have difficulties, and that they always have difficulty. It can be concluded that the group of students who have difficulties are more stressed than students who sometimes have difficulties and never have difficulties, and students who sometimes have difficulties are more stressed than students who have never had difficulties.

When the literature was examined, no studies were found that supported or did not support the current study in terms of the variable "Having Difficulty in Evaluating Leisure Time".

d) The relationship between Anxiety and Stress scores, which are the subject of the research, and sports was examined. According to this review,

- It can be concluded that there is a positive statistically significant relationship between sports and anxiety total score and stress total score, and there is a statistically significant positive relationship between anxiety total score and stress total score.

When the literature is examined, it is seen that some studies support the current study and some do not. According to this;

- Çakmak (2005) stated that especially exam stress is an important factor on exam anxiety.
- In the study conducted by Erten (2020), it was determined that there is a significant relationship, albeit low, between the perceived stress levels of students and their test anxiety.
- In another study conducted by Tugan (2015), it was concluded that test anxiety negatively affects the school success level of students.
- In another study conducted by Çabuk et al. (2015) on high school students, it was reported that students' anxiety and anxiety levels about exams increase exam anxiety.

CONCLUSIONS

It is concluded that,

- the average score of the students included in the study from the total anxiety dimension, Delusional Anxiety levels from the test anxiety scale sub-dimensions, and Affective Anxiety levels are above the medium level.
- the average score of the participants included in the study from the total stress dimension, perceived stress levels from the stress scale sub-dimensions, and Coping with Stress levels are above the medium level.
- there is a positive statistically significant relationship between sports and anxiety total score and stress total score, and there is a statistically significant positive relationship between anxiety total score and stress total score.

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REFERENCES

- Akcakaya, U. (2012). *Causes of exam anxiety and solution suggestions*. Hyperlink: [https://www.tavsiyedyor.com/makale_8443.html]. Retrieved on 26 June 2021.
- Alpertunga, H., Unsar, A.S., & Akin, K.Y. (2016). A field study on the determination of anxiety and stress levels of physical education and sports school students. selcuk university, faculty of economics and administrative sciences. *Journal of Social Economic Research*, 16 (32).
- Altıparmak, M.E. (1994). *The effect of sports on coping strategies used in adolescents' stress experiences*. Dokuz Eylül University, İzmir, (Unpublished PhD Thesis).
- Aral, N., & Basar, F. (1996). Examining the anxiety levels of children who are prepared and not prepared for the Anatolian high school exam. *IX. National Psychology Congress*, Bogazici University, Istanbul.
- Aytan, G.K. (2010). *The effects of sports on socialization of secondary school students*. Gazi University Institute of Educational Sciences, phd thesis, Ankara.

- Bilge, A., Öğce, F., Genç, R.E., & Oran, N.T. (2009). Psychometric appropriateness of the turkish version of the perceived stress scale (PSS). *Journal of Ege University School of Nursing*, 2(25), 61-72.
- Brody, J.E. (1995). *Choosing the right exercise*. (Tra.) Positive approach to coping with stress. Istanbul: Sistem Publishing & Turkish Psychologists Association Publication.
- Boke, I. (2018). *Investigation of self-esteem, anxiety level and stress coping skills of high school students doing sports*. Istanbul Gelisim University, Institute of Social Sciences, Department of Psychology, Department of Psychology, Master's Thesis. Istanbul.
- Büyüköztürk, Ş., Kılıç-Çakmak, E., Akgün, O.E., Karadeniz, S., & Demirel, F. (2016). *Scientific research methods*. Ankara: Pegem Academy.
- Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, 24(4), 385-396.
- Cress, V.C., & Lampman, C. (2007). Hardiness, stress, and health-promoting behaviors among college students. *Psi Chi Journal of Undergraduate Research*, 12(1), 18-23.
- Çabuk, F., Kacansofta, H., & Ulaşkarahmetoğlu, G. (2015). Exam anxiety of senior high school students and influencing factors. *Kastamonu Journal of Education*, 23: 1481-94.
- Çakmak, O., & Hevedanlı, M. (2005). An investigation of the anxiety levels of the students of the education and science and literature faculties biology department in terms of various variables. *Electronic Journal of Social Sciences*, 4: 115-27.
- Çiçek, I., & Tanhan, F. (2018). Examination of the relationship between high school senior students' constraint perception schemes and their test anxiety levels. *Journal of Life Sciences*, 8: 69-85.
- Çetinkaya, B. (2018). Life is a test: test anxiety and motivation. *Journal of Pegem*,4: 001-214.
- Dalkıran, O. (2012). *Evaluation of trait anxiety, exam anxiety and social skill levels and exam performances of private classroom students according to the variable of physical activity* (Published Master's Thesis). Ankara University, Institute of Health Sciences, Department of Physical Education and Sports, Ankara.
- Eraslan, Y. (2010). *Examination of exam anxiety of high school seniors according to perceived parental attitudes*. Institute of Social Sciences, Department of Psychology. Master's thesis, Istanbul: Maltepe University.
- Erözkan, A. (2004). Exam anxiety and coping behaviors of university students. *SBE Journal*, 12.
- Erten, S.B. (2020). *An investigation of the relationship between exam anxiety and perceived stress levels of high school seniors*. Unpublished Master's Thesis, İnönü University Institute of Health Sciences, İzmir.
- Gökler, R., & Isitan, I. (2012). Disease of the modern age; stress and its effects. *Journal of History, Culture and Art Studies*, 1(3), 50-61.
- Guida, F., & Ludlow, L. (1989). A cross-cultural study of test anxiety. *Journal of Cross Cultural Psychology*, 20: 178-190.
- Güler, D., & Çakır, G. (2013). Examination of the variables predicting test anxiety of high school senior students. *Turkish Journal of Psychological Counseling and Guidance*, 4: 82-94.
- Karasar, N. (2011). *Scientific research method* (11th ed.). Ankara: Nobel Publishing House.
- Kartopu, S. (2012). Investigation of state and trait anxiety levels of high school students and teachers in terms of some variables (Kahramanmaraş Example), Fırat University. *Journal of the Faculty of Theology*, 17:2, 147-170.

- Kısa, S. (1996). *The relationship between exam anxiety and parental attitudes of senior high school students attending private teaching institutions in Izmir city center*. Master's Thesis, Dokuz Eylul University Institute of Social Sciences, Izmir.
- Mollaoğulları, H., & Uluç, S. (2019). Examination of exam anxiety status of secondary school students who play and don't do sports. *Journal of Sports Education*, 3:3, 78-87.
- Mumcu, N. (2019). *Determination of stress and happiness levels of physical education students with and without active sports*. Master Thesis. Hitit University, Institute of Health Sciences, Department of Physical Education and Sports, Çorum.
- Musch, J., & Broder, A. (1999). Test anxiety versus academic skills: A comparison of two alternative models for predicting performance in a statistics exam. *British Journal of Educational Psychology*, 69: 105-116.
- Otrar, M. (2003). *How can I deal with test anxiety?* Istanbul and Ankara: Nobel Publication Distribution.
- Özhan-Çaparlar, C., & Dönmez, A. (2016). What is scientific research and how is it done? *Turk J Anaesthesiol Reanim*, 44: 212-8.
- Öznur, G. (2014). *Investigation of the effects of physical activity level on posture, pain and anxiety in adolescents in Ayaş* (Published Doctoral Thesis). Hacettepe University, Institute of Health Sciences, Ankara.
- Paltı, C. (2012). *Self-esteem, test anxiety and state trait anxiety levels of high school students preparing for university before and after the transition to higher education exam*. Istanbul University, Istanbul, (Unpublished Master's Thesis).
- Tekbaş, S. (2009). *Secondary education institutions student selection and placement exam (oks) for senior primary school students and student selection exam (öss) for senior high school students in edirne merkez district, exam anxiety and affecting factors*. Institute of Health Sciences, Department of Public Health. Master's thesis, Edirne: Trakya University.
- Tugan, S.E. (2015). Relationship between test anxiety and academic achievement. *Karaelmas Journal of Educational Sciences*, 3: 98-106. Doi: 98 - 106, 01.01.2015