



Investigation of Higher Education Students' Interest in Sports and Usage Levels of University Sports Facilities

Investigación sobre el interés de los estudiantes de enseñanza superior por el deporte y los niveles de uso de las instalaciones deportivas universitarias

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Abstract

Introduction The size, number, capacity, characteristics and quality of the areas where sports activities can be carried out in universities are among the leading indicators of student investment.

Objective: To determine the interest and attitudes of university students in the Western Black Sea region towards sports, their level of utilisation of university sports facilities, and whether university sports facilities significantly predict students' interest and attitudes towards sports. **Methodology:** The classification and regression tree method (CART), one of the data mining methods, was used through a relational screening model. Data were collected from 1462 associate and undergraduate students (789 males and 673 females) studying in different departments of 7 universities in the Western Black Sea Region in 2022-2023 with two scales of Ceyhun (2015, 2017).

Results: It was determined that the areas where university students do sports, their level of interest in sports, their age, class level, duration of doing sports and their active participation in sports affect their level of utilisation of sports facilities.

Discussions: It was observed that the level of interest in sports of female university students was higher than that of males, and the level of interest in sports of students who do sports was negatively correlated with the duration of doing sports.

Conclusion: The efficient use of sports facilities, one of the main factors of sports participation in universities, is directly proportional to the university's facilities and individual factors.

Keywords

Inactivity; interest and attitude towards sports; sports facilities; sports participation; university youth.

Resumen

Introducción El tamaño, el número, la capacidad, las características y la calidad de los espacios donde se pueden realizar actividades deportivas en las universidades son algunos de los principales indicadores de la inversión de los estudiantes.

Objetivo: Determinar el interés y las actitudes de los estudiantes universitarios de la región occidental del Mar Negro hacia el deporte, su nivel de utilización de las instalaciones deportivas universitarias y si las instalaciones deportivas universitarias predicen significativamente el interés y las actitudes de los estudiantes hacia el deporte.

Metodología: Se utilizó el método de árbol de clasificación y regresión (CART), uno de los métodos de minería de datos, mediante un modelo de cribado relacional. Se recopilaron datos de 1462 estudiantes asociados y de grado (789 hombres y 673 mujeres) que estudiaban en diferentes departamentos de 7 universidades de la región occidental del Mar Negro en 2022-2023 con dos escalas de Ceyhun (2015, 2017).

Resultados: Se determinó que las zonas donde hacen deporte los estudiantes universitarios, su nivel de interés por el deporte, su edad, el nivel de clase, la duración de la práctica deportiva y su participación activa en el deporte afectan a su nivel de utilización de las instalaciones deportivas.

Discusiones: Se observó que el nivel de interés por el deporte de las mujeres universitarias era superior al de los hombres, y que el nivel de interés por el deporte de los estudiantes que practican deporte estaba negativamente correlacionado con la duración de la práctica deportiva.

Conclusión El uso eficiente de las instalaciones deportivas, uno de los principales factores de la participación deportiva en las universidades, es directamente proporcional a las instalaciones de la universidad y a factores individuales.

Palabras clave

Inactividad; interés y actitud hacia el deporte; instalaciones deportivas; participación deportiva; jóvenes universitarios.

Introduction

Although a sedentary life culture has been adopted with the development of technology today, an active life is essential for a healthy and fit society. Regular physical activity is the key to a healthy life. Sports are effective in the growth and development of children and young people (Baltacı, 2008) in the prevention and treatment of many chronic diseases such as cardiovascular diseases and diabetes (Warburton et al., 2017; Şengül & Çam, 2022), in getting away from mental diseases such as stress, anxiety and depression (Wankel, 1993), while making positive contributions to the families of young people who do sports and especially to the mental health of mothers (Sutcliffe et al., 2021). A study of university students revealed that physical activity significantly impacts student's health and well-being, showing that those who are not physically active in their leisure time are more likely to have moderate levels of disbelief and high levels of emotional burnout (Dantas et al., 2022). It plays an important role in preventing obesity, a disease of our age, and being a social individual. Performing sports activities in childhood and adolescence increases the possibility of doing physical activity in adulthood (Batista et al., 2019; Graham v.d., 2011). Therefore, participation in regular sports from childhood will likely result in greater fitness in adulthood and, consequently, a low-risk and less costly situation in terms of health (Haynes et al., 2021). Physical activity is a factor that increases the quality of life of the individual from birth to death (Bek, 2008; Ölçücü et al., 2015) and directly affects public health (Marques et al., 2016). Participation in sports throughout middle school and high school plays an important role in controlling body mass index, and young people who engage more in physical activity have a lower risk of cardiovascular disease (Logan et al., 2020) and higher academic achievement (Bilgin et al., 2020).

Especially in adolescence, the effort to live independently of the family and turn to a group of friends can effectively participate in sports activities (Kılıç, 2020). Students' gender, department, health status, level of achievement, health promotion courses, smoking status and doing sports affect their healthy lifestyle behaviours (Kostak et al., 2014). University students need 60 minutes of moderate to vigorous physical activity daily to maintain their body's energy levels and fitness (Haitao et al., 2021). It was determined that physical inactivity is associated with obesity in university students (Soyuer et al., 2010), and body mass index and overweight increase over time, especially starting from the first years of university (Deng et al., 2022; Pulmann et al., 2009; Deforche et al., 2015; Deliens et al., 2013). For this reason, university students' level of interest in sports, physical activity habits, and participation in sports are important issues. Sports and sports have become very important in modern societies, so they have played a major role in individuals' health, happiness and success (Yetim, 2000). In this context, university education, as an important process in the individual's life, constitutes an important transition and change process that includes the acquisition of healthy life behaviours along with personal and professional development. This change in the individual and the good habits he/she acquires also directly affects the family and society (Ayaz et al., 2005). For sustainable social acquisition in the long term, the positive hereditary consequences of sports done by young people should not be ignored. It was observed that the participation and addiction of young people interested in sports and receiving support from their parents increased (Strandbu et al., 2020; Furusa et al., 2020; Burke et al., 2023). The transfer of this heritage to their later life and the children in the family by the students who have acquired the habit of doing sports during or before the university period will be an important factor in achieving this addiction. Considering that students with family members who are doing sports have higher attitudes towards sports (Kalfa, 2019), sports culture is transferred through families (Wheeler, 2012). It is primarily influenced by their parents and siblings (Dorsch et al., 2022). It is important that individuals who acquire the habit of participating in sports activities at the university continue this culture in their future lives and tend to transfer it to future generations to understand better (Can, 2010). In addition to its features that will support social life, prevent violence, and enable participants to act with a greater sense of belonging (Moyano et al., 2022; Yang, 2022), university students who are engaged in sports will have a higher level of satisfaction with their social life (Slavinski et al., 2021). In particular, through acquired social capital and new relationships, young people can discover new identities (e.g. athlete, student, business person) and acquire an alternative vision of the future (Whitley et al., 2018).

In the process in which students who start university after high school should use their leisure time more efficiently (Chan et al., 2020), a new and inexperienced period begins regarding economic and social activities. Since most of the students' economic income comes from family support and a small

part from scholarships and part-time jobs (Shi & Bao, 2022), many of them start to learn about life by using and experiencing money and leisure time on their own for the first time independently of their families. The alternatives created by universities for utilising leisure time activities are directly proportional to the quality and facilities of the university. Students should be allowed to participate in leisure activities to gain healthy living habits (Chan et al., 2020). Among these activities are sports activities, and sports facilities are the first places that come to mind as places of action. Universities need to use various strategies to encourage students to participate in sports. These strategies may include organising more sports activities and changing students' perceptions of sports (Webber & Mearman, 2009). It is necessary to encourage university students to do sports through extracurricular activities and include physical activities in the curriculum (Silveira et al., 2023) to improve and maintain healthy living habits (such as mental health and quality sleep) through physical activity (Sanchis-Soler et al., 2022), and to strengthen strategies that encourage these habits (Strale et al., 2024).

Sports facilities are an essential element of the sports infrastructure (Wicker et al., 2009). For this reason, to make sports more attractive, high-quality and multi-purpose sports facilities should be offered to university students. Well-planned campuses provide opportunities to meet the needs of students, such as doing sports activities, education, and learning (Yuca & Yilmaz, 2022). A campus that considers students' needs and purposes can help them adapt to their environment by making difficult living conditions easier (Düzenli et al., 2017).

In a study by Tuğut and Bekar (2008) on university students, it was determined that the exercise level of young people in a young society where the organism is at the highest level in terms of physical well-being, contrary to expectations, is at a low level. While the value and importance of sports are increasing day by day, in another study on physical education and sports teacher candidates (Oktay et al., 2021), it was determined that 28.2% of the students exercise less than 4 hours a week, and 35.5% of them exercise 4-6 hours a week. It was determined that 63.7% of the pre-service teachers, who form the basis of the Turkish sports system, exercise less than 1 hour per day on average. It should be discussed why more than half of the physical education and sports teacher candidates do not exercise and do regular sports. Universities are seen as the most critical places where young people can gain the habit of doing sports, adopt the sports culture and acquire the qualifications that can be passed on to future generations. Universities' guidance of young people to sports, making them adopt sports culture, and maintaining sports habits to guarantee a healthy future will also indicate a modern vision for universities in terms of society. Contributions to long-term planning that aim to increase sports and physical activity will also support achieving more than one sustainable development goal. Along with this vision, one of the most important indicators will be the investments made in university sports and the determination of the student's use of the facilities.

This study, designed from this point of view, aimed to determine the level of interest (attitudes) of university students in sports and their use of university sports facilities and to examine the correlations between them and different variables. The study is expected to contribute to future studies and determine the current situation.

Method

Research Model

This study was carried out to examine the correlation between university students' sports habits and their use of university sports facilities, and the relational screening model, one of the quantitative research types, was used. Karasar (2012) defines the relational survey model as a research model that aims to determine the relational change between two or more quantitative variables and the level of this change.

Research Group

The study population consists of associate degree and undergraduate degree students studying in different departments of 7 universities located in the Western Black Sea Region (Karabük, Bartın, Düzce, Sinop, Kastamonu, Zonguldak Bülent Ecevit and Bolu İzzet Baysal) in 2022-2023. The study sample consists of a total of 1462 university students, 789 of whom are male and 673 are female. The

convenience sampling method was used to determine the study's sample group. The distributions of various variables belonging to the sample according to the categories are given in Table 1.

Table 1. Variables.

Variables	Categories	f	%
Age	Under 20	363	24,8
	20-21	584	39,9
	22 and above	515	35,2
Gender	M	789	54,0
	F	673	46,0
Faculty	Social	642	43,9
	Science	733	50,1
	Health	87	6,0
Grade Level	1st Level	581	39,7
	2nd Level	421	28,8
	3rd Level	262	17,9
	4th Level	198	13,5
BMI (Body mass index)	1.	143	9,8
	2.	1071	73,3
	3.	212	14,5
	4.	36	2,5
Actively Doing Sports	Yes	371	25,4
	No	461	31,5
	Sometimes	630	43,1
Facility Usage Time	1 Month and Less	646	44,2
	1-6 Months	478	32,7
	More than 6 Months	338	23,1
Facility Usage During the Day	Before noon	327	22,4
	In the afternoon	577	39,5
	In the evening	558	38,2
Sports Area	Indoor	355	24,3
	Outdoor	500	34,2
	Other	607	41,5
Total		1462	100

Table 2. Current status of sports facilities of universities in the Western Black Sea Region.

Facility / University	Bartın University	Zonguldak Bülent Ecevit University	Sinop University	Kastamonu University	Düzce University	Bolu Abant İzzet Baysal University	Karabük University
Artificial Grass Stadium	1	3	3	2	1		1
Basketball Court	5	6	2	2	1	2	
Volleyball Court	2	6	1	2			
Tennis Court	2	3	2	2	2	2	1
Swimming Pool		1		1	1		
Multi-Purpose Indoor Sports Hall	5	3	1	1	1	1	1
Fitness Center	1	2		2	1	1	1
Individual Sports Halls	6	2	4	3		1	2
Athletics Track	1		1			1	1
TOTAL	23	26	15	15	7	9	7

*These data were obtained from the relevant universities' Health, Culture, and Sports departments on 17.05.2023.

Data collection tools

Personal Information Form

In the study, a personal information form consisting of variables such as age, gender, height, weight, grade level, department, sports branch of interest, and status of actively doing sports was used.

The Scale for Interest Levels of University Students in Sports

In the study, "The Scale for Interest Levels of University Students to Sports", which was developed by Ceyhun (2017) and aims to measure university students' level of interest in sports, was used. The scale consists of 10 items, has a single factor, and is evaluated over the total score. Items in the 5-point Likert type are scored from "Strongly Agree = 5" to "Strongly Disagree = 1". A high score on the scale indicates that the student's interest in sports is high, and a low score indicates low interest in sports. The internal consistency coefficient of the scale was stated to be highly reliable, with a score of .80. In this study, its internal consistency coefficient was determined as .87.

The Sports Facility Utilization Scale of University Students

The study, "The Sports Facility Utilization Scale of University Students", developed by Ceyhun (2015), was used to determine the university students' interest in utilising sports facilities. The scale consists of 13 items and is in a 5-point Likert type with a single factor. It is scored as "5-Strongly Agree", "4-Agree", "3-Neutral", "2-Disagree", and "1-Strongly Disagree". The internal consistency coefficient of the scale is highly reliable at .87. In the current study, the internal consistency coefficient was determined to be .83.

Data Collection

The Ethics Committee Approval of the study was received from Bartın University Social and Human Sciences Ethics Committee with the application numbered 2022-SBB-0436 at the meeting numbered 24 and dated 25.10.2022. In this direction, data were collected face-to-face in the fall semester of the 2022-2023 academic year. Before the data collection phase, the participants were informed about the study, the data were collected based on confidentiality and voluntariness, and it took an average of 10 minutes for the students to fill out the scales.

Data Analysis

SPSS 22 statistical package program was used to analyse the data obtained within the scope of the study. In the study, the missing data were evaluated. In this context, 18 out of 1480 data collected within the scope of the study were removed, and analyses were carried out using data obtained from 1462 students. Within the scope of the study, the level of utilisation of sports facilities and interest in sports were considered dependent variables. In contrast, the area where they do sports, the status of actively doing sports, grade level, gender, faculty, age, body mass index, duration of doing sports, and the period they do sports during the day were considered independent variables. CART (Classification and Regression Trees) analysis method, which is one of the decision tree methods, was used to determine whether the independent variables considered within the scope of the study have effects on the dependent variables. The decision tree method, which is widely used in data mining, is a method that helps to determine which factors are effective in solving a problem and to reveal the correlations of these factors with each other (Demirel & Yakut, 2019). This analysis is a powerful technique with significant potential but requires significant time and effort to interpret the results (Lewis, 2000). CART performs well in providing robust and unbiased detection of effective predictors. Therefore, it is one of the recommended methods to reveal the correlations between a dependent variable and its predictors (Kayri & Ceyhan, 2016).

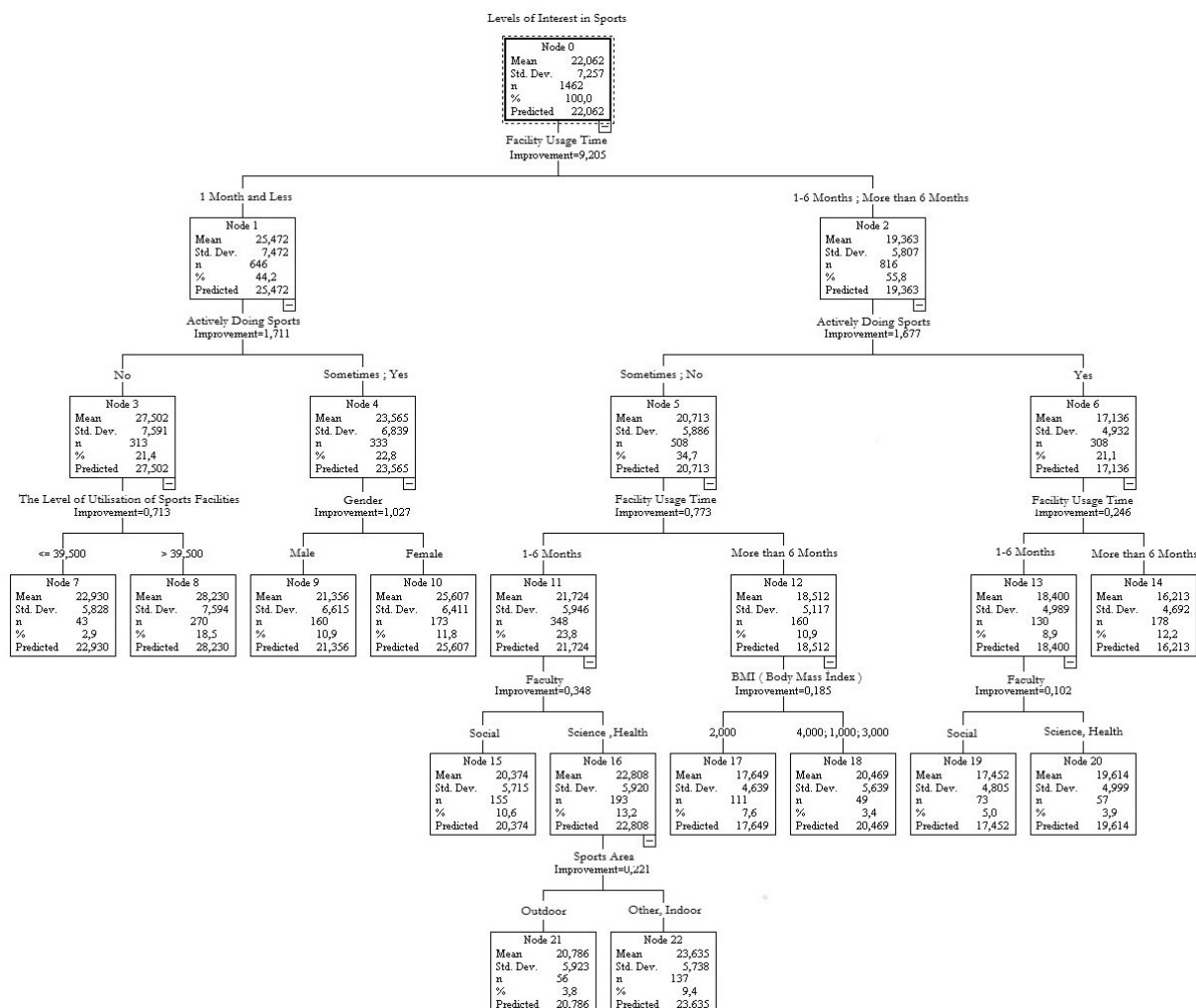
Results

As a result of the analysis, it was determined that the areas where the students do sports, their level of interest in sports, their age, grade level, duration of doing sports and status of actively doing sports affect the students' level of utilisation of sports facilities. The tree structure of the variables that affect the students' levels of interest in sports is given in Figure 1.

Considering the tree structure in Figure 1, the total mean score ($N=1462$, $\bar{X}=22,06$) of the students participating in the study from the scale for the interest in the sport indicates that the student's interest levels in sports are close to the moderate level. The variable that had a dominant effect on the sports interest levels of the students participating in the study was the duration of doing sports. It was determined that the new students who have been doing sports for less than 1 month ($\bar{X}=25,47$) have a higher level of interest in sports than those who have been doing sports for 1-6 months or more than 6 months ($\bar{X}=19,36$). As shown in Figure 1, the students' status of actively doing sports is the variable that affects the sports interest level of the students who have just started and have been doing sports for less than 1 month. The students who do not actively do sports ($\bar{X}=27,50$) have a higher level of interest in sports than the students who actively do sports or actively do sports occasionally ($\bar{X}=23,57$). Considering the tree structure, it is seen that the variable that affects the sports interest levels of the students who do not actively do sports is the level of utilisation of sports facilities. Students whose level of utilisation of sports facilities is above 39.50 points ($\bar{X}=28,23$) of students whose level of interest in sports is 39,50 or below the level of utilisation of sports facilities ($\bar{X}=22,93$) were found to be higher than female students ($=22,93$). On the other hand, it is seen that the variable affecting the level of interest

in sports of the students who do active sports or occasionally do active sports (not doing sports regularly) is gender. Female students ($X=25,61$) of male students' level of interest in sports ($X=21,36$) was higher than that of the participants.

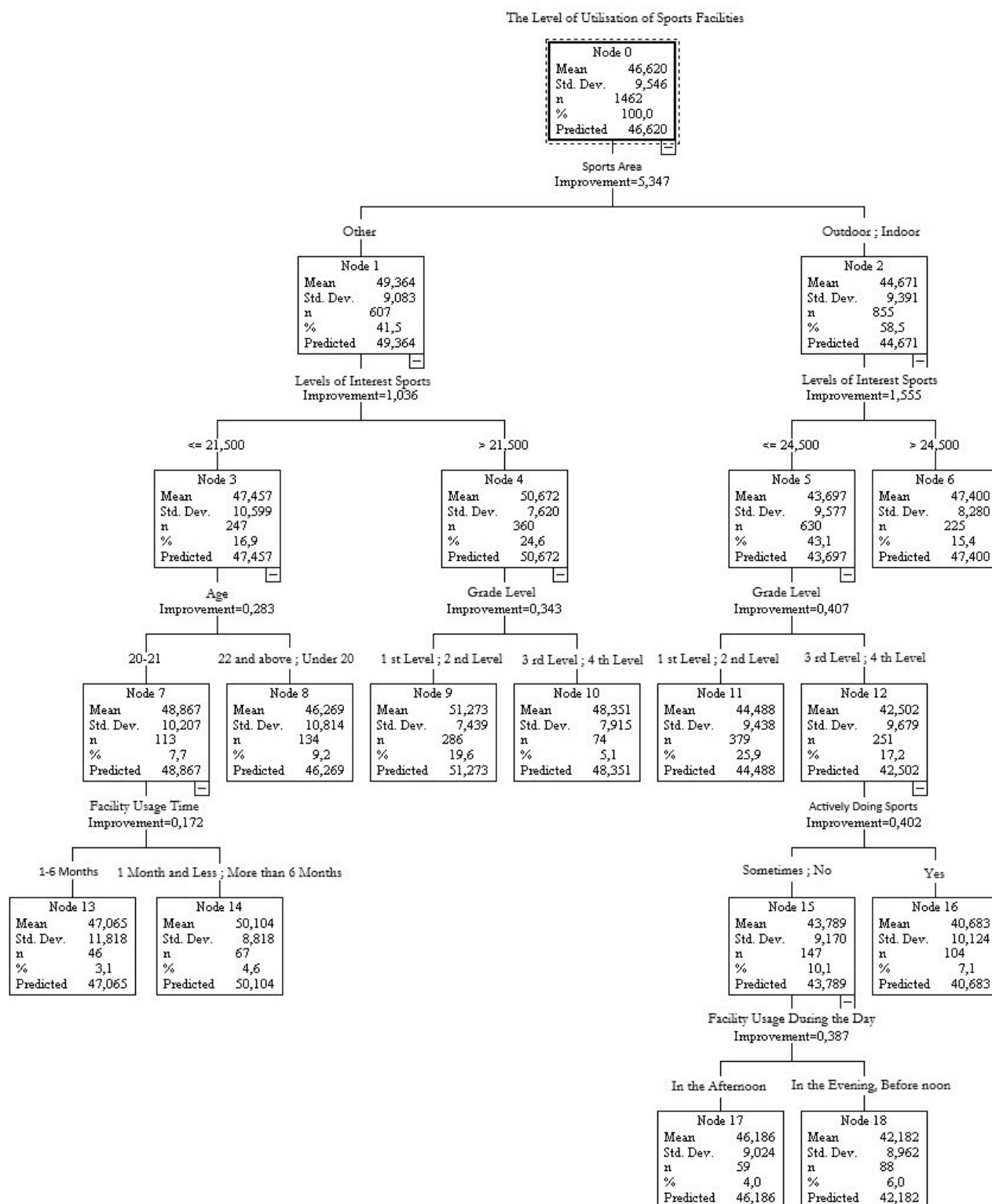
Figure 1. The tree structure of the variables that affect the Students' Levels of Interest in Sports.



When the tree structure in Figure 1 is analysed, it is seen that the level of interest in sports of the students who do not do active sports or do active sports occasionally ($X=20,71$) to students who do active sports ($X=17,14$) is higher than the other variables. When the tree structure is considered, it is seen that the variable affecting the level of interest in sports of the active students is the duration of their sports; for students who do sports between 1-6 months ($X=18,40$), the level of interest in sports to students who have been doing sports for more than 6 months ($X=16,21$) was found to be higher than the other variables. On the other hand, it is seen that the type of faculty affects the level of interest in sports of the students who do sports in the range of 1-6 months. For students studying at a science or health type faculty ($X=19,61$), the level of interest in sports to students studying at a social type faculty ($X=17,45$) was found to be higher than the other variables. When the analysis results in Figure 1 are examined, it is seen that the variable affecting the level of interest in sports of the students who do not do active sports or do active sports occasionally is the duration of the students' sports; for students who do sports between 1-6 months ($X=21,72$) the level of interest in sports to students who have been doing sports for more than 6 months ($X=18,51$) was found to be higher than the other variables. On the other hand, the type of faculty is the variable affecting the level of interest in sports of the students who do sports for 1-6 months. Faculty students studying in science or health type ($X=22,81$) of the level of interest in sports to students studying at a social type faculty ($X=20,37$) was found to be higher than that of the participants. According to another analysis result, the students who do sports indoors or in other areas ($X=23,64$) have a higher level of interest in sports than the students who do sports

outdoors ($\bar{X}=20,79$). The tree structure of the variables that affect the students' level of utilisation of sports facilities is given in Figure 2.

Figure 2. The tree structure of the variables that affect the student's scores for using sports facilities.



Considering the tree structure in Figure 2, the total mean score ($N=1462$, $\bar{X}=46,62$) of the students participating in the study from the scale for the utilisation of sports facilities indicates that the students' levels of utilisation of sports facilities are high. The variable that had a dominant effect on the level of utilisation of sports facilities of the students participating in the study was the "sports areas they use at the university". It was determined that students who use sports areas (natural and urban areas that can

be used for sporting purposes) other than the outdoor and indoor sports areas at the university ($\chi^2=49,36$) have a higher level of utilisation of sports facilities than the students who use indoor or outdoor sports areas at the university.

In Figure 2, it is seen that the variable that affects the level of utilisation of sports facilities by students who use other sports areas at the university is the student's level of interest in sports. The students whose level of interest in sports is above 21.50 points ($\chi^2=50,67$) have a higher level of utilisation of sports facilities than students whose level of interest in sports is 21.50 points and below ($\chi^2=47,46$). Considering the tree structure, it is seen that the variable that affects the level of utilisation of sports facilities of the students whose level of interest in sports is above 21.50 points is the grade level of the students.

According to this finding, the students aged 20-21 ($\chi^2=48,87$) have a higher level of utilisation of sports facilities than those under 20 or over 22 ($\chi^2=46,27$). Figure 2 shows that the variable affecting the level of utilisation of sports facilities of active students aged 20-21 is the time of starting sports. According to this result, the students who have been doing sports for less than 1 month, have just started doing sports or have been doing sports for more than 6 months ($\chi^2=50,10$) have a higher level of utilisation of sports facilities than the students who have been doing sports between 1-6 months ($\chi^2=47,07$). Considering the tree structure in Figure 2, the variable that affects the level of utilisation of sports facilities of the students who use the indoor or outdoor sports areas at the university is the students' levels of interest in sports. The students whose level of interest in sports is above 24.50 points ($\chi^2=47,40$) have a higher level of utilisation of sports facilities than those whose level of interest in sports is 24.50 points and below ($\chi^2=43,70$).

When the tree structure is considered, it is seen that the variable that affects the level of utilisation of sports facilities of the students whose level of interest in sports is 24.50 points and below is the student's grade level. According to this finding, the students who do not actively or actively do sports occasionally ($\chi^2=43,79$) have a higher level of utilisation of sports facilities than those who actively do sports ($\chi^2=40,68$). Figure 2 shows that the variable that affects the utilisation of sports facilities by students who do not actively or do sports occasionally is the time of use of sports facilities.

According to this result, the students who use the sports facilities in the afternoon ($\chi^2=46,19$) have a higher level of utilisation of sports facilities than those who use the sports facilities before noon or in the evening ($\chi^2=42,18$).

Discussion

The data obtained from the study was conducted to determine the level of interest in sports and the use of sports facilities regarding the undergraduate degree and associate degree students of 7 different universities in the Western Black Sea region, and the correlation between the two variables was discussed and interpreted in this section. As a result of the study, the university student's interest level in sports was close to moderate. The primary variable affecting the students' level of interest in sports is the duration of doing sports. It is seen that there are significant differences in students' attitudes toward sports according to their activity frequency. It is seen that students who have just started doing sports are more interested in sports than students who do sports occasionally or regularly. It can be seen as a natural situation in which the activities start with motivation and desire, and the same situation cannot be maintained for different reasons. The data confirming each other is that the students who do sports regularly have a lower level of interest in sports than those who do not do sports regularly. In other words, as the duration of doing sports increases, the level of interest in sports may decrease over time.

It was observed that female university students had higher levels of interest and attitudes toward sports than male students. There are studies in which female students' attitudes toward physical education and sports were higher than those of male students (Yazıcı et al., 2016; Atalay et al., 2015). This result is contrary to expectations. In most of the studies, the level of interest of male students in sports is higher than that of female students (Breuer et al., 2011; Koçak F., 2014; Koca et al., 2004; Kangalgil et al., 2006; Atalı et al., 2018; Yıldız et al., 2017). There are studies in the literature that did not detect any difference in attitudes toward physical education according to gender (Erturan et al., 2011; Şimşek & Karahüseyinoğlu, 2020). However, it should not be overlooked that a level of interest in sports or a positive attitude towards sports does not mean active participation in or doing sports regularly. Low

physical activity levels are expected, especially among female students (Pengpid et al., 2015). In the study conducted by Mirsafian (2014), it was determined that 73% of female university students who expressed positive opinions about sports did not do sports. In line with the results obtained from the findings, it can be expected that public and government strategies to counter sociodemographic correlations (e.g., gender, participation in sports) and increase the physical activity levels of young people will focus on women (Júdice v.d., 2021), sports participation programs to be prepared by taking into account gender characteristics will encourage university students to participate in sports (Ouyang et al., 2021).

When the results of the analysis in Figure 1 are examined, it can be said that the variable that affects the sports interest levels of the students who have been doing sports for more than 6 months is the body mass index. According to the results of the analysis, students who do not have an average body mass index (thin, overweight, and obese) are more interested in sports. The high level of interest in sports among university students whose body mass index does not indicate typically that students may turn to physical activities to stay healthy (Griffiths et al., 2022) and lose weight (Samara et al., 2015). However, in the study of Hadri et al. (2022), it was determined that there was no relationship between sports activity and body weight or body mass index. Regarding why university students who do not have an average body mass index have a higher interest in sports, it can be thought that they turn to sports because of the anxiety caused by their body images or body satisfaction levels. Güven et al. (2021) stated that the high rate of body liking of individuals who exercise may be the cause or result of exercising. In the study conducted by Aşçı et al. (1993), it was determined that sports play an essential role in the physical structure of the participants and the degree of satisfaction with their body characteristics. A different study by Ballı et al. (2006) determined that participation in sports increases individuals' attitudes toward their body and body images. Öngören (2015), on the other hand, stated that among the reasons why individuals apply to sports centres are reasons such as body shape, weakening of body shape, or being fit. A study by Hacıoğlu (2017) stated that sports participation positively affects body satisfaction. In another study conducted on sportswomen, it was determined that the level of perception of their bodies was higher than that of the women who did not do sports (Baştuğ & Kuru, 2009).

Another result obtained in the study is the differences in the student's level of interest in sports according to the types of faculties where they study. It is seen that the level of interest in sports among students in social sciences is lower than that of students in science or health sciences. The variable that affects the sports interest levels of the students whose faculty type is science or health is the area where sports are practised. The level of interest in sports of students who prefer sports outdoors is lower than those who do sports indoors or in other areas.

The study shows that the student's utilisation of existing sports facilities is high. It is seen that students who have been doing sports for more than 6 months in universities utilise sports facilities more than students who have just started doing sports. The variable that had a dominant effect on the level of utilisation of sports facilities of the students participating in the study was "the sports areas they use at the university". It was determined that students who use sports areas (natural and urban areas that can be used for sporting purposes) other than the outdoor and indoor sports areas at the university (\bar{X} =49,36) have a higher level of utilisation of sports facilities than the students who use indoor or outdoor sports areas at the university. Similarly, in a study involving urban areas, green areas played a more prominent and influential role in improving residents' physical and mental health than sports facilities (Lachowycz, 2013). In the study conducted by Uzun (2022) at Düzce University in the Western Black Sea region, it was determined that the students use the walking trails the most among the sports areas (fitness hall, swimming pool, football, basketball, volleyball, tennis and indoor sports halls and walking trails). However, students find these facilities insufficient. In the study by Black et al. (2019) carried out in England, it was reported that spending resources to improve school sports facilities and increasing the number of sports facilities will not be a long-term permanent solution alone, and more participation in lifelong physical activity is required.

Conclusions



According to the analysis results, it was determined that the level of utilisation of sports facilities of the 1st or 2nd-grade students was higher than that of the 3rd and 4th-grade students. In another finding, the variable affecting the level of utilisation of sports facilities of the 3rd and 4th-grade students was determined as the status of actively doing sports the students. A study conducted in Taiwan determined that adolescents move away from physical activity with advancing age and step into a highly sedentary lifestyle, and time limits for physical activity emerge with academic pressure (Chang & Wu, 2023). Similarly, in the study conducted by Önaç et al. (2018) at Ege University, the frequency of participation in recreational activities decreases as the grade levels of university students increase. In the study by Baydar et al. (2020) carried out in the province of Bolu, which is located in the Western Black Sea region, it was observed that the time factor is the most important in the participation of university students in leisure time physical activities, including the students in the preparatory class or the 1st grade in the orientation period, while senior students cannot participate in such activities due to their professional and future concerns. Similarly, it is seen that there is a linear proportion between the level of interest in sports and the level of utilisation of sports facilities of students whose age is under 21.50. Studies also show that participation in performance and recreational sports decreases with age (Ardahan, 2013). Furthermore, it was stated that university students will better understand the importance of physical activity and health as they get older, and the probability of participation in sports will increase (Ouyang et al., 2020) as they get closer to the end of their education (Roberts et al., 2015) to improve their lifestyle management.

It can be said that students in the 1st and 2nd-grade levels are more inclined to engage in physical, recreational or sporting activities than those in the 3rd and 4th-grade levels. Therefore, they utilise the facilities more, away from work anxiety, and with an effort to get to know the environment and socialise. It is seen that students who have been doing sports at universities for more than 6 months utilise sports facilities more than students who have just started doing sports. The variable that affects the utilisation of the facilities of the students who do not do sports regularly is the use time. The tendency of university students to use university sports facilities in the afternoon is higher than those who use them before noon or in the evening.

Different variables may be influential in the use of the facilities, depending on the region, university, profile of university students, and the sportive activity desired to be done. For example, in the study by Thomas et al. (2019) carried out in Canada, the excess number of users in the facilities was defined as an obstacle, while in the study by Honari et al. (2010), the lack of sports facilities was found among the reasons that prevented students from doing sports. The efficient use of sports facilities, one of the essential factors of participation in sports in universities, is directly proportional to the habits, level of interest and awareness of the individual, as well as the university's facilities. Especially the fact that many universities established in Türkiye in recent years have infrastructure problems related to sportive and artistic activities (Özdemir, 2012) weakens the students' sense of belonging to the universities where they study.

Recommendations

In today's conditions, more budget should be allocated to campus sports activities, as it increases participation in sports, commitment to the university and student satisfaction (Kim et al., 2017; Elkins et al., 2011; Hall, 2006). If the participation rate in sports is considered in the quality evaluations of universities, our social attitude toward sports will be positively affected (Atalay et al., 2015). If the existing sports facilities of the universities provide correct and efficient service, students can benefit from positive results (Ceyhun, 2015).

To develop and promote sports in Türkiye, a significant part of the joint work between public institutions should be carried out with educational institutions, and the target audience should be students (Gökalp et al., 2022). Sports should be promoted in universities and first-level educational institutions to increase the participation of the new generations. In this direction, qualified sports facilities should be provided to spread mass sports and promote non-competitive sports branches aimed at active participation rather than watching. The results required careful consideration and evaluation by the relevant administrators and decision-makers in higher education institutions' strategic planning processes.

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