

## **The Relationship Between Stress Coping and Aggression Levels of Faculty of Sports Sciences Students**

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### **Abstract**

This study aims to examine the relationship between stress coping and aggression levels among students of the Faculty of Sports Sciences. The sample of the study consisted of 305 students from the Faculty of Sports Sciences. The "Aggression Scale" adapted into Turkish by Madran (2012) and the "Coping with Stress Methods Scale" adapted into Turkish by Ballı & Kılıç (2016) were used as data collection instruments. Differences in the total scores of the scales and their sub-dimensions according to gender were determined using the Student's t-test, while differences based on age, income, department, and class status were analyzed using One-Way Analysis of Variance (ANOVA) and Tukey's post hoc test. The results indicated that the overall aggression levels of male participants were higher than those of female participants. However, it was found that females had higher anger levels than males. Regarding age and aggression levels, it was observed that participants aged 18-21 exhibited higher overall aggression levels than those aged 26 and above. No relationship was found between income and stress coping, but students with higher income levels showed higher aggression levels compared to those with lower income levels. Fourth-year students had higher scores in problem-solving and environmental support compared to first- and second-year students. No relationship was found between class status and aggression. To better understand and reduce tendencies toward stress coping and aggression, it is recommended to examine the effects of factors such as income, gender, and age, and to strengthen educational programs and social support accordingly.

**Keywords:** Student Stress, Student Violence, Anger Control

## Introduction

Sport can be considered as a culture of a society, a tradition, a nation's expression of strength, a unifier of societies with different lives and perspectives, a means of expressing emotions and thoughts, and even an economic sector from which individuals, societies, and countries gain financial benefits. It also provides both mental and physical benefits to individuals (Öz et al., 2023). It is known that the most significant population density in our country falls within the age range considered as the young population, primarily consisting of university students (Barut & Demirci, 2024). In this context, sport can be viewed as a phenomenon that contributes to well-being. Students studying at the Faculty of Sports Sciences, which serves as the educational institution for sports and athletes, possess an in-depth understanding of various aspects of sport, equipped with disciplined education and specialized areas of expertise. These students are capable of effectively understanding and applying the physical, mental, and social benefits of sport through both theoretical knowledge and practical experience. Additionally, students at the Faculty of Sports Sciences are significant due to their ability to develop various strategies to meet the needs of athletes in areas such as health, performance, and rehabilitation. In this way, students of the Faculty of Sports Sciences grow into qualified individuals who have the potential to guide society in maximizing the positive impacts of sport. It is well known that such education is generally provided in the Sports Sciences faculties or the School of Physical Education and Sports at universities (Canpolat & Akyol, 2022). However, despite the considerable positive effects of sport on mental health, the stress brought about by modern life has become an inseparable part of daily existence. This stress is often the result of high expectations, which, while not necessarily troubling others, can have significant physical and psychological effects on individuals.

Stress is an integral part of daily life. In today's world, as life becomes increasingly complex, avoiding stress has become almost impossible (Özel & Karabulut, 2018). Stress is defined as the state of strain or discomfort experienced as a result of events encountered in daily life or pressures arising from interpersonal relationships. It refers to an emotional, physical, or cognitive response triggered by environmental pressures, conflicts, tensions, or similar stimuli (Kaba, 2019). Intense pressure, anxiety, stress, health problems, financial difficulties, and family issues in personal life can also lead to burnout (Derelioğlu & Sabah, 2023). Considering factors such as career planning and employment anxiety levels, intensity of classes, and teachers' expectations from students during their academic lives, students studying at sports science faculties are likely to have stress in their lives and to experience aggressive symptoms that are a result of stress. It is known that students, especially those under intense stress, may tend to exceed their limits and prefer to express their negative emotions in the form of physical or verbal aggression.

Aggression is a universal impulse that has existed from the beginning of human existence to the present day. Nowadays, it has become an increasing problem in the family, on the street, at school and even in sports competitions. Aggression leads to not only physical harm but also psychological damage. For this reason, it is defined as an individual's inclination to inflict physical or psychological harm and is recognized as a personality disorder (Algur, 2019). Aggression is a behavior that is usually carried out for a purpose, and its target can usually be a person, a society or a group. Individuals who encounter such behaviors may generally react such as avoidance or struggle. Aggression often occurs as a result of conflict and can be expressed in different ways, influenced by various factors. Therefore, it is important to understand the environmental, social and individual factors that affect aggression. Especially in competitive sports, it may sometimes be necessary to use violence tactically to gain superiority over the opponent. However, when sports ethics and fair-play rules are violated,

behavior that harms the opponent is considered aggression. In the competitive atmosphere among students, the effort to gain superiority over their peers can sometimes manifest itself in the form of aggression. However, sports science students should keep their aggressive tendencies under control and act within the framework of sports ethics by adhering to the ethical and fair-play rules of sports. This will help them maintain both their academic success and sports ethics. The relationship between sports science students' coping with stress and aggression levels is closely related to the nature of the field they study and the nature of the sport. These students often study in a competitive and performance-oriented environment. Therefore, various factors may influence stress coping skills and aggression tendencies. In this context, educational institutions that train physical education and sports teachers, coaches, and managers should develop their curricula in a way that transforms the principles of sports ethics and philosophy into behavior (Pehlivan & Konukman, 2004).

The focus of this study is to examine the relationship between stress coping skills and aggression levels of students studying at sports science faculties in terms of some socio-demographic characteristics. Faculties of sports sciences are educational institutions that focus on sports and its multidisciplinary aspects, offering students the opportunity to comprehensively learn and understand the different dimensions of sports. In this context, understanding the stress coping abilities and aggression levels of students studying at the faculty of sports sciences is important to evaluate both the psychological effects of sports and the leadership potential of future professionals in the field of sports education. This study aims to provide valuable insights into how sports science faculties can support their students in improving their stress coping mechanisms and reducing possible aggressive tendencies.

### **Material and Method**

Ethics committee approval was received for the research with the decision of Giresun University Social Sciences, Science and Engineering Sciences Research Ethics Committee dated 08.05.2024 and numbered 05/31.

### **Research Model**

The survey used the survey research model, which is generally used to understand the current situation about a subject or population. Screening models can be used to get a general idea about the current situation before conducting more comprehensive research on a topic (Karasar, 1999).

### **Research Group**

The population of the study consists of students enrolled in the Faculty of Sports Sciences at universities, while the sample was determined using a random sampling method from among 305 students studying at the Faculty of Sports Sciences of Ondokuz Mayıs University, Yaşar Doğu Sports Sciences Faculty during the 2023/2024 academic year.

### **Data Collection Tools**

As data collection tools, the personal information form developed by the researchers, the "Aggression Scale" adapted to Turkish Culture by Madran (2012), whose validity and reliability studies were conducted by Buss & Perry, (1992) and the "Aggression Scale" developed by Moos (1993) and Ballı & Kılıç (2016) were used. "Stress Coping Methods Scale" adapted to Turkish by was used. In the personal information form, questions such as the age, gender, class, income status and legal criminal history of the sports sciences faculty students participating in the research were asked. "Aggression Scale" is a scale used to examine the aggression levels of individuals. The scale consists of 29 items and is evaluated

in 4 sub-dimensions. Sub-dimensions: Physical aggression, hostility, verbal aggression, and there are no reverse-scored items in the scale. A 5-point Likert -type scale such as "1: Strongly Disagree" and "5: Completely Agree" is used to answer each item in the scale, and higher scores indicate higher levels of the relevant dimension. Methods of Coping with Stress Scale: 24 statements are rated on a 5-point Likert type consisting of 4 sub-dimensions (logical analysis, positive evaluation, seeking guidance and support, problem solving) and the answer options are; It was scored as 1-Never, 2-Rarely, 3-Sometimes, 4-Often, 5-Always. Rising scores on the scale indicate high levels of the relevant dimension.

### Collection of Data

Before asking the scale items to the students of the faculty of sports sciences, who constituted the research group, the purpose of the research was explained and the necessary information was given about the factors to be taken into consideration. The research scales were applied to the students of the faculty of sports sciences between 15.10.2023 and 15.12.2023, through Google forms and by hand physical survey method, based on voluntary participation.

### Data Analysis

To check the internal consistency of the responses given by the participants to the scale items, reliability coefficients (Cronbach Alpha) were calculated (Table 1).

**Table 1.** Internal Consistency Coefficients of Participants' Answers to Scale Items

Scale	Internal Consistency Coefficient	Evaluation
Coping with Stress Scale Total	0.920	Highly Reliable
Problem solving	0.884	Highly Reliable
Position Evaluation	0.890	Highly Reliable
Analytics	0.897	Highly Reliable
Professional Support	0.645	Moderately Reliable
Environmental Support	0.820	Highly Reliable
Aggression Level Scale Total	0.870	Highly Reliable
Physical Aggression	0.710	Moderately Reliable
Hostility	0.854	Highly Reliable
Anger	0.675	Moderately Reliable
Verbal Aggression	0.810	Highly Reliable

In the study, the internal consistency of the answers given to the total items and subscale items of the coping with stress and aggression levels scale was found to be moderately and highly reliable.

In the statistical evaluation of the data, the assumption of normality was first examined with the Kolmogorov-Smirnov and Shapiro-Wilk tests ( $P > 0.05$ ). In the study, whether the total scores of the scale differed according to gender, being a national athlete, or having received a criminal sanction was determined by Student's t test, income level, department, class, age were determined by One-Way Analysis of Variance, and differences between groups were determined by Tukey's multiple comparison test. SPSS 22.0 V. statistical package program was used in all statistical calculations. Research findings are given as frequency (%), mean and standard deviation values, and the findings were considered significant at the  $P < 0.05$  level.

The demographic characteristics of the students from Ondokuz Mayıs University Yaşar Doğu Faculty of Sports Sciences who voluntarily participated in the research are provided in Table 2.

### Findings

**Table 2.** Frequency and Percentage Distributions Regarding Demographic Characteristics of Participants

<b>Gender</b>	<b>n</b>	<b>%</b>	<b>Punishment procedure</b>	<b>n</b>	<b>%</b>
Woman	139	45.6	Yes	24	7.9
Male	166	54.4	No	281	92.1
<b>Total</b>	<b>305</b>	<b>100</b>	<b>Total</b>	<b>305</b>	<b>100</b>

  

<b>Age (years)</b>	<b>n</b>	<b>%</b>	<b>Income rate</b>	<b>n</b>	<b>%</b>
18-21	185	60.7	Low (Income<Expense)	66	21.6
22-25	104	34.1	Medium (Income=Expense)	206	67.5
26 and over	16	5.2	High (Income>Expense)	33	10.8
<b>Total</b>	<b>305</b>	<b>100</b>	<b>Total</b>	<b>305</b>	<b>100</b>

  

<b>Section</b>	<b>n</b>	<b>%</b>	<b>Class</b>	<b>n</b>	<b>%</b>
Teaching	35	11.5	1st Class	154	50.5
Coaching Training	52	17.0	2. Class	78	25.6
Sports Management	186	61.0	3rd Class	58	19.0
Recreation	32	10.5	4th grade	15	4.9
<b>Total</b>	<b>305</b>	<b>100</b>	<b>Total</b>	<b>305</b>	<b>100</b>

Of the individuals who voluntarily participated in the research, 54.4% were male, 92.1% had not received any criminal action, 60.7% were between the ages of 18-21, 67.5% had a middle income level, and 61% were department of sports management and 50% of them are first year students (Table 2).

**Table 3.** Participants' Stress Coping and Aggression Levels by Gender Status

<b>Scale and Sub-Dimensions</b>	<b>Gender</b>	<b>n</b>	<b>Average</b>	<b>SS</b>	<b>P-value</b>
Coping with Stress Scale	Woman	139	88.39	14.48	0.013
	Male	166	90.43	12,19	
Problem Solving	Woman	139	21.96	3.95	0.103
	Male	166	22.51	3.56	
Positive Evaluation	Woman	139	22.75	3.94	0.097
	Male	166	22.81	3.46	
Analytics	Woman	139	22.06	3.89	0.021
	Male	166	22.97	3.36	
Professional Support	Woman	139	5.82	1.93	0.540
	Male	166	6.25	1.82	
Environmental Support	Woman	139	7.88	1.65	0.938
	Male	166	7.74	1.61	
Aggression Level Scale	Woman	139	79.28	14.39	0.004
	Male	166	80.04	17.69	
Physical Aggression	Woman	139	21,29	5.61	0.015
	Male	166	23.55	6.54	
Hostility	Woman	139	24.11	4.85	0.234
	Male	166	23.09	5.00	
Anger	Woman	139	20.05	4.35	0.001
	Male	166	19,14	5.17	
Verbal Aggression	Woman	139	13.83	2.40	0.002
	Male	166	14.25	3.25	

In the study, a statistically significant difference was found in the students' stress coping scale total score, problem solving and logical analysis sub-dimensions according to gender. No statistically significant difference was detected between the total scores of the positive evaluation, professional support and environmental support subscales. A statistically significant difference was detected between the aggression level scale total and all other subscale total scores (except hostility). In the study, male participants' total scores of the scales and all other subscale total scores with significant differences were found to be higher than female participants. In the anger subscale, female participants' subscale total scores were found to be higher than male participants ( $P < 0.05$ ; Table 3).

**Table 4.** Students' Stress Coping and Aggression Levels According to Penal Sanction Status

Scale and Sub-Dimensions	Criminal sanctions	n	Average	SS	P-value
Coping with Stress Scale	Yes	24	87.25	15.96	0.145
	No	281	89.69	13.06	
Problem Solving	Yes	24	21.88	4.23	0.232
	No	281	22.29	3.71	
Positive Evaluation	Yes	24	22.08	4.15	0.271
	No	281	22.84	3.64	
Analytics	Yes	24	21.50	4.30	0.193
	No	281	22.64	3.56	
Professional Support	Yes	24	6.58	1.95	0.851
	No	281	6.01	1.87	
Environmental Support	Yes	24	7.42	1.53	0.979
	No	281	7.84	1.64	
Aggression Level Scale	Yes	24	90.75	14.64	0.769
	No	281	78.75	16.05	
Physical Aggression	Yes	24	28.42	4.75	0.081
	No	281	22.01	6.08	
Hostility	Yes	24	25.08	4.20	0.403
	No	281	23.42	4.99	
Anger	Yes	24	22.21	4.10	0.566
	No	281	19.33	4.82	
Verbal Aggression	Yes	24	15.04	3.10	0.291
	No	281	13.98	2.87	

In the study, no statistically significant difference was detected between the students' coping with stress scale total score and aggression level scale total score and the sub-dimension total scores of the scales, depending on whether they received criminal sanctions ( $P > 0.05$ ; Table 4).

**Table 5.** Students' Stress Coping and Aggression Levels by Age

Scale and Sub-Dimensions	Age	n	Average	SS	P-value
Coping with Stress Scale	18-21	185	87.26b	12.02	p < 0.001
	22-25	104	91.88b	14.76	
	over 26	16	99.94a	9.91	
Problem Solving	18-21	185	21.65b	3.63	0.001
	22-25	104	23.05ab	3.80	
	over 26	16	24.13a	3.30	
Positive Evaluation	18-21	185	22.25b	3.10	0.001
	22-25	104	23.31b	4.51	
	over 26	16	25.50a	1.86	

Analytics	18-21	185	21.97b	3.37	p <0.001
	22-25	104	23.13b	3.91	
	over 26	16	25.56a	2.63	
Professional Support	18-21	185	5.90b	1.83	0.013
	22-25	104	6.13b	1.86	
	over 26	16	7.31a	2.18	
Environmental Support	18-21	185	7.58a	1.66	0.006
	22-25	104	8.07ab	1.60	
	over 26	16	8.63b	0.96	
Aggression Level Scale	18-21	185	80.92a	16.25	0.018
	22-25	104	79.13a	15.95	
	over 26	16	69.13b	15.05	
Physical Aggression	18-21	185	22.84b	6.32	0.060
	22-25	104	22.48b	6,11	
	over 26	16	19.00a	5.05	
Hostility	18-21	185	23.91b	4.94	0.030
	22-25	104	23.38b	4.73	
	over 26	16	20.56a	5.64	
Anger	18-21	185	19.97a	4.91	0.019
	22-25	104	19.29a	4.47	
	over 26	16	16.56b	5.21	
Verbal Aggression	18-21	185	14,19	2.89	0.274
	22-25	104	13.99	2.88	
	over 26	16	13.00	3.06	

In the study, a statistically significant difference was found between the students' stress coping scale total score and sub-dimension total scores and the aggression level scale total and all sub-dimension total scores (except for verbal aggression) according to age. ( $P < 0.05$ ; Table 5). In general, it was determined that students who declared that they were 26 years old and above had higher stress coping scores than students between the ages of 18-21. In the total and subscale total scores of the aggression level scale, it was determined that the scores of students aged 18-21 were higher than those of students aged 26 and over.

**Table 6.** Participants' Stress Coping and Aggression Levels by Income Status

Scale and Sub-Dimensions	Income	n	Average	SS	P-value
Coping with Stress Scale	Low (Income < Expense)	66	90.05	12.96	0.215
	Medium (Income = Expense)	206	89.94	13.54	
	High (Income > Expense)	33	85.67	12,12	
Problem Solving	Low (Income < Expense)	66	22.03	3.62	0.535
	Medium (Income = Expense)	206	22.41	3.85	
	High (Income > Expense)	33	21.73	3.29	
Positive Evaluation	Low (Income < Expense)	66	23,23	3.78	0.062
	Medium (Income = Expense)	206	22.85	3.49	
	High (Income > Expense)	33	21.42	4.40	
Analytics	Low	66	23.00	3.50	0.374

	(Income<Expense)				
	Medium (Income=Expense)	206	22.51	3.67	
	High (Income>Expense)	33	21.94	3.64	
Professional Support	Low (Income<Expense)	66	5.83	1.93	
	Medium (Income=Expense)	206	6.17	1.87	0.343
	High (Income>Expense)	33	5.82	1.84	
Environmental Support	Low (Income<Expense)	66	7.79	1.40	
	Medium (Income=Expense)	206	7.89	1.71	0.160
	High (Income>Expense)	33	7.30	1.49	
Aggression Level Scale	Low (Income<Expense)	66	80.65b	14.20	
	Medium (Income=Expense)	206	77.65b	16.61	p <0.001
	High (Income>Expense)	33	90.55a	13.41	
Physical Aggression	Low (Income<Expense)	66	22,18b	5.36	
	Medium (Income=Expense)	206	21.87b	6.17	p <0.001
	High (Income>Expense)	33	27,21a	6.35	
Hostility	Low (Income<Expense)	66	24,30b	5.04	
	Medium (Income=Expense)	206	23.03b	5.05	0.017
	High (Income>Expense)	33	25,33a	3.42	
Anger	Low (Income<Expense)	66	19.97b	4.43	
	Medium (Income=Expense)	206	18.98b	4.95	0.014
	High (Income>Expense)	33	22,33a	3.69	
Verbal Aggression	Low (Income<Expense)	66	14,20b	2.33	
	Medium (Income=Expense)	206	13.76b	3.01	0.002
	High (Income>Expense)	33	15.67a	2.73	

In the study, no statistically significant difference was detected between the stress coping scale total score and subscale total scores according to the income status declared by the students. A statistically significant difference was detected between the aggression level scale total score and subscale total scores ( $P < 0.05$ ; Table 6). As a result of the findings, the aggression levels of students who declared themselves to be high-income were found to be higher than those of students with lower income.

**Table 7.** Students' Stress Coping and Aggression Levels by Department

Scale and Sub-Dimensions	Section	n	Average	SS	P-value
Coping with Stress Scale	Teaching	35	89.03	14.43	0.051
	Coaching Training	52	85.62	13.63	
	Sports Management	186	89.97a	13.21	
	Recreation	32	93.59	10.71	
Problem Solving	Teaching	35	21.80	4.20	0.139
	Coaching Training	52	21.44	3.55	
	Sports Management	186	22.40	3.74	
	Recreation	32	23.25	3.40	
Positive Evaluation	Teaching	35	23.03ab	4.15	0.013
	Coaching Training	52	21,29b	4.49	
	Sports Management	186	23.03ab	3.39	
	Recreation	32	23.47a	2.74	
Analytics	Teaching	35	22.60	4.01	0.199
	Coaching Training	52	21.71	4.06	
	Sports Management	186	22.63	3.54	
	Recreation	32	23.41	2.78	
Professional Support	Teaching	35	5.66	1.92	0.132
	Coaching Training	52	6.35	1.75	
	Sports Management	186	5.96	1.90	
	Recreation	32	6.56	1.81	
Environmental Support	Teaching	35	7.87ab	1.51	0.018
	Coaching Training	52	7.21b	1.65	
	Sports Management	186	7.87ab	1.67	
	Recreation	32	8.28a	1.28	
Aggression Scale	Teaching	35	74.86b	15.46	p <0.001
	Coaching Training	52	89.56b	15.36	
	Sports Management	186	77.68b	15.32	
	Recreation	32	80.63a	17.96	
Physical Aggression	Teaching	35	19.89bc	5.82	p <0.001
	Coaching Training	52	26.67a	6.35	
	Sports Management	186	21.73c	5.76	
	Recreation	32	23,25b	6.17	
Hostility	Teaching	35	23,23b	5.19	0.006
	Coaching Training	52	25.75a	3.91	
	Sports Management	186	23.04b	4.97	
	Recreation	32	23,31b	5.32	
Anger	Teaching	35	18.77b	5,10	0.019
	Coaching Training	52	21.38ab	4.25	
	Sports Management	186	19,15ab	4.74	
	Recreation	32	19.84a	5.35	
Verbal Aggression	Teaching	35	12.97c	2.98	p <0.001
	Coaching Training	52	15.75a	2.91	
	Sports Management	186	13.77b	2.68	
	Recreation	32	14.22b	3.03	

The study found no statistically significant differences in the total scores of the stress coping scale and its sub-dimension scores (except for the positive evaluation sub-dimension) based on the departments in which students were enrolled ( $P > 0.05$ ; Table 7). However, statistically significant differences were identified in the total scores of the aggression scale and all its sub-dimensions ( $P < 0.05$ ; Table 7). According to the findings, recreation department students scored higher in the positive evaluation and environmental support sub-dimensions compared to coaching department students. Conversely, coaching department students scored higher than teaching department students in the total aggression scale score, as well as the sub-dimensions of physical aggression, anger, and verbal aggression. Additionally, in the hostility

sub-dimension, coaching department students scored higher than management department students.

**Table 8.** Participants' Stress Coping and Aggression Levels by Class

Scales and Sub-Dimensions	Class	n	Average	SS	P-value
Coping with Stress Scale	1 (one)	154	88.07	12.29	0.067
	2 (two)	78	91.06	14,17	
	3 (three)	58	89.34	14.70	
	4 (four)	15	96.60	10.70	
Problem Solving	1 (one)	154	21.76c	3.66	0.047
	2 (two)	78	22.88b	3.91	
	3 (three)	58	22,29b	3.76	
	4 (four)	15	23.93a	2.96	
Positive Evaluation	1 (one)	154	22.63	2.98	0.106
	2 (two)	78	22.69	4.02	
	3 (three)	58	22.71	4.86	
	4 (four)	15	25.07	2.40	
Analytics	1 (one)	154	22,23	3.45	0.357
	2 (two)	78	22.88	3.76	
	3 (three)	58	22.71	3.88	
	4 (four)	15	23.60	3.70	
Professional Support	1 (one)	154	5.92	1.85	0.118
	2 (two)	78	6,12	1.96	
	3 (three)	58	6.07	1.81	
	4 (four)	15	7.13	1.88	
Environmental Support	1 (one)	154	7.56b	1.64	0.006
	2 (two)	78	8.27b	1.56	
	3 (three)	58	7.67b	1.70	
	4 (four)	15	8.40a	0.91	
Coping with Stress Scale	1 (one)	154	80.68	15.57	0.765
	2 (two)	78	78.63	17.94	
	3 (three)	58	78.88	15,17	
	4 (four)	15	78.27	18.81	
Physical Aggression	1 (one)	154	22.50	6.13	0.517
	2 (two)	78	23,10	6.61	
	3 (three)	58	22,29	6.03	
	4 (four)	15	20.53	6.05	
Hostility	1 (one)	154	24,10	4.68	0.131
	2 (two)	78	22.64	5.18	
	3 (three)	58	23.09	4.75	
	4 (four)	15	24.53	6.51	
Anger	1 (one)	154	19.86	4.76	0.751
	2 (two)	78	19,21	5.08	
	3 (three)	58	19.29	4.47	
	4 (four)	15	19.33	5.68	
Verbal Aggression	1 (one)	154	14.22	2.93	0.567
	2 (two)	78	13.68	3.09	
	3 (three)	58	14.21	2.49	
	4 (four)	15	13.87	3.09	

In the study, no statistically significant difference was detected between the coping with stress scale and aggression level scale total scores and sub-dimension total scores (except for the problem solving and environmental support sub-dimensions) according to the students' classes ( $p > 0.005$ , Table 8). As a result of the findings, the scores of 4th grade students were found to

be higher than the 1st grade students in the problem solving sub-dimension, while the scores of 4th grade students were found to be higher than the 2nd grade students in the environmental support sub-dimension total score.

## Discussion and Conclusion

This study aims to examine the relationships between stress coping and aggression levels of sports science faculty students by taking some variables into consideration. As a result of the research findings, no significant difference was found between the participants' levels of coping with stress and aggression according to the variable of receiving criminal sanctions. This statement shows that the research results show that criminal sanctions do not have a significant effect on the participants' ability to cope with stress or their tendencies towards aggression. That is, facing criminal sanctions does not significantly affect the participants' methods of coping with stress or their tendencies towards aggression. This may suggest that researchers need to conduct further research on the potential of punitive sanctions to change behaviors related to stress management or aggression. However, these conclusions may be limited by the scope and method of the research, and different results may be obtained in different contexts. Therefore, it needs to be considered from a broader perspective and evaluated in accordance with the relevant literature. As a result of the literature review, no similar studies were found that addressed the criminal action variable.

As a result of the findings, when the effect of gender factor on sub-dimensions such as students' coping with stress, problem solving, logical analysis and aggression levels was examined, it was revealed that there was a difference in students' stress coping, problem solving and logical analysis skills depending on gender. According to the findings, it was determined that female participants were generally more successful than men in coping with stress. (Gündüz, 2019; Savcı & Aysan, 2014) found the relationship between coping with stress and gender variables to be higher in female participants than male participants, in line with the research findings. Contrary to existing research findings, Karabulut (2024) concluded in his study that male participants were able to cope with stress more functionally. However, (Duman, 2016; Doğru, 2018; Renk & Creasey, 2003; Tural, 1994; Binboğa, 2002) could not find a significant difference between the gender variable and the dimension of coping with stress.

The research also revealed that levels of aggression differ by gender. Although it was found that the anger levels of female participants were higher than male participants, male participants were found to be higher than female participants in terms of general aggression level and other sub-dimensions. This result may lead to the interpretation that male participants are more prone to aggression than females. (Yamak et al., 2019; Özgider & Akgün, 2021) obtained results parallel to the current research findings in their research.

When the age variable was examined in the study, it was determined that participants aged 26 and over were more effective in coping with stress than participants aged 18-21. This finding suggests that age may play an important role in the ability to cope with stress. It can be argued

that older participants were more effective at coping with stress due to factors such as maturity, experience and self-confidence. As individuals get older, their life experiences increase, which can improve their ability to cope with stress. Additionally, older participants may generally have better problem-solving and emotional regulation skills, which may provide an advantage when it comes to coping with stress. However, when the age variable and aggression levels were considered, it was determined that the general aggression levels of participants aged 18-21 were higher than participants aged 26 and over. This finding shows that the effect of age on aggressive tendencies is significant. It can be thought that participants in the younger age group may have a higher tendency to aggression due to factors such as lack of maturity, difficulty in emotional control and lack of life experience. Additionally, participants in the younger age group are often coping with the challenges of adolescence, which may lead to increased aggressive tendencies. Conducting research with different groups, (Taşğın & Çağlayan, 2011; Afyon & Metin, 2014; Çankaya & Çiftçi, 2019; Aşçı et al., 2015; Yazkan 2018; Özgider & Akgün, 2021) In their research findings where they examined the variables of aggression and age, they could not find a relationship between the two situations, contrary to existing research findings.

As a result of the research findings, no relationship was found between income and coping with stress. The most important reason for this result can be considered as cultural differences. Factors such as cultural differences, regional conditions, and research method may influence the relationship between income and stress because these factors can shape the stress coping strategies of individuals and communities. For example, coping with stress in one culture often relies on a social support network, whereas in another culture it may rely on individual resolution. Regional conditions are also important because the purchasing power of income and living standards may vary in different regions, which can affect the perception of stress. In the study, it was determined that students with high income levels had higher levels of aggression than students with low income. The reasons why high-income students have higher levels of aggression than low-income students may be diverse. This may be due to factors such as students with high incomes feeling under social status and pressure, their tendency to be more competitive, the influence of the modeling they receive from their families, social expectations and image pressure, inequality of opportunity and perception of injustice. These factors combined may lead higher-income students to tend to behave more aggressively. Erşan et al. (2009) in his research, he found that the aggression scores of high-income students were lower than those of students in other groups. He explained this situation as being related to the fact that students in this group can get what they want financially more easily than students in other groups. But, (Öztürk, 2019; Beşkat, 2016), did not find a relationship between income level and aggression levels in their research, similar to the results of the current research.

In the study, no relationship was found between students' ability to cope with stress according to the departments they study in. It was determined that only the positive evaluation scores of the recreation department students were higher than the coaching department students. The cause of this situation may depend on several factors. Firstly, due to the nature of the program in which recreation department students are educated, it is possible that it may include courses

that may emphasize positive thinking and perception of environmental support. These classes can teach students strategies to improve stress coping skills and maintain a positive outlook. Additionally, the recreation department can often provide an environment that encourages social interaction and includes group activities, which may increase students' perception of environmental support. Additionally, students in the recreation department can be considered to often participate in stress-reducing activities such as nature or outdoor activities, which may promote positive thinking and strengthen the perception of environmental support. When these factors come together, they can enable recreation department students to have a higher awareness and activities on these issues. (Çetin & Kuru, 2010; Özdemir, 2022; Karabulut, 2024) obtained results parallel to the existing research results in their research. When the relationship between the department and Aggression was examined in the study, it was determined that students studying in the coaching department received higher scores in physical aggression, anger and verbal aggression than students studying in the teaching department. In hostility, it was found that students studying in the coaching department received higher scores than students studying in the management department. Among the reasons why students in the coaching department have higher scores in the physical aggression, anger and verbal aggression subscales may be that they receive training in competitive sports environments and are exposed to more competition and pressure in these environments. These environments can encourage physical strength and aggressive competition, which can increase aggressive tendencies. On the other hand, since teaching students generally receive education in a collaborative and calm environment, their aggression levels may be lower. In the hostility sub-dimension, the fact that coaching department students received higher scores than management department students may reflect the fact that sports environments where leadership and competitive spirit are at the forefront tend to develop more feelings of hostility. Combining these factors, it can be concluded that the aggression and hostility levels of students in the coaching department are higher than those in other departments. As a result of the literature review, no research was found examining the relationship between the department variable of sports sciences faculty students and aggression.

In the research, the problem solving and environmental support scores of 4th grade students were found to be higher than those of 1st and 2nd grade students. There may be several possible reasons for this situation. Firstly, as students get older, their problem-solving skills and perception of social support generally improve. 4th grade students may have gained more experience and learning opportunities, which may increase their problem-solving skills and strengthen their perception of environmental support. Additionally, 4th grade is often a period in which social and academic skills are developed more intensively, which may contribute to students' increased environmental support and problem-solving skills. Finally, as students' grade levels rise, educational programs often become more complex and challenging, which may increase students' problem-solving skills and perception of environmental support. A combination of these factors may explain 4th grade students' higher problem solving and environmental support scores. Durmuş & Gerçe (2017); In their research, contrary to the existing data, they could not detect a relationship between the class the students studied and

their ability to cope with stress. As a result of the research findings, no relationship was found between the class variable and aggression. (Demir, 2020; Günay & Aygün, 2023) found in his research that, contrary to the current research results, the violence scores of second-grade students were higher than fourth-grade students. These findings indicate the need for further research to understand the impact of factors such as gender, age, income, department and class, as well as criminal sanctions, on stress coping and aggression.

## Suggestions

As a result of the findings, a more in-depth examination can be made on the reasons for gender-based differences. Ethnographic studies can be conducted to examine the cultural and social norms behind gender-based differences. Field studies can be conducted to understand the effects on men's and women's stress coping strategies in a particular culture or society and how these strategies are shaped. Additionally, it may be recommended to develop measurement tools to more accurately measure gender-based stress coping differences. To better understand the relationship between age and coping with stress and aggression, the effect of age on coping with stress and aggression can be examined in more detail by conducting comparative analyzes between different age groups. In this way, subsequent researchers can better understand the differences that occur in certain age groups and determine the reasons for the differences. It is important to examine other individual factors (e.g. experience, personality traits, living conditions) as well as age in the research. Determining the effects of these factors on stress coping and aggression may provide a more comprehensive understanding. It is important to understand the social and cultural dynamics underlying age-related stress coping and aggression tendencies by evaluating research findings in social and cultural contexts. More research can be done to better understand how these factors shape the effects of age. These recommendations may provide guidance for better understanding the effects of age on stress coping and aggression and developing effective interventions in these areas. It is important to organize education and awareness programs for individuals with low income levels to teach them strategies to cope with stress and reduce their tendencies towards aggression. These programs can be designed to improve emotional regulation skills, increase problem-solving abilities, and teach alternative solutions. Increasing low-income individuals' access to family and community support may help them cope with stress and reduce tendencies toward aggression. Strengthening family communication, expanding social support networks and encouraging social solidarity can be effective strategies in this area. These findings may require reviewing the impact of public policies and social service programs on income inequality and psychosocial well-being. Making policies and social service programs aimed at reducing income inequality more effective can increase stress coping skills and reduce aggression tendencies. These suggestions may contribute to understanding the relationship between income level and coping with stress and aggression and to the development of effective interventions and policies in this area. It may be beneficial to adopt and implement courses that emphasize

positive thinking and perception of environmental support in other departments, such as the recreation department. It may be necessary to add courses to improve students' stress coping skills or revise existing courses. Environments that encourage social interaction and include group activities can be created. The fact that coaching department students received higher scores in the physical aggression, anger and verbal aggression subscales shows that competitive sports environments may increase aggressive tendencies. Therefore, it is important for students training in competitive sports environments to receive psychological support and develop skills to cope with aggressive tendencies. The fact that the hostility levels of the students of the coaching department are higher than those of other departments indicates that sports environments where leadership and competitive spirit are at the forefront may increase feelings of hostility. In this case, it is important to emphasize social skills such as empathy and collaboration along with leadership skills. The fact that recreation department students' perception of environmental support is higher than other departments emphasizes the importance of programs and activities to strengthen the perception of environmental support. Similar events can be organized in other departments to increase students' perception of environmental support. In order to understand and reduce stress coping strategies and aggression tendencies, the effects of factors such as income level, gender and age should be examined in depth and educational programs and social supports should be strengthened accordingly.

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