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Original Article

Examination of Smoking Addiction According to Some Variables in Sports Sciences Faculty Students

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**Authors' Contribution:** A: Study design, B: Data collection, C: Data analysis, D: Manuscript preparation, E: Discussion and conclusion

### ABSTRACT

**Study aim(s):** The aim of this study was to investigate the tobacco addiction of students studying sports science according to some variables.

**Methods:** A total of 168 students studying at the Sports Faculty of Suleyman Demirel University participated in the selection group, of which 67 were girls and 101 were boys. A personal data form, created by the researcher was used to search for demographic questions, and the Fagerstrom Nicotine Dependence Test (FNBT) was used to determine tobacco dependence. When testing the variance and homogeneity of the data obtained, the independent samples t-test was used for pairwise comparisons, the one-way ANOVA test was used for multiple comparisons, and the Tukey HSD test was used to determine the source of the difference. Statistical analysis and interpretation of the data took into account the significance level of <0.05.

**Results:** Although there was no statistically significant difference according to participant gender, income level, or athletic status, a statistically significant difference was observed according to age and subject factor. **Conclusions:** As a result, it was found that age and institutional factors were effective in the smoking addiction of sports science students, which was thought to be caused by students' future anxiety and responsibilities.

Keywords: Dependence, Smoking Dependency, Sports Sciences

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#### **INTRODUCTION**

Substance use typically begins in adolescence and has significant psychological, social, and cultural implications. Therefore, research on the early diagnosis of people at risk for substance use is very important. In the addiction development process, many psychological, physical and social factors exhibit interpersonal interaction [1]. The social and economic effects of smoking on human health and society are well known. Tobacco is the most common and important drug addiction due to its easy availability, legal use, and transition to other drug addictions. [2]. In recent years, comprehensive studies have been carried out in our country and around the world on the harms of smoking to individuals and society, and on creating a smoke-free society. There is a reactionary movement against smoking that has emerged all over the world and has started to make itself felt in our country. The number of publications in the media and health institutions to inform and encourage the public on this issue is increasing [3].

According to [4], it shows that adolescents with substance-addicted friends have a higher tendency to use substances than those who do not have substance-addicted friends. The young population is an easily affected group and the rate of trying to smoke is high. The most important impulses that trigger smoking in adolescence are the efforts to show oneself, to imitate the elders, to be among friends, to defy authority, to stay away from friends, to control weight, and to resemble those who are admired [5]. Teenagers in adolescence have a higher risk of encountering addictive substances in their high school lives compared to other periods. As a result of the studies conducted in Turkey in recent years, it has been determined that there is a rapid increase in the substance use of adolescents [6]. The fact that university students move away from family control, start smoking and think that they are free by making themselves feel like adults can show the habit of smoking as a more attractive and easy way to cope in the face of depression or stress [7].

#### **METHODS**

Research; A descriptive research was conducted in order to determine the scope and method, collect data related to the research, and apply field research and surveys.

#### Research design

The research used a descriptive survey method, that aimed to reveal the current situation. Descriptive research designs are research methods that aim to describe a past or present situation as it is. One tries to define the event, individual, or object under investigation in its own terms and as it is. There is no attempt to change or influence them in any way.

#### Study sample

The research group consisted of students studying at the Faculty of Sports of Suleyman Demirel University; 396 of the 650 students of the Faculty of Sports were smokers, and it was applied to a total of 168 people, 67 women, and 101 men.

#### Data collections tools

This section, created by the researcher, consists of questions such as students' age, gender, department, income status, and sports status. Fagerström Test for Nicotine Addiction In 1989, [8] developed the Fagerstrom Tolerance Test for Nicotine Dependence (FTND) to detect nicotine consumption independent of smoking. This scale is a 6-part test that includes questions about the first cigarette after waking up, about not smoking, about places where smoking is prohibited, about cigarettes that cannot be smoked, about the number of cigarettes smoked per day, about the number of cigarettes smoked in the morning, and about smoking status as sick.

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#### Data analysis

After analyzing the obtained data, variance, and homogeneity were tested, and the results were determined to be homogeneous. The independent samples t-test was used for pairwise comparisons, the one-way Anova was used for multiple comparisons, and Tukey's HSD test was used to determine the source of the difference. Statistical analysis and interpretation of the data considered a significance level of 0.05. Analyses were performed based on the total score of the scale.

Table 1. Change of cigarette addiction level by gender

Gender	n	Χ±SD	t	р
Female	67	5,2239±2,80595	1 275	160
Male	101	4,6436±2,47622	- 1,375	,160

As Table 1 examined, no statistically significant change was observed in cigarette addiction levels related to gender.

 Table 2. Change of cigarette addiction level by the age factor

Ages	n	- X±SD	t	р
18-21	53	4,3208±2,57035		
22-25	88	4,9773±2,56850	2,713	,043*
>26	27	5,6296±2,74770		

Looking at Table 2, a statistically significant difference by age factor was observed in the comparison of tobacco dependence.

 
 Table 3. Changes in smoking addiction levels depending on the quotient factor

Depar tment	n		t	р
1	63	4,2540±2,42944	<b>- - - -</b>	004
2	52	4,6538±2,72882	5,79	,004 *
2	53	5,8302±2,50181	2	*

1: Physical education and sports teacher, 2: Coaching, 3: Sports Management

Looking at Table 3, a statistically significant difference was found in the levels of tobacco addiction according to the subject factor.

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Economi c Level	n	<u></u> X±SD	t	р
Low	41	4,4878±2,51119		
Middle	94	4,8191±2,54407	1,4	,23
High	33	5,5152±2,91677	62	3

Examining Table 4, there was no statistically significant change in the level of tobacco dependence depending on financial income.

 Table 5. Changes in the level of smoking addiction

 according to the status of doing sports

Exercise	n	Χ±SD	t	р
Yes	69	4,7681±2,74475	121	665
No	99	4,9495±2,54099	- ,434	,665
		~		

When Table 5 is examined, no statistically significant change was observed in the levels of smoking addiction according to the status of exercise.

#### DISCUSSION

In this study, which tried to find out the smoking addiction levels of students studying in the Faculty of Sport based on a number of factors, no statistically significant change in the smoking addiction levels depending on the gender factor was observed. It is possible to find studies that support our research on this topic. Baykan Z, & Naçar M. (2014) showed in their study that boys smoke about six times more than girls in first-year medical students. They also showed the rate of smoking among medical doctors as 26.9% for male doctors and 25.0% for female doctors, and these rates do not reflect the general population [9]. It is thought that the reason for these differences in research findings may be due to the peer environment of individuals.

A statistically significant difference was observed in the levels of tobacco dependence according to the age factor. Looking at the differences between the groups, it turned out that the average of the 26-year-old and older group was higher than that of the 18-21-year-old group. Studies supporting our findings with age can be found in the literature. [10]

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found that the high dependency ratio in the 20-39 age group was 49.1% for men and 35.3% for women. Again, [10], when smokers were assessed with the FNBT, men were found to be significantly more dependent than women. In the same study, they showed that 82.3% of smokers were in the age group of 25-44, which was statistically significant. This can be explained by the fact that people consume more cigarettes as they get older.

A statistically significant difference was found in the cigarette addiction levels of the participants according to the branching factor. [11] In the study titled "The prevalence and risk factors of smoking in various university students in the city center of Kars, the prevalence of smoking in university students studying in various departments is 32.3% [12] reported that the frequency of smoking was high. In the said study, it was 27.5%. Based on our research findings, it is thought that this situation may be caused by the concerns of those studying in the Sports Management Department.

This situation, which is related to the income factor, does not affect smoking. [13] stated that individuals with low socio-economic status smoke more. It is thought that the reason for this difference is that the students in the study have not started their own professional careers yet, so the economic level of their families may not be a determining factor in smoking. Students may be smoking due to environmental reasons such as peer influence and school stress rather than their economic situation.

No statistically significant change was observed in the level of smoking dependence according to sports status. A study by [14] concluded that "students who smoke have an approximately high life expectancy. Smokes per day". In addition, students were defined as very low dependent and less dependent based on the FNBT score. In addition, respiratory function parameters were found to differ by sex, and FVC, FEV1, and PEF values were lower in students who smoked at least six cigarettes. It turned out that the students did not join their active sports activities. In summary, although our study found no statistically significant difference for gender, income, or sport, a statistically significant difference was found for smoking dependence levels for age and other dependent factors.

#### CONCLUSION

This study investigated smoking addiction levels among students in the Faculty of Sport. Gender did not significantly affect addiction levels, although previous studies have shown higher rates among boys. Age was a significant factor, with older students being more tobacco dependent, supported by other studies. Field of study showed a significant difference, possibly due to concerns in the Sports Management Department. Income did not influence smoking behavior, contrary to low socioeconomic status and smoking rates. Sports involvement did not affect addiction levels significantly, but smoking students had lower respiratory function and were less active. In conclusion, this study found significant differences in addiction levels based on age and other factors, but not gender, income, or sports status.

#### **CONFLICT OF INTERESTS**

No potential conflict of interest was reported by the authors.

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