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ABSTRACT
The aim of this study; It was carried out to evaluate the status of students in undergraduate programs studying at Istanbul University-Cerrahpasa Faculty of Sports Sciences on "perceptions and attitudes towards Occupational Health and Safety Course". This cross-sectional study includes 480 students who are all 1st, 2nd, 3rd and 4th grade students of Sports Management, Coaching Education, Physical Education and Teaching programs in the 2022-2023 academic year. 55 participants who did not want to participate in the study, were not at school or were left out of the evaluation as a result of filling the questionnaire incorrectly due to similar reasons were excluded from the evaluation. Our research was carried out with 425 students, and it was applied by using the survey questions in the study of Cevik and Aksoy (2013) to collect the data. A participant can collect a minimum of 7 and a maximum of 35 points from the survey questions. The questionnaire used in the study was created as a result of scanning the relevant literature and its application was made face-to-face with the students who agreed to participate at the end of each lesson. The obtained data were analyzed using the Spss 22.0 package program, and $p<0.05$ was considered a statistically significant difference. Kolmogorov smirnov test, Independent Samples t Test and One-way ANOVA test or one-way analysis of variance were used in the study.

Keywords: Sports, Occupational Health and Safety, Education, Attitude and Awareness.

INTRODUCTION

It is a multidisciplinary approach that covers occupational health and safety, work accidents and occupational diseases and all kinds of health and safety prevention activities that should be taken in work environments, requires the preparation of risk analyzes and emergency plans, trains employees on this issue, and imposes various rights and responsibilities on the state, employer and employee. working system. This system and the law in force provide the necessary regulations to the working life, and work to ensure and sustain a full health, safety and social well-being of the employees individually and collectively. Thus, regardless of the difference between public and private institutions; Physical, chemical, biological, ergonomic and psycho-social improved work environments increase the motivation, work compliance and productivity of employees and provide social and economic gains. In addition, the improved work environments in this way will provide holistic protection by aiming to protect the employees, visitors, customers, anyone who may be in the workplace at that time, and the environment. The important role of employee violations in the concept of occupational safety was revealed for the first time in a report prepared after the Chernobyl disaster in 1986. After this report, attention was drawn to the fact that the human factor is a very important concept in ensuring safety. It is aimed to increase the awareness of the employees in the field of safety together with the occupational safety training and to prevent the dangers that may occur in human resources. In this way, it is possible to prevent occupational diseases and occupational accidents by keeping occupational safety in the foreground. With the prevention of occupational and occupational diseases, motivation and job satisfaction will increase, and the quality of life of its employees will be increased. Occupational Health and Safety practices consist of 10% written sources and 90% unwritten sources. Unwritten sources consist of suggestions and opinions of occupational health and safety graduates. Putting Occupational Health and Safety into practice without being in the legislation ensures that conferences, trainings and seminars are held, and that these seminars create permanent behavioral changes for everyone on behalf of the employees. With the formation of this permanent awareness, it has been determined that there is an acceleration in the consciousness levels of working individuals. The concept of awareness is an innate state that can be learned later. It is defined as the changes that occur in the emotional, mental and physical states of

individuals. Consciousness and the increase in awareness level always change in direct proportion to each other (Karavardar, 2015,Duyan et al.2022,Özdemir et al.2018).

One of the most important factors in creating awareness is that individuals working on occupational health and safety should be given "Basic Occupational Health and Safety Training" at certain periods. It is expected that sufficient awareness will be provided with this basic education. Looking at the statistics on occupational accidents and occupational diseases, it has been observed that the results of these "Basic Occupational Health and Safety" trainings are good.

One of the other important elements of gaining sufficient awareness on Occupational Health and Safety and raising awareness is to make the concept of Occupational Health and Safety comprehend how important it is by making different practices instead of providing trainings as required by the legislation, ensuring that the working personnel work in accordance with the rules, showing exemplary behavior and obeying. Encouragement of all working individuals can be provided by performing practices such as rewarding the personnel (Yar, S. 2018).

Occupational safety culture is not a concept limited to working individuals. The concept of occupational safety culture, which is in the field of many disciplines, has a multidimensional field of study. Occupational safety trainings should also take place in universities, which are the training places of various branches of science. When we look at today's world, changes in social policies also affect the perspective on occupational health and safety. It is of great importance to evaluate the perspectives of managers, architects, employers, engineers or other department students who will work in different sectors, on occupational safety and occupational safety education in their future working lives. These trainings are given in different departments and levels of universities. Occupational Health and Safety is defined as the studies carried out with the aim of increasing the efficiency of production by minimizing the harmful conditions arising from the execution of the work and the situations that will endanger the occupational safety. The aim here is to protect individuals working in terms of safety and health, to ensure safety in production and to ensure operational safety by determining emergency measures. Occupational safety is of great importance with both its economic and social dimensions (Turk- İs, 2014: 90).

Occupational health and safety is a multidisciplinary science. It can be transformed into a culture by developing with the contribution of employees, employers, the state, universities and different organizations. The state, employers, employees and universities have duties to develop a culture of occupational safety. Occupational Health and Safety is not a lesson to be taught at every stage of life, it is the basis of the phenomenon that teaches proactive living against dangerous actions and situations.

In a report published by EUOSHA (European Agency for Occupational Health and Safety), it is stated that integrating occupational health and safety into university education will both facilitate overcoming difficulties in this field and overcome obstacles in practice.

The basic pillars of occupational health and safety training are included in corporate curricula and supported by in-service training in workplaces. In this way, it seems possible to create an occupational health and safety culture (Tanır and Ural, 2011).

Raising awareness of "Occupational Health and Safety" of employees with basic Occupational Health and Safety training is definitely a temporary solution. Occupational Health and Safety courses should be added to the curricula at secondary and university levels in order to form "Occupational Health and Safety Awareness and Culture" before students start their business life and to prevent work accidents and occupational diseases that may occur in the future.

The main duties of universities in the development of occupational safety culture are;

- Preparing a scientific infrastructure for the establishment of a reliable registration system,
- To make scientific analysis of work accidents,
- To provide basic training of manpower who will work in the field of occupational health and safety.
- To contribute to the continuous training of the manpower who will work in the field of occupational health and safety after graduation.
- It can be listed as creating academic environments for working in the field of occupational health and safety (Tokuç, 2016).

In this study, it is aimed to evaluate the change in student perception of the course, which is compulsory for one semester in a different department, which constitutes the first pillar of occupational safety education. In this study, it is aimed to evaluate the results of the OHS training given as a course in order to increase the knowledge and awareness of our students who will work in sports services, about work accidents and occupational diseases that they may encounter in their professional lives. In this study, besides the approach of the students to the OHS issue, the effect of the education they receive on the increase of occupational safety awareness will be investigated.

METHODS AND MATERIAL

This study was carried out in order to evaluate the status of students in undergraduate programs studying at Istanbul University-Cerrahpasa Faculty of Sports Sciences on "perceptions and attitudes towards Occupational Health and Safety Course".

This cross-sectional study includes 480 students who are all 1st, 2nd, 3rd and 4th grade students of Sports Management, Coaching Education, Physical Education and Teaching programs in the 2022-2023 academic year. 55 participants who did not want to participate in the study, were not at school or were left out of the evaluation as a result of filling the questionnaire incorrectly due to similar reasons were excluded from the evaluation. Our research was carried out with 425 students, and it was applied by using the survey questions in the study of Cevik and Aksoy (2013) to collect the data. The questionnaire was distributed to the students by the researcher and the students were asked to answer them in sufficient time.

The purpose of the study was explained to the students in the questionnaire, and they were asked to answer the questions asking about their demographic information, whether they had taken OHS course and their perceptions and attitudes about OHS course, and the forms were collected back.

In particular, the students are attentive and attentive to the questions of whether they have information about the costs and damages of work accidents and occupational diseases to the worker, employer and the state, whether it is beneficial to give first aid courses in the program, and whether they are aware of the current work accidents and occupational diseases in the program. responses were emphasized. In the survey, no information about the person or the institution was collected. A 5-point Likert scale was applied in the questionnaire, and the participants were scored in a way to get at least 1 and at most 5 points from each question. A participant can collect a minimum of 7 and a maximum of 35 points from the survey questions. The questionnaire used in the study was created as a result of scanning the relevant literature and its application was made face-to-face with the students who agreed to participate at the end of each lesson. The obtained data were analyzed using the Spss 22.0 package program, and $p<0.05$ was considered a statistically significant difference. Kolmogorov smirnov test, Independent Samples t Test and One-way ANOVA test or one-way analysis of variance were used in the study.

DISCUSSION AND CONCLUSION

The data obtained from the research were collected from students studying in all classes of Istanbul University-Cerrahpasa, Faculty of Sports Sciences, Sports Management, Coaching Education, Physical Education and Teaching programs.

The participants' gender, age, class, department taking OHS course, working status and detailed analysis results of all questions in the questionnaire are shown in Table 1-Table14.

Table 1:Gender Distribution of Faculty of Sport Sciences Students

Gender				
	Frequency	Percent	Valid Percent	Cumulative Percent
Female	157	36,9	36,9	36,9
Male	268	63,1	63,1	100,0
Total	425	99,8	100,0	
Total	425	100,0		

The findings between Table 1 and Table 6 show the demographic data of the students participating in the study. Of the 425 students participating in our study, 157 (36.9%) were female, 268 (63.1%) were male, and the age range of 334 participants was (22-25). Considering the class status of the students participating in the research, 106 (24.9%) in the 1st grade, 100 (23.5%) in the 2nd grade, 109 (25.7%) in the 3rd grade, 110 (25%) in the 4th grade. 9) it was determined that the person was found. When the Departmental Distribution of the Faculty of Sports Sciences Students is analyzed, the Department of Coaching is 108 (24.9%), the Department of Sports Management is 214 (50.4%), the Department of Physical Education Teacher is 103 (24.2%), and the students who take courses on Occupational Health and Safety are examined. The number of students was found to be 59 (13.9%).

Table 2:Age Distribution of Faculty of Sport Sciences Students

Age				
	Frequency	Percent	Valid Percent	Cumulative Percent
18-21	85	20,0	20,0	20,0
22-25	334	78,6	78,6	98,6
26-29	5	1,2	1,2	99,8
30-50	1	,2	,2	100,0
Total	425	100,0	100,0	
Total	425	100,0		

Table 3:Class Distribution of Students of the Faculty of Sport Sciences

Class				
	Frequency	Percent	Valid Percent	Cumulative Percent
1	106	24,9	24,9	24,9
2	100	23,5	23,5	48,4
3	109	25,7	25,7	74,1
4	110	25,9	25,9	100,0
Total	425	100,0	100,0	
Total	425	100,0		

Table 4:Distribution of Departments of Sports Sciences Faculty Students

Department in Faculty				
	Frequency	Percent	Valid Percent	Cumulative Percent
Coaching Department	108	25,4	25,4	25,4
Department of Sports Management	214	50,4	50,4	75,8
Physical Education Teacher Department	103	24,2	24,2	100,0
Total	425	100,0	100,0	
Total	425	100,0		

Table 5:Distribution of Sports Sciences Faculty Students Taking Occupational Health and Safety Course

OHS Lesson				
	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	59	13,9	13,9	13,9
No	366	86,1	86,3	100,0
Total	425	100,0	100,0	
Total	425	100,0		

Table 6:Study Distribution of Faculty of Sport Sciences Students

Working Status of Students				
	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	59	13,9	13,9	13,9
No	365	86,1	86,1	100,0
Total	425	100,0	100,0	
Total	425	100,0		

Between Table 7 and Table 13, there is a detailed breakdown of the answers given by the students to the questions in order to determine their approaches to Occupational Health and Safety.

Table 7:Opinions of Faculty of Sport Sciences Students about the necessity of OHS course

Do you think Occupational Health and Safety Course is a Course That Should Be Given in Your Program?				
	Frequency	Percent	Valid Percent	Cumulative Percent
2	2	,5	,5	,5
3	17	4,0	4,0	4,5
4	195	45,9	46,0	50,5
5	211	49,6	49,5	100,0
Total	425	100	100,0	
Total	425	100,0		

Table 8:Opinions of Faculty of Sport Sciences Students to believe that OHS courses increase occupational safety awareness

Do you believe that Occupational Health and Safety Courses Increase Occupational Safety Awareness?				
	Frequency	Percent	Valid Percent	Cumulative Percent
1	1	,2	,2	,2
2	4	,9	,9	1,1
3	23	5,4	5,4	6,5
4	188	44,3	44,3	50,8
5	209	49,2	49,2	100,0
Total	425	99,8	100,0	
Total	425	100,0		

Table 9: Research Status of the Faculty of Sports Sciences in books, articles, etc. on OHS

Do you search for Regulations, Legislation and Other Publications (Books, Articles, etc.) Related to Occupational Health and Safety related to your profession?				
	Frequency	Percent	Valid Percent	Cumulative Percent
1	1	,2	,2	,2
2	36	8,5	8,5	8,7
3	250	58,8	59,0	67,7
4	63	14,8	14,8	82,5
5	75	17,5	17,5	100,0
Total	425	100,0	100,0	
Total	425	100,0		

Table 10:Opinions of Faculty of Sport Sciences Students about including the subject of occupational health and safety in the course content

Would you find it helpful to include a topic or section related to Occupational Health and Safety in the Content of the Courses in your Program?				
	Frequency	Percent	Valid Percent	Cumulative Percent
2	3	,7	,7	,7
3	29	6,8	6,8	7,5
4	211	49,8	49,8	57,3
5	182	42,7	42,7	100,0
Total	425	100,0	100,0	
Total	425	100,0		

Table 11:Knowledge of Sports Sciences Faculty Students on Current OHS accidents

Are You Aware of Current Work Accidents and Occupational Diseases related to the department you are studying?				
	Frequency	Percent	Valid Percent	Cumulative Percent
2	8	1,9	1,9	1,9
3	194	45,7	45,7	47,6
4	99	23,4	23,4	71,0
5	124	28,9	29,0	100,0
Total	425	99,8	100,0	
Total	425	100,0		

Table 12:Opinions of Faculty of Sports Sciences Students about First Aid course

Are You Aware of the Costs and Losses of Work Accidents and Occupational Diseases to the Worker, Employer and the State?				
	Frequency	Percent	Valid Percent	Cumulative Percent
2	4	,9	,9	,9
3	35	8,2	8,3	9,2
4	191	44,9	45,0	54,2
5	195	45,8	45,8	100,0
Total	425	100,0	100,0	
Total	425			

Table 13:Opinions of Faculty of Sports Sciences Students on OHS Costs

Are You Aware of the Costs and Losses of Work Accidents and Occupational Diseases to the Worker, Employer and the State?				
	Frequency	Percent	Valid Percent	Cumulative Percent
1	1	,2	,2	,2
2	16	3,8	3,8	4,0
3	229	53,9	54,0	58,0
4	36	8,5	8,5	66,5
5	143	33,5	33,5	100,0
Total	425	100,0	100,0	
Total	425	100,0		

It was analyzed whether the data fit the normal distribution or not. Normal distribution analysis is presented in Table 14 and Figure 1. Since the skewness is between -1 and +1, the data conformity to the Normal distribution has been determined.

For this reason, Independent Samples t-Test and One-way ANOVA test or one-way analysis of variance were used to compare groups and demographic data in terms of total score.

Table 14:Analysis of Normal Distribution

Descriptives				
			Statistic	Std. Error
Total score	Mean		28,48	,169
	95% Confidence Interval for Mean	Lower Bound	28,15	
		Upper Bound	28,81	
	5% Trimmed Mean		28,49	
	Median		28,00	
	Variance		12,141	
	Std. Deviation		3,484	
	Minimum		17	
	Maximum		35	
	Range		18	

	Interquartile Range	5	
	Skewness	,112	,119
	Kurtosis	-,450	,237

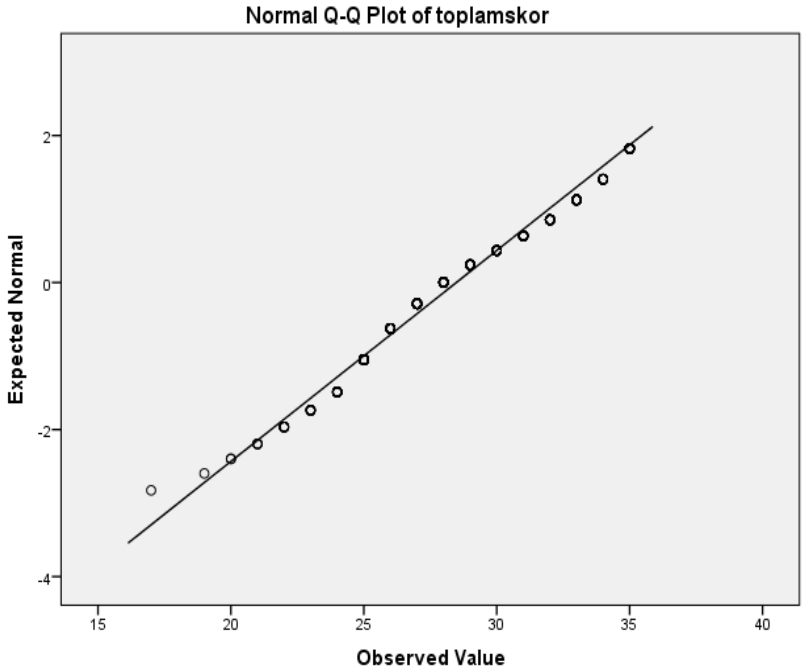

Figure 1. Total Score Q-Q Chart

Whether there was a difference between the total score and gender was analyzed with the Independent Samples Test, and no statistically significant difference was found (p>0,05).

Table 15:Relationship Between Total OHS Score and Gender

Group Statistics						
	Gender	N	Mean	Std. Deviation	Std. Error Mean	p
Total Score	Famele	156	28,60	3,539	,283	0,57
	Male	268	28,41	3,457	,211	

Whether there is a difference according to the class status of the students was analyzed with the oneway Anova method and a difference was determined between the groups.

Table 16:Relationship Between Total OHS Score and Classes

Total Score					
Class	N	Mean	Std. Deviation	Std. Error	p
1	106	29,44	3,541	,346	P<0,05
2	100	28,52	3,865	,387	
3	109	27,94	3,061	,293	
4	110	28,05	3,309	,316	
Total	425	28,48	3,484	,169	

In the analysis carried out to determine which groups the difference between the classes emerged, it was determined that there was a difference between the 1st grade and the 3rd and 4th grades.

Table 17. Relationship Between Classes

(I) class	(J) class	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1	2	,918	,482	,227	-,32	2,16
	3	1,493*	,471	,009	,28	2,71
	4	1,384*	,470	,018	,17	2,60
2	1	-,918	,482	,227	-2,16	,32
	3	,575	,477	,624	-,66	1,81
	4	,465	,476	,762	-,76	1,69
3	1	-1,493*	,471	,009	-2,71	-,28
	2	-,575	,477	,624	-1,81	,66
	4	-,110	,466	,995	-1,31	1,09
4	1	-1,384*	,470	,018	-2,60	-,17
	2	-,465	,476	,762	-1,69	,76
	3	,110	,466	,995	-1,09	1,31

When the difference between the departments in terms of total score was examined, it was determined that the students of the Department of Sports Management got statistically significantly higher scores than the students of the Department of Coaching and Physical Education.

Table 18:Relationship Between Total OHS Score and Departments

Total Score					
	N	Mean	Std. Deviation	Std. Error	p
Coaching	108	28,05	3,289	,318	p<0,05
Sports Management	214	29,41	3,519	,241	
Physical education teacher	103	26,99	2,998	,295	
Total	425	28,48	3,484	,169	

Table 19:Relationship Between Departments

(I) class	(J) class	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval
					Lower Bound
Coaching	Sports Management	-1,364*	,396	,002	-2,30
	Physical Education Teacher	1,056	,461	,058	-,03
Sports Management	Coaching	1,364*	,396	,002	,43
	Physical Education Teacher	2,421*	,401	,000	1,48
Physical Education Teacher	Coaching	-1,056	,461	,058	-2,14
	Sports Management	-2,421*	,401	,000	-3,36

In the evaluation made in terms of taking courses and working status, the total score of the students and employees was found to be significantly higher.

Table 20:Relationship Between Total OHS Score and Taking Courses

Group Statistics						
	Taking Lessons	N	Mean	Std. Deviation	Std. Error Mean	p
Total Score	Yes	58	31,38	2,796	,367	<0,005

	No	366	28,02	3,362	,176	

Table 21:Relationship Between Total OHS Score and Employment Status

Group Statistics						
	Study	N	Mean	Std. Deviation	Std. Error Mean	p
Total Score	Yes	59	30,34	3,452	,449	<0,005
	No	365	28,18	3,400	,178	

The most important goal of the principles and standards determined in the field of Occupational Health and Safety is to carry out the work in a safe and healthy environment. One of the ways to achieve this goal is to give the necessary importance to education through cooperation between the parties. Education is of vital importance in terms of safe and healthy working environments (Allı, 2005: 12-13). At the same time, it constitutes an important application step of the preventive approach accepted in the world in order to be protected from health and safety hazards (Ekemen, 2006: 12). It also plays an active role in raising awareness and sensitivity, establishing a safety culture (Allı, 2005: 34), facilitating the implementation of OHS policies. In recent years, there have been developments affecting human life and business life. These developments force businesses to make business life more reliable and quality. Great responsibilities fall on the worker, the employer and the state to prevent work accidents and occupational diseases that may be encountered in business life. This situation shows the necessity of occupational health and safety training first. Since the most important need of the Turkish industry is high-qualified technical manpower, it is inevitable to give the necessary importance to worker health and safety training (Aksoy et al., 2013; Ceylan, 2012; Sarıkaya et al., 2009).

With the study, the approaches of the students studying in some undergraduate programs to the issue of occupational health and safety (OHS) were determined.

According to the findings obtained in the study, the following conclusions can be made;

1. Most of the students are aware of the importance of Occupational Health and Safety. They think that OHS courses in the programs they receive education will be beneficial for them.
2. Students think that the Occupational Health and Safety courses they will take in the programs they study will increase their awareness of occupational safety.
3. Although the students are aware of the importance of education on occupational health and safety, it has been observed that they do not show the necessary sensitivity to conduct research and/or examination on the subject individually.
4. It has been understood that the students do not have enough information about the occupational accidents and diseases that occur in the fields of education.
5. Students think that it would be beneficial to give first aid lessons in their education programs.

Conflict of Interest

The authors declare that there is no conflict of interest.

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