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Investigation of the Alcohol Usage Habits of University Students by Logistic Regression Analysis

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Abstract

Alcohol is among the most addictive substances all over the world. It is a health hazard that has a high mortality rate, is easy to obtain and also causes other dependencies. University life is a risky process for alcohol use and dependence. During the university period when the age of proving that the individual is an individual, adverse situations can be encountered in student behaviours due to easy adaptation to the neighbourhood, care for the users of alcohol, and similar behaviour. Therefore, it is important to know the circumstances that lead students to use alcohol. The factors that lead students to use alcohol were researched by logistic regression analysis in this study and the results were interpreted.

Keywords: Alcohol Use, Logistic Regression Analysis, Odds.

Üniversite Öğrencilerinin Alkol Kullanma Alışkanlığının Lojistik Regresyon Analizi ile Araştırılması

Öz

Alkol, dünyada bağımlılık yapan maddeler arasında başta gelmektedir. Ölüm oranı yüksek olan, elde etmesi kolay olan ve beraberinde başka bağımlılıklara da yol açan sağlık tehdididir. Üniversite hayatı alkol kullanımı ve bağımlılığı için riskli bir süreçtir. Birey olduğunu ispatlama yaşı olan üniversite döneminde, bulunduğu çevreye kolay uyum sağlama, alkol kullananlara özenme, kendini kaptırma benzeri davranışlarla öğrenci davranışlarında olumsuz durumlarla karşılaşılabilir. Bu yüzden öğrencileri alkol kullanmaya yönelten durumların bilinmesi önem taşımaktadır. Öğrencileri alkol kullanmaya yönelten etkenler bu çalışmada lojistik regresyon analizi ile araştırılmış ve sonuçlar yorumlanmıştır.

Anahtar Kelimeler: Alkol Kullanımı, Lojistik Regresyon Analizi, Olasılık

1. Introduction

The age of adolescence is a transition period between childhood and adulthood which is the beginning of developmental periods, a turning point in the development of the personality, a period in which all the childhood is reviewed and the emotions and characters that will shape the individual's future for a lifetime. The negative behaviors in the adolescence age are the problems of public health but may cause more serious problems. The behaviors which are risky for health are mostly acquired in this period. University education, which is the most important step of the new generations

for their future and for the peace of the country, has a great importance in the education process. The quality of the education received in this process is the basis for students to establish a good lifestyle, to walk more confidently to the future and to be successful in their business life. The determination of families, which is the main element of education, will be reflected on their children.

There are some important problems in improving the quality of education system and training of successful generations. At the beginning of these problems, parental discord, introversion, students' self-isolation, and efforts to prove themselves. Individuals with such problems may experience alcohol abuse, smoking and substance abuse as a result of relaxation, recovery, and self-isolation. Alcohol and substance use give a person a sense of well-being, happiness and self-confidence. Due to the characteristics of the youth period, it is seen as attractive among young people. The parents' careless attitude about alcohol use, the lack of role models by parents, and the use of alcohol by parents also play an influential role for both genders.

The scientific studies on the treatment of substance use problems during adolescence and university periods and the support to be provided during this process are progressing every day. Within the scope of the studies, the transformation of smoking, alcohol and drug use into habit is considered to be risky for adolescence and university life (Rogers et al. 1991). In the addiction process, adolescence is the beginning phase and psychological, social and cultural influences seem to be important. (Abrams and Wilson 1986, Doğan, 1982).

It is suggested that personality traits are related to smoking, alcohol and substance dependence (Dalack at all, 1993). In the formation of addiction, spiritual and physical characteristics vary from person to person (Doğan, 1982). It has been claimed that the idea of improving women's self-confidence and relationships in social life prevails in smoking and alcohol use (Clayton, 1991).

In this study, alcohol use and dependencies of university students were investigated by using logistic regression. It is seen that logistic regression has been used more recently in the fields of biology, medicine, economy, agriculture, veterinary and transportation. Breslow and Day (1980), Pastides (1985) public health, Abbott (1985), Efron (1988) have done studies in the field of life analysis.

Gardside and Glueck (1995), examined the effects of risk factors such as nutrition styles, alcohol use, physical activity on heart disease. Bonney (1987) studied the usage of logistic regression and how it could be improved. Duffy (1990), examined the distribution of error terms in the logistic regression model and the approximation of parameter values to real values.

In our country, a wide variety of studies have been carried out on this subject. Ünsal and Güler (2005), analyzed the banking sector by using logistic regression. Tatlıdil, Başarır and Hökmen (1990), examined the socio-economic development of the countries with logistic regression. Tobacco, which is often consumed as cigarettes, is one of the most harmful substances for both the individual and the community.

Nicotine is the active substance that causes the physical and psychological dependence of cigarettes. It is emphasized in terms of public health, since that smoking is addictive in a short period of time and can be easily obtained everywhere and it threatens not only the smokers but also the health of the people in the environment.

Alcohol, like cigarettes, is a threat, which is easily addictive, easily accessible at all times and permanently damaging to human health and the environment. The frequency of alcohol use varies from country to country and from year to year. In Turkey, the use of alcohol among young people in recent years has become quite widespread. In the report of the Organization for Economic Co-operation and Development on the damages of alcohol and its effects on public health, it was stated that the annual alcohol consumption in OECD countries is 9.1 liters per person. Between 2005 and 2015 it was recorded that, the lowest consumption per capita in Turkey was 1.31 liters of pure alcohol in 2005; the highest consumption was 1.55 liters of pure alcohol in 2012. There is a high degree of alcohol use, which should be intervened in a very serious way. The necessary interventions should include elements such as prevention of starting, teaching the damages, and supporting and controlling those who tend to drop. In the fight against alcohol use in Turkey, universities have an important place.

For this reason, this study was conducted for university students. The factors affecting the alcohol use of students and the elimination of these factors were studied. The remaining part of this paper is organized as follows. In the second part of the study, the studies conducted with this subject in the literature are examined. Research techniques of the studies have been mentioned. In the third part of the study, techniques and methods to be used for research were investigated. The techniques used in the research were examined in detail. In the application section, the study with university students is mentioned. Application style and application areas of the study were reported. In the conclusion section, the results of the study, the results and the benefits of the analyzes are reported. Afterwards, explanations were made in order to guide the studies.

2. Literature Review

Habits can be handled according to many criteria such as family structure, friend environment and psychological factors. In the literature research, various estimation techniques based on different number of parameters have been studied. Some of the studies can be summarized as follows;

In their study, (Güler at all, 2009) determine the incidence of smoking, alcohol use and suicidal tendency among high school students. Chi-square test was used in the study. In the study concluded between Turkey and other countries, that there are similarities in cigarette use, but the similarities in alcohol use has emerged that lower rate. In adolescence, suicidal tendency was found to be higher than the other study results.

In the study, the frequency of alcohol use was investigated in young people receiving apprenticeship training in Ankara. A questionnaire containing detailed questions to investigate alcohol use problems was conducted on a total of 581 young people from five apprenticeship training centers. They concluded that alcohol use in working young people is high, and that risk factors should be addressed in order to take necessary precautions against alcohol use (İlhan, Demirbaş and Doğan, 2005).

The relationship between smoking and alcohol use in university students and their relationship with familial problems. A total of 192 students from the Department of Psychology of the Near East University participated in the study. The form of sharing personal information prepared by the researchers, Family Structure Evaluation Tool and Family Problem Evaluation Scale in the Youth Period were included in the study. In the results, it was seen that there were negativities in the family environments of young people who tried cigarette and alcohol. It was understood that smoking and alcohol use prevention studies should be continued in the university periods and family effect should be taken into consideration (Akfert et al. 2009).

İnce, Doğruer and Türkçapar (2005), compared epidemiological data, characteristic features, mental disorders and psychological symptoms in early and late onset male alcoholics. 47 male patients who were admitted to a psychiatry clinic to discard alcohol, were evaluated by applying sociodemographic data set, Brief Symptom Inventory, Beck Anxiety Inventory and CIWA-Ar. A diagnosis was found in 66% of the patients.

Ögel and Aksoy (2007), they conducted a study on the imprisoned and convicted adolescents. In the scope of the research, 270 adolescents aged 18 and under 18 years of age were randomly selected in Istanbul, Ankara, Elâzığ and İzmir detention centers and prisons. The questionnaire form developed by the Once Again Health and Education Association was applied in the research. As a result of the study, it was seen that the frequency of substance use was high in detainees and convicted adolescents.

Görker (2010) investigated, as in the world, beginning to use alcohol at an early age starts to become a public health problem in Turkey. He reviewed alcohol use, alcohol dependence, epidemiological data, etiologic findings, clinical features, and preventive interventions before and during adolescence.

Akvardar (2009) investigated the knowledge, attitude and behaviour characteristics of General Practitioners in the health sector. A questionnaire was applied in the study and 135 general practitioners participated in the questionnaire. As a result of the study, it was seen that general practitioners needed more support and training for their important role in the intervention of alcohol use problem.

Alaçam at al. (2015) investigated the relationship between internet addiction and smoking and alcohol use in university students. 2096 students were included in the research. Students were given Internet Addiction Scale, CAGE Test and data form to obtain information about age, gender, alcohol and cigarette use, duration and mode of internet use. As a result of the study, the rate of internet addiction was 8.6%. The

rates of smoking and alcohol use in students with internet addiction were higher than those without internet addiction.

Tanrıkulu (2009) aimed to determine the prevalence and risk factors for smoking and alcohol use and drug abuse in university students in Kars. It was found that, alcohol drug and smoking use were the risk factors for each other, and they were determinative for the environment and human relations.

In this study, they aimed to determine the prevalence of dissociative symptoms in alcohol and drug addicts and their relationship with childhood trauma, alcohol/substance use and depression. Thirty inpatient treatment patients diagnosed with alcohol dependence and 32 inpatient treatment patients diagnosed with alcohol dependence in Bakırköy Mental Health and Nervous Diseases Training and Research Hospital were included in the study. It has been observed that dissociative symptoms and disorder should be investigated as well as depression and anxiety in people with substance addiction (Evren and Ögel, 2003).

In this study, aimed to determine the relationship between substance use, personality traits and psychiatric symptoms and to determine the effect of gender difference in this relationship. In the study, it was found that the social relations of the smoking girls were good, but the interpersonal sensitivities were impaired; there was no change in interpersonal sensitivity scores of female students using alcohol and drugs (Herken, Bodur and Kara, 2000).

In their study (Vals, Kiivet and Leinsalu, 2013), studied that alcohol and smoking are common risk factors for weight problems and health problems and the relationship between these factors with health services. Data for 6500 people aged 25-64 were taken from a survey in Estonia in 2004, 2006 and 2008. The effects of alcohol, smoking and weight problems on primary and specialist care services, hospitalizations and ambulance calls were analyzed separately for men and women using dual logistic regression. As a result of the study, it has been revealed that excessive weight and smoking should be directed to healthy lifestyles in order to reduce the burden of disease and decrease health care costs.

In Giresun province, the factors that cause the teachers who perform their duties to get pleasure from their profession are examined. As the results of the data obtained for the study were in binary status, the study was concluded with the help of logistic regression analysis (Logit). At the end of the analysis, it was determined that teachers had a desire to renew themselves continuously. In addition, it was also noticed that many variables, one of the factors that cooled teachers from their professions, had no significant effect on teachers (Özkan, 2013).

Ng and Su (2017), investigated the prevalence and correlations of metabolic syndrome (MS) among Hong Kong / Chinese adults. Random cluster sampling and International Diabetes Federation (IDF) MS criteria were carried. 737 adults participated in the study. ANOVA analysis revealed that men, marital status, low education level, occupation as manager or housewife, and alcohol consumption

significantly correlated with central obesity. At the end of the study, the prevalence of MS was 14.1% and alcohol consumption was the strongest risk factor of MS.

Orak and Solakoğlu (2017), examined the alcohol consumption of Turkish adolescents with the lens of general strain theory of Agnew. In this study, alcohol consumption and related factors in Turkey were researched and generality of the general strain theory was tested by using the data from the 2008 European Youth Survey. Sequential Logistic Regression Analysis was used in the study. The results showed that apart from family, the stress types were significantly related to the negative emotions and drinking behaviors of the students.

Kumar at al. (2017), investigated the relationship between sociodemographic characteristics and alcohol consumption in India with multivariate logistic regression models. The questionnaire was used to collect data on the socio-demographic characteristics and alcohol consumption of the participants. Both alcohol consumption and consumed alcoholic beverage types and socio-demographic relationship are aimed to be revealed. Significant differences were found in sociodemographic relationships with alcohol consumption and alcoholic beverages in India.

Xavier, Brown and Benoit (2017), compared the risks of long-term poor mental health outcomes in pregnant and non-pregnant women and investigated whether cultural factors change these risks. Dual logistic regression analysis was used in the study.

In this study, emphasized that alcohol use disorder is a public problem. The study was conducted with the participation of 597 persons. In this study, individuals' own errors in fact are mentioned. There was a significant relationship between alcohol use and violence (Kirouac and Witkiewitz, 2017).

In this study (Nagy, Verres, and Grevenstein, 2017), investigated that addiction is vital in adolescence. It is aimed to control health institutions, diseases and operations. 753 persons are participated in the study. It was mentioned that the scales were a valid measure of different aspects of risk adequacy in coping skills with psychoactive substances.

Pogue and Sloan (2017), aimed to investigate health problems and alcohol dependence together, and to determine that alcohol-related disorder was not associated with reliability. The data were derived from the acquisition of alcohol and related diseases. It has been shown that, there is limited empirical support for the treatment of depression in men who do not show signs of alcohol use, however, it has been demonstrated that for people with depression and alcohol use disorders, treatment of depression should be taken to a treatment, which does not overreact quickly and acts rapidly.

In the study of Jongenelis and Johnston (2018), aimed to determine the factors associated with parents' belief in the appropriateness of giving alcohol to minors. The parents of Western Australia (n = 443) conducted a survey of their alcohol use habits and their behaviors, beliefs and attitudes, and their children's alcohol consumption and

demographic characteristics. At the end of the study, it was observed that approximately half of the parents participating in the survey (44 %) would allow their minors to use alcohol. The change of faith has emerged that parents will be able to create thoughts on young people's alcohol-related harms and can be facilitated by the implementation of public education campaigns that prevent alcohol use. It is emerged that the faith can create ideas for parent's young people's alcohol-related harms and can be facilitated by the implementation of public education campaigns that prevent alcohol use.

Phillips at al. (2018), aimed to conduct a new analysis of the relationships between online activity and alcohol and monitoring the interactions of students with online course materials over time. The mean age of the 63 participants was 20.11 and all were enrolled in the psychology course. Participants completed a questionnaire that hosted Blackboard and was supported by personal charm and online course announcements. It was observed that 31.8% of this participant needed a short intervention or training about alcohol use and 9.6% of them could benefit from the consultant. Although approximately half of these students were exposed to risky alcohol consumption, the relationship between alcohol use and monitored activity was not strong.

Hoffmann (2018), used this study to assess the relationship between coexistence and substance use for the estimation of co-living and the use of drug and heavy alcohol among young adults as a representative sample of young adults in the United States and the equivalent treatment effects. There is little evidence that coexistence has a causal effect on substance use in general. However, among young women, it was observed that those living together used more drug than those who were single.

Regression analysis is the most frequently used technique to explain the relationship between variables in research. Linear, non-linear, simple, multiple, parametric, nonparametric, logistics, etc. There are many regression models. Regression models have been used a lot in the studies.

3. Material and Method

The aim of the study is 18-35 age group. The basis of the selection of this group is the fact that this age group is continuing its education and that it is not too young to use alcohol. In our country, 18-35 age group is mostly in university education. In other studies, similar age groups were included in similar analyses and provided opportunities for comparison and analysis. The questionnaire questions used for the research are the questions prepared for the purpose of analysis. The research was conducted in a private university in Istanbul. It was conducted and completed in November and December of 2017. In the questionnaires, the name information was not asked and collected randomly. The survey data was transferred to the system by Microsoft excel. Logistic regression analysis was performed by using IBM SPSS 22.0 statistical software program and the results were tried to be interpreted.

3.1. Logistic Regression Analysis

There are several methods to group observations according to the structure of the data within the scope of study to be investigated. Based on these methods there are; Logistic Regression Analysis, Discriminant Analysis and Cluster Analysis.

Logistic regression analysis aims to estimate the value of the categorically dependent variable. Here, an attempt is made to estimate the membership of two or more groups. It can be clearly stated that the objectives of the analysis are to investigate the relationships between classification and dependent and independent variables (Mertler and Vannatta, 2005). Logistic regression analysis is more widely used over time. The reasons for this; (Mertler and Vannatta, 2005; Seven, 1997; Tabachnick and Fidell, 1996):

- In logistic regression analysis, while there is no restriction for independent variables, dependent variable must be categorical (Discrete, discontinuous).
- It is easy to interpret logistic regression model parameters and produces functions which are mathematically simple to use and easy to understand.
- There are many computer programs that can make analyzes based on logistic regression model.
- Since there is no limitation on the distribution of probability functions of independent variables, many tests can be applied.
- Since logistic regression does not produce negative predictive probabilities, all probability values are positive and range from 0 to 1.
- In logistic regression analysis, the relationship between independent and dependent variables does not need to be linear. The relationship may be exponential or polynomial. Since logistic regression analysis accepts a logistic relationship between dependent and independent variables, it can produce nonlinear models.
- The logistic regression analysis is the analysis that is especially used when it is known or expected that the distribution of the dependent variable data shows a nonlinear relationship with one or more independent variables (Çokluk, 2010).

4. APPLICATION

In this section, independent variables which can cause alcohol use of students in a private university were determined and analyzed with the help of variables. Logistic regression analysis was used because the dependent variable was two-level categorical variable. The study aimed to determine the most important variables in alcohol use. 150 students were randomly selected from the campus according to the determined variables. Logistic regression analysis was performed by using SPSS 22.0 Statistical Software.

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Independent variables;
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x_1=Age,

x_2= Gender (1- Female/ 2- Male),

x_3= Family monthly income,
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 x_4 =Monthly Allowance,

 x_5 = Accommodation type (0- Student house / 1- Private dormitory / 2- CDI (Credit and Dormitories Institution) / 3- With family),

 x_6 = Is the mother alive? (1-Yes / 2- No),

 x_7 = Is the father alive? (1-Yes / 2- No),

 x_8 =Are parents together? (1-Yes / 2- No),

 x_9 = Does the mother drink alcohol? (1-Yes / 2- No),

 x_{10} = Does the father drink alcohol? (1-Yes / 2- No),

 x_{11} = Is there anyone in the family who smoke? (1-Yes / 2- No),

 x_{12} = Does the student smoke? (1-Yes / 2- No),

 x_{13} =Is there anyone who drinks alcohol among friends? (1-Yes / 2- No),

 x_{14} = Does the student do sports? (1-Yes / 2- No),

 x_{15} = Do you think that alcohol pushes away from stressful thoughts? (1-Yes / 2- No),

 x_{16} = Do you think alcohol brings status? (1-Yes / 2- No),

The " γ_i " variable indicating whether the students participating in the survey use alcohol or not, is indicated as the described variable. Data are coded to SPSS as 1: Uses alcohol. 2: Not uses alcohol.

As descriptive variables; age, gender, total monthly income, monthly allowance, type of accommodation, mother's survival, father's survival, parents living together, mother's alcohol use, father's alcohol use, smoking members in family, student smoking, having alcohol in friends environment, doing sports, idea of alcohol pushes away from stressed thought, idea of alcohol to give status have been determined.

Table 1. Case Processing Summary

Unweighted Cases		N	Percent
	Included in Analysis		
Selected Cases		150	100
	Missing Cases	0	0,
	Total	150	150
Unselected Cases		0	0,
Total		150	100

Table 2. Classification Table

		Does the Student Use Alcohol?		% Right
		Yes	No	
Does the Student Use Alcohol?	Yes	61	11	84,7
	No	8	70	89,7
Overall Rate				87,3

The classification table shows the estimations in the model. According to this table, 19 people were estimated incorrectly. Eleven participants who said that they used alcohol were estimated not to use alcohol; 8 students who used alcohol were estimated to be drinking alcohol. 61 individuals who stated that they used alcohol and 70 people who did not drink alcohol were estimated correctly. When evaluated proportionally, it can be seen that 84.7% of the students who use alcohol and 89.7% of the students who do not use alcohol are estimated correctly. In general, the model correctly predicted 87.3% of 150 students were using alcohol. In other words, the correct classification rate was found to be 87.3%. The classification table is used when any classification process is to be performed in the analysis.

Table 3. Table of Equations in the Equation

Variable	$oldsymbol{eta_i}$	$S.\hat{E}(\boldsymbol{\beta}_{\dot{1}})$	Wald	df	Sig	$Exp(\boldsymbol{\beta}_{i})$
Constant	-5,244	2,517	4,341	1	,037	,005
Age	-,038	,082	,212	1	,645	,963
Gender	-,749	,575	1,694	1	,193	,473
Parents' living together	-,357	,586	,372	1	,542	,700
Fathers' alcohol drinking	,301	,467	,416	1	,519	1,351
Mothers' alcohol drinking	-,262	,559	,219	1	,640	,770
Friends' alcohol drinking	,079	,585	,018	1	,893	1,082
Idea of alcohol brings status	2,688	,510	27,809	1	,000	14,696
Idea of alcohol pushes away from Stressful thoughts	2,351	,512	21,063	1	,000	10,495

According to the results, it was found that the factors influencing students' use of alcohol were age, type of accommodation, parents' living together, Mother's alcohol drinking, Father's alcohol drinking, smoking cigarettes, friends' alcohol drinking, Idea of alcohol pushes away from stressful thoughts and Idea of alcohol brings status.

Therefore, the equation to be used for classification is as follows;

$$\gamma_i = -5,244 - 0,038 * x_1 - 0,749 * x_2 - 0,357 * x_8 + 0,301 * x_{10} - 0,262 * x_9 + ,079 * x_{13} + 2,688 * x_{16} + 2,351 * x_{15}$$

The variables expressed in Table 3 are β values for explanatory variables and constant values. β values are used in logistic regression analysis to determine the possibility of making one job or the other while are used to obtain the predictive

function in multiple regression analysis (Çevik, 2004). The positive or negative values of B indicate the direction of the relationship. When the β values of the model are examined, it is observed that the maximum affect that students use alcohol is the idea that alcohol gives status (2,688). When B values were examined, it can be seen that age, gender, parents living together, father's alcohol drinking, mother's alcohol drinking, friends' alcohol drinking, the idea of alcohol brings status, the idea of alcohol pushes away from stressful thoughts independent variables, in 0.05 significance level, statistically significant. Exp (β) values are odds ratios. The odds value represents Exp (β). In order to understand the logistic coefficients, the events should be evaluated in terms of odds ratios (Çevik, 2004). When the odds values of the values that are found to be significant in Table 3 are observed, in 0.05 significance level, it is seen that odds increased by 0.700 units when there is one unit increase in "are parents together" variable; odds increased by 14,696 units when there is one unit increase in "idea of alcohol brings status" variable; odds increased by 10,495 units when there is one unit increase in "idea of alcohol pushes away from stressful thoughts" variable and odds increased by 1,082 units when there is one unit increase in "friends' alcohol drinking" variable.

5. Conclusion

In this study, the factors that lead students to use alcohol were researched by logistic regression analysis in this study and the results were interpreted. Logistic regression analysis which is used as a differentiation model of the dependent variable's two-level assignments to groups that are categorical variables between independent variables and independent variables.

Nowadays, there is an increase in alcohol use among students. Therefore, it has been tried to determine the independent variables that may have an effect on alcohol use. An application, which covers students of a private university, has been made with these independent variables. The correct classification percentage of the equation γ_i is too high. As a result of the tests, the findings were found to be significant. Our equation can be used as a separation equation in the most appropriate way.

According to the results obtained from logistic regression analysis, it was seen that the important variables affecting the alcohol use of the students were "age", "gender", "parents' living together", "father's alcohol drinking", "mother's alcohol drinking", "friends' alcohol drinking", "the idea of alcohol brings status", "the idea of alcohol pushes away from stressful thoughts". According to the odds ratio, the most important factor affecting the alcohol use of students is the idea of alcohol brings status. This value shows that believing in the idea of alcohol brings status is 14,696 times higher than the disbelief of the idea of alcohol brings status. This factor is high enough to require immediate control. Students should be informed with lectures and seminars. It should be explained in seminars and conferences that the status can be won by education, work and effort, and alcohol in work life harms physical functions. Based on the Exp (β_1) values, this value is followed by ve the "the idea of alcohol pushes away from stressful thoughts". Alcohol and other addictive substances minimize the thinking functions, mind-gathering, because it numbs the body and the

brain. Even though it may seem that the effect of pushing away from stressful thoughts, since it is reducing the level of perception and preventing the focus, this is only perception disorder, brain numbness. Young people should be taught in the family that problems can be solved by speaking. Parents should be open to their children so that they can communicate their problems to their families without any communication problems, and problems that can cause distress and stress should be able to reach a solution among the family. The simplest stress management should begin with the simple responsibilities that parents give to their children. Responsibility should teach to be able to reach a solution and manage the situation.

It can be seen that "father's alcohol drinking", "friends' alcohol drinking", "age", "mother's alcohol drinking" and "parents' living together" factors follow the sequence. Family is the main factor that influences the growth of children in their development. The attitudes and behaviors of parents in front of their children are examples. Parents should not use alcohol and addictive substances while their children are around. They should not take their children to the environments where alcohol is used. The habits gained during childhood, eye familiarity becomes unpreventable at later ages.

As a result; smoking, alcohol drinking and substance use, due to sociocultural and economic reasons, is a serious problem starting in childhood and can reach a solution in cooperation with family, school, social media, artist, medical staff and government.

Fight with alcohol should not be limited to the studies carried out only at universities. Along with universities, studies should be done to draw attention to the harms of alcohol, smoking and substance addiction in high schools, associations and working areas. In order to protect young people against alcohol dependence and to prevent use, programs should be made starting from secondary school and concentrating on the university period before the high school age, precautions should be taken continuously with visual films and posters and trainings should be taken. In visual and educational programs, it should be clearly stated that alcohol does not provide any gain or status and that it does not correct the stress and loneliness.

It should be made clear to the students that they do not make friends with people who use alcohol and/or are addicted to drugs. In addition, family members should not use alcohol next to their children. It is very important that children should be informed about the harmful effects of alcohol use.

In this study, alcohol use habits of university students were examined in terms of age, family, friends and psychological factors. Different criteria can be examined for university students. In a similar study, it can be examined by comparing the criteria for high school students or middle age people.

References

- Abrams, D., Wilson, G. (1986). "Clinical Advances in Treatment of Smoking and Alcohol Addiction", Amerikan Psikiyatri Birliği: Yıllık İnceleme, Vol. 5 Washington, DC: Amerikan Psikiyatri Basını.
- Akdavar, Y., Uçku, R., Ünal, B. (2010). "Pratisyen Hekimler Alkol Kullanım Sorunları Olan Hastaları Tanıyor ve Tedavi Ediyorlar mı?", Türk Psikiyatri Dergisi 2010; 21(1): 5-13.
- Akfert, S., Çakıcı, E., Çakıcı, M. (2009). "Üniversite Öğrencilerinde Sigara-Alkol Kullanımı ve Aile Sorunları ile İlişkisi", Anadolu Psikiyatri Dergisi 2009; 10:40-47
- Akgül, A., Çevik, O. (2004). "İstatistiksel Analiz Teknikleri-SPSS'te İşletme Yönetimi Uygulamaları", Ankara: Emek Ofset Ltd. Şti.
- Akkuş, Z., Çelik, M. Y. (2004). Lojistik Regresyon ve Diskriminant Analizi Yöntemlerinde Önemli Ölçütler. VII. Ulusal Biyoistatistik Kongresinde sunulan bildiri. Mersin Üniversitesi, Tıp Fakültesi, Biyoistatistik Anabilim Dalı, Mersin.
- Alaçam, H., Ateşçi, F., Şengül, C. (2015). "Üniversite Öğrencilerinde İnternet Bağımlılığının Sigara ve Alkol Kullanımı ile İlişkisi", Anadolu Psikiyatri Dergisi 2015; 16(6):383-388.
- Bircan, H. (2004). Lojistik Regresyon Analizi: Tıp Verileri Üzerine bir Uygulama. Kocaeli Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, 2, 185-208.
- Budak, H., Erpolat, S. (2012). "Kredi Riski Tahmininde Yapay Sinir Ağları ve Lojistik Regresyon Analizi Karşılaştırılması".
- Clayton, S. (1991). Gender Differences in Psychosocial Determinants of Adolescent Smoking. J Sch Health, 61:115-20.
- Çokluk, Ö., (2010), "Logistic Regression: Concept and Application", Kuram ve Uygulamada Eğitim Bilimleri / Educational Sciences: Theory & Practice 10 (3), 1357-1407.
- Çolak, E., Özdamar, K. (2004). "Ölümle Sonuçlanan Trafik Kazalarında Risk Faktörlerinin Koşullu ve Sınırlandırılmış Lojistik Regresyon Yöntemleri ile İncelenmesi", OGÜ T p Fak. Dergisi, 26, 1, 7-14.
- Coşkun, S. (2004). "Lojistik Regresyon Analizinin İncelenmesi ve Diş Hekimliğinde Bir Uygulama", Cumhuriyet Üniversitesi Diş Hekimliği Fakültesi Dergisi, Cilt:7, Sayı: 1, 42-50.
- Doğan, Y.B. (1982). Drinking Behavior in a Changing Country. Br J Addict, 77:209-210.
- Evren, C., Ögel, K. (2003). "Alkol/Madde Bağımlılarında Dissosiyatif Belirtiler ve Çocukluk Çağı Travması, Depresyon, Anksiyete ve Alkol/Madde Kullanımı ile İlişkisi", Anadolu Psikiyatri Dergisi 2003; 4:30-37.
- Gök, C., Özdemir, A. (2011). "Lojistik Regresyon Analizi İle Banka Sektör Paylarının Tahminlenmesi", İşletme Fakültesi Dergisi, Cilt 12, Sayı 1, 2011, 43-51.
- Görker, I. (2010). "Çocuk ve Ergenlerde Alkol Kullanımı ve Alkol Bağımlılığı", Türkiye Klinikleri Psikiyatri Özel Dergisi; 2010;3(3):100-106
- Güler, N., Güler, G., Bekar, M. (2009). "Lise Öğrencileri Arasında Sigara, Alkol Kullanımı ve İntihar Düşüncesi Sıklığı", Cumhuriyet Tıp Dergisi 2009; 31: 340-345.

- Herken, H., Bodur, S., Kara, F. (2000). "Üniversite Öğrencisi Kızlarda Madde Kullanımı ile Kişilik ve Ruhsal Belirti İlişkisi", Klinik Psikiyatri Dergisi 2000; 3:40-45.
- Hoffmann, J. (2018). "Cohabitation, Marijuana Use, and Heavy Alcohol Use in Young Adulthood", Substance Use & Misuse, 53:14, DOI:10.1080/10826084.2018.1480037. [Taylor & Francis Online], [Web of Science ®].
- İnce, A., Doğruer, Z., Türkçapar, H., (2002). "Erken ve Geç Başlangıçlı Erkek Alkol Bağımlılarında Sosyodemografik, Klinik ve Psikopatolojik Özelliklerin Karşılaştırılması", Klinik Psikiyatri Dergisi 2002;5:82-91
- Jongenelis, M., Johnston, R., Stafford, J. (2018). "Factors Associated with Parents' Belief in the Appropriateness of Providing Alcohol to their Child", Substance Use & Misuse, Vol.53, No.14, 2281-2290.doi:10.1080/0826084.2018.1473433. [Taylor & Francis Online], [Web of Science ®].
- Kirouac, M., Witkiewitz, K. (2017). "Toward the Operationalization and Examination of "Hitting Bottom" for Problematic Alcohol Use: A Literature Review", ISSN: 0734-7324, DOI: 10.1080/07347324.2015.1050934
- Kılıç, S. (2000). Lojistik Regresyon Analizi ve Pazarlama Araştırmalarında bir Uygulama. Yayınlanmamış Yüksek Lisans Tezi, İstanbul Teknik Üniversitesi, Fen Bilimleri Enstitüsü, İstanbul.
- Kumar, K., Kumar, S., Singh, A. (2017). "Prevalence and Socio-Demographic Correlates of Alcohol Consumption: Survey Findings from Five States in India", Drug and Alcohol Dependence.
- Man Ng, S., Su, X. (2018). "Prevalence and Correlates of Metabolic Syndrome in Hong Kong Chinese Adults—A Random Community Sample Study", Psychology, Health & Medicine, 2018 Vol. 23, no. 4, 485–495.
- Mertler, C.A., Vannatta, R.A. (2005). Advanced and Multivariate Statistical Methods: Practical Application and Interpretation. 3rd Edition, Pyrczak, Los Angeles.
- Nagy, E., Verres, R., Grevenstein, D. (2017). "Risk Competence in Dealing with Alcohol and Other Drugs in Adolescence", doi.org/10.1080/10826084.2017.1318149.
- Oğuzlar, A. (2005). "Lojistik Regresyon Analizi Yardımıyla Suçlu Profilinin Belirlenmesi", İktisadi ve İdari Bilimler Dergisi, Cilt: 19 Nisan 2005 Sayı: 1.
- Orak, U., Solakoğlu, Ö. (2017). "Alcohol Consumption Among Turkish Adolescents: An Empirical Test of General Strain Theory", Journal of Child&Adolescent Substance Abuse 2017, VOL. 26, NO. 4, 293–302.
- Ögel, K., Aksoy, A. (2007). "Tutuklu Ve Hükümlü Ergenlerde Madde Kullanımı", Bağımlılık Dergisi 2007; 8: 11-17.
- Özkan, M. (2013). "Lojistik Regresyon Analizi ile Öğretmenler Üzerinde Bir Uygulama". Ordu Üniversitesi Sosyal Bilimler Araştırmaları Dergisi (ODÜSOBİAD). Yıl 2013, Cilt 4, Sayı 7: 43 48.
- Özgür, İ., Demirbaş, H., Doğan, Y. (2005). "Çıraklık Eğitimine Devam Eden Çalışan Gençlerde Alkol Kullanımı Üzerine Bir Çalışma", Türk Psikiyatri Dergisi 2005; 16(4):237-244.

- Phillips, J. Landhuis, C., Ogeil, R. (2018). "Risky Alcohol Consumption and Online Activity Levels", Substance Use & Misuse, 53:14, 2350-2358. doi: 10.1080 / 10826084.2018.1474227. [Taylor & Francis Online], [Web of Science ®].
- Pogue, Y., Hakes, J., Sloan, F. (2017). "Is Major Depression Linked to Alcohol-Impaired Driving?", Substanceuse&Misuse, Vol.52, No.14.
- Rogers, PG., Sillings, SM., Adams, LR. (1991). Adolescent Chemical Dependence. A Diagnossible Disease. Psychiatric Annalls, 21:91-97.
- Seven, Z. (1997). Değişken Seçimi Yöntemi Olarak Adımsal Lojistik Regresyon ile Adımsal Diskriminant Analizinin Karşılaştırılması. Yayınlanmamış Yüksek Lisans Tezi, Gazi Üniversitesi, Fen Bilimleri Enstitüsü, Ankara.
- Şenel, S. Alatli, B. (2014). "Lojistik Regresyon Analizinin Kullanıldığı Makaleler Üzerine Bir İnceleme", Eğitimde ve Psikolojide Ölçme ve Değerlendirme Dergisi, Cilt 5, Sayı 1, Yaz 2014, 35-52.
- Tabachnick, B. G., Fidell, L. S. (1996). Using Multivariate Statistics (3rd ed.). New York: Harper Collins.
- Tanrkulu, Ç., Çarman, B., Palancı, Y., Çetin, D. (2009). "Kars İl Merkezinde Çeşitli Üniversite Öğrencileri Arasında Sigara Kullanım Sıklığı ve Risk Faktörleri" Tur Toraks Dergisi 2009; 11:101-6.
- Tatlidil, H. (1996). Uygulamalı Çok Değişkenli İstatistiksel Analiz, Cem Web Ofset, Ankara.
- Vals, K., Kiivet, R., Leinsalu, M. (2013). "Alcohol Consumption, Smoking and Overweight as a Burden for Health Care Services Utilization: A Cross-Sectional Study in Estonia", BMC Public Health 2013, 13:772.
- Yilgör, A. (2005). "İşletmelerin Borçlanma Düzeylerindeki Değişimin Hisse Senedi Getirileri Üzerindeki Etkileri", Dokuz Eylül Üniversitesi İ.İ.B.F. Dergisi, Cilt 20, Sayı 1, 15-28.
- Xavier, C., Brown H., Benoit, A. (2018). "Teenage Pregnancy and Long-Term Mental Health Outcomes Among Indigenous Women in Canada", Archives of Women's Mental Health 21:333–340.