Research Article

The Role of Perceived Social Competence on Cigarette and Alcohol Usage among Faculty of Health Sciences Students[*]

Remziye Semerci[1]
Trakya University

İlknur Dindar[2]
Trakya University

Burcu Küçükkaya[3]
Trakya University

Elif Kızılok Kale[4]
Trakya University

Buket Derleyen[5]
Trakya University

Seda Sunar[6]
Trakya University

Abstract

Introduction. Being a college student can bring out certain anxieties and stresses for young adults. When they experience worry and concern, a lack of adequate support can lead to different habits. This study aims to identify the role of perceived social competence on cigarette and alcohol usage among students in the Faculty of Health Sciences. Method. This is a descriptive study conducted with 940 students from the Faculty of Health Sciences in Edirne, Turkey. Data have been collected using a survey form and the Perceived Social Competence Scale. Results. Students' average age is 20.09 (±1.6); 80.6% are female, 49.4% study nursing-midwifery, 16.12% are current smokers, and 21.1% regularly consume alcohol. Risk factors for cigarette and alcohol usage have been evaluated as students whose parent smoke or drink, who live alone or with friends, who are male, and who don't have adequate parental support. Conclusion. The results of this study shows that students and families need more education about cigarette and alcohol usage, and students need more support from their friends and parents.

Keywords
Alcohol • Cigarettes • Faculty of Health Sciences students • Perceived social competence • Addiction

---

Persons need to be equipped with various competencies and skills for adapting to and maintaining their environment (Akın et al., 2012; Traş & Arslan, 2013). These competencies and skills explain one's perspectives of self and skills (Yayan & Çelebioğlu, 2016).

Perceived social competence forms when a person displays competent behaviors in one's environment and these behaviors are positively accepted and supported by the surrounding people (Akın et al., 2012). Perceived social competence contributes to enhanced academic achievement and well-being, as well as to a decrease in substance usage and risky behaviors (Anderson-Butcher, Iachini, & Amorose, 2008). When individuals experience problems in their lives, if they do not receive support during these processes, their perception of social competence does not develop and they tend to perform risky behaviors (Anderson-Butcher et al., 2008). Individuals who do not receive support during these processes and are unable to deal with their problems may tend to use substances as an escape (Anderson-Butcher et al., 2008). Cigarettes and alcohol are the most preferred substances for escaping from problems these days (Roberts, Glod, Kim, & Hounchell, 2010).

Attending a university is a period when individuals experience the most problems in their lives (Cooke et al., 2017; Yalçın, Eşsizoğlu, Akkoç, Yaşan, & Gürgen, 2009). When students begin a new life separate from their parents, they experience anxieties regarding: fear of loneliness, adapting to a new environment, financial difficulties, and post-graduation employment concerns (Hagger-Johnson et al., 2013; Hodder et al., 2017; Horgan, Sweeney, Behan, & McCarthy, 2016; O'Loughlin, Dugas, O'Loughlin, Karp, & Sylvestre, 2014). If their perceived social competence does not develop or they do not receive enough support from their friends and parents when experiencing these problems, they tend to use alcohol and cigarettes (Haardörfer et al., 2016; Helmer et al., 2016; Lehmann, von Lindeman, Klewer, & Kugler, 2014).

Cigarette and alcohol usage is an important public-health problem all over the world (Baykan et al., 2013; Jalilian et al., 2015; Potter, Galbraith, Jensen, Morrison, & Heimberg, 2016). Cigarette and alcohol usage, which are preventable habits and at worst cause death, becomes more widespread among youths each day (Evans-Polce, Lanza, & Maggs, 2016; Taheri, Ghorbani, Salehi, & Sadeghnia, 2014). Many studies have focused on determining the factors that increase or decrease the risk of engaging in substance usage among university students (Allahverdipour, Abbasi-Ghahramanloo, Mohammadpoorasl, & Nowzari, 2015). Insufficient research is found regarding the role of perceived social competence on substance usage. Therefore, this study aims to identify the reason for cigarette and alcohol usage among students in the Faculty of Health Sciences, as they will become health professionals in the future, and to examine the role of perceived social competence on cigarette and alcohol usage.

Method

Study Design and Study Group

The descriptive design was applied in this research article. The population of the study includes 1,450 students from Trakya University's Faculty of Health Sciences in the 2015-2016 academic year. The study has been conducted with 940 students (65% participation) who were willing to participate in the study and had completely filled out the survey forms.

Data Collection Tools

Data have been collected using a survey form and the Perceived Social Competence Scale (PSCS). The researchers prepared the survey form, which consists of the literature results on factors that affect alcohol and cigarette usage and perceived social competence (Avcı, İlhan, Civil, Özdemirkan, & Bumin, 2014; Erol Yayla, 2012; Karaçam Ö, 2014; Ulukoca, Gökgöz, & Karakoç, 2013; Yengil, 2014).

The Perceived Social Competence Scale. Developed by Anderson-Butcher, Iachini, and Amorose (2008), it is a self-reporting assessment tool that evaluates the concept of social competence based on both an individual's self-perceptions in social relations and what information the individual provides about the self. The validity and reliability study in Turkish was conducted by Sarıçam, Akın, Akın, and Çardak, (2013). The PSCS consists of six items and uses a 5-point Likert-type scale ("1" = Strongly Disagree, "5" = Strongly Agree). The scores that can be obtained from the scale range from 6 to 30. The scale has no reverse-coded items.

Data were collected between December 2015 and February 2016. The students filled out the surveys in their classrooms while supervised by the researchers. Before filling out the form, the students were informed about the study. The voluntary students were requested to fill in the questionnaire form and the PSCS without writing their names down. Filling out the survey form and scale took approximately 10 minutes.

Data Analysis

The study's data have been analyzed in the program, SPSS 19.0. Students' socio-demographic characteristics and behaviors towards cigarette and alcohol usage were evaluated using descriptive statistics. The factors that affect students' cigarette and alcohol usage were evaluated with multiple logistic regression analysis. The p values less than 0.05 have been accepted as statistically significant.

Ethical Approach

Written permission for the study (permission no. 22/12 dated 12/4/2015) was received from the institution, Trakya University's Ethical Committee of the Faculty of

Medicine. The purpose of the study was explained to the students before distributing the questionnaire forms and scales. The questionnaire forms and scales were applied to voluntary students after receiving their verbal consent.

Results

The mean age of the sample is 20 (±1.60; min. = 17, max. = 30). Of the students, 80.6% are female, 33.3% are sophomores, 49.4% study nursing-midwifery, and 74.9% reside in the dormitory (see Table 1).

Table 1
Characteristics of Students (N = 940)

VARIABLES	Mean ± SD	Min-Max
Age	20 ± 1.60	17-30
	f	%
Gender		
Female	758	80.6
Male	182	19.4
Class		
Freshman	308	32.8
Sophomore	313	33.3
Junior	208	22.1
Senior	111	11.8
Department		
Nursing/Midwife	464	49.4
Physical Therapy and Rehabilitation	157	16.7
Nutrition and Dietetics	96	10.2
Health Management	223	23.7
Living Spaces		
With Parents	64	6.8
Dormitory	704	74.9
With Friends	148	15.8
Alone	24	2.6

When examining students' and their parents' cigarette usage status, 20.6% of students have used cigarettes once during their lives and 16.1% still smoke, 20.1% of their mothers and 41.7% of their fathers are smokers (see Table 2).

When examining students' and their parents' alcohol-usage status, 11.2% of students has used alcohol once during their lives and 21.1% of them still drink; 4.5% of their mothers and 21.9% of their fathers use alcohol (see Table 2).

Table 2
Cigarette and Alcohol Usage Status of Students and Their Parents (N = 940)

VARIABLES	Cigarette Usage		Alcohol Usage	
	f	%*	*f*	%*
Students				
Once in their life	194	20.6	105	11.2
Within the last year	78	8.3	107	11.4
Within the last month	56	6.0	78	8.3
Still using	151	16.1	198	21.1
Mothers				
Yes	189	20.1	42	4.5
No	751	79.9	898	95.5
Fathers				
Yes	392	41.7	206	21.9
No	548	58.3	734	78.1

* The number of students has been calculated based on those who replied.

When examining the reasons for a decline in students' cigarette and alcohol usage, 73.5% of students stated not smoking because it is unhealthy, 3.6% do not smoke because of their religious beliefs, and 3.2% do not smoke because of its high cost; 39.8% of students stated not using alcohol because it is unhealthy, and 32.3% do not use alcohol because of their religious beliefs (see Table 3).

Table 3
The Reasons of Decline Students' Cigarette and Alcohol Usage (N = 940)

VARIABLES	Cigarette		Alcohol	
	f	%*	*F*	%*
Family Pressure	7	0.7	7	0.7
Religious Belief	34	3.6	303	32.3
High Price	30	3.2	18	1.9
Unhealthy	691	73.5	374	39.8

* The number of students has been calculated based on those who replied.

When analyzing the reasons why students began using cigarettes, 23.0% of students stated started smoking out of curiosity, 14.6% due to stress, and 13.6% due to peer influence. When examining the reasons why students began using alcohol, 23.8% of students stated starting drinking alcohol for fun, 12.3% due to curiosity, and 6.7% due to peer pressure (see Table 4).

When examining the situations in which students use cigarettes, 50.5% of students stated smoking in stressful times, 8.4% when angry, 6.6% when feeling desperate about the future, 7.9% when feeling alone, and 4.8% when experiencing problems with their parents (see Table 5).

When examining the situations in which students use alcohol, 5.9% of students stated using alcohol in stressful times, 3.8% when feeling desperate about the future, 3.4% when angry, and 3.4% when feeling alone (see Table 5).

Table 4
Reasons of Began Cigarette and Alcohol Usage (N = 940)

Variables	Cigarette		Alcohol	
	f	%*	*F*	%*
Curiosity				
Yes	216	23.0	116	12.3
No	260	27.7	282	30.0
Peer Influence				
Yes	128	13.6	63	6.7
No	346	36.8	337	35.9
Parents' Influence				
Yes	13	1.4	4	0.4
No	461	49.0	396	42.1
Stress				
Yes	137	14.6	31	3.3
No	340	36.2	369	39.3
Fun				
Yes	95	10.1	224	23.8
No	382	40.6	181	19.3

* The number of students is calculated based on those who replied.

Logistic regression is particularly popular because its results are relatively easy to interpret and asks no assumption about distribution of data. Because the dependent variables of our study are binary variables and several independent variables have been included in the models, we have preferred to use a multiple binary logistic regression model for determining which factors are significant on the dependent variables. To analyze our data, dependent variables have been coded as either "0" for non-smokers/non-alcohol consumers or "1" for smokers/alcohol consumers. For the categorical independent variables, lower-risk categories for alcohol consumption and smoking have been considered as reference categories. The odds-ratios (*OR*) obtained from multiple logistic regression shows how many times the risk or probability of an event increases. When comparing reference categories and for numerical value, *OR*s give how many times the risk of an event increases per one unit increase in a variable's numerical value.

The result of the Omnibus Test of Model Coefficients is significant ($p = 0.001$). The -2 log-likelihood value of the model is 686.302, Cox & Snell's R^2 is 11.2%, and the Nagelkerke R^2 of the model is 19.6%. The correct classification rate (*CCR*) for smoking is 10.6% and 98.7% for nonsmoking (see Table 6).

According to the model results, males are 3.5 times more likely to smoke than girls. Students who living in dormitory are 3.6 times more likely to smoke than students who live alone. Students who live with friends are 6.5 times more likely to smoke than students who live alone. Students whose mothers smoke are 1.9 times more likely to smoke than students whose mothers do not smoke. Students who lack

Table 5
Situations Involving Cigarette or Alcohol Usage (N = 940)

Variables	Cigarette		Alcohol	
	F	*%**	*f*	*%**
Stress				
Yes	176	50.5	55	5.9
No	172	49.5	275	29.3
Anger				
Yes	79	8.4	32	3.4
No	267	28.4	299	31.8
Feel desperate about future				
Yes	62	6.6	36	3.8
No	283	30.1	294	31.3
Live problems with parents				
Yes	45	4.8	11	1.2
No	300	31.9	319	33.9
Feel alone				
Yes	74	7.9	32	3.4
No	271	28.8	298	31.7
Live in disbelief				
Yes	49	5.2	14	1.5
No	296	31.5	316	33.6
When life come meaningless				
Yes	63	6.7	28	3.0
No	283	30.1	302	32.1

* The number of students has been calculated based on those who replied.

familial support when experiencing problems are 2.7 times more likely to smoke than students who have familial support (see Table 6).

Table 6
Multiple Binary Logistic Regression Model for Determining Important Factors on Smoking (N = 940)

VARIABLES	*ß*	*OR*	95% CI		*p*
			Lower	Upper	
Gender *Male vs. Female*	1.252	3.499	2.287	5.354	**0.001***
Live with *Family vs. Alone*	0.273	1.314	0.530	3.259	0.555
Live in *Dormitory vs. Alone*	1.290	3.632	1.390	9.493	**0.008***
Live with *Friends vs. Alone*	1.868	6.474	2.045	20.498	**0.001***
Status of mother cigarette usage *Yes vs. No*	0.647	1.909	1.206	3.023	**0.006***
Status of father cigarette usage *Yes vs. No*	0.366	1.443	0.964	2.159	0.075
Do you feel yourself alone? *Yes vs. No*	0.288	1.334	0.808	2.201	0.260
Do you feel yourself academic fails? *Yes vs. No*	0.358	1.430	0.930	2.199	0.103
Can you able to contact people easily? *No vs. Yes*	-0.403	0.669	0.396	1.130	0.133
Are you supported by your friends when you have a problem? *No vs. Yes*	0.268	1.308	0.742	2.305	0.353
Are you supported by your family when you have a problem? *No vs. Yes*	0.979	2.663	1.447	4.898	**0.002***
PSCS Total score	-0.033	0.967	0.924	1.013	0.156

ß = regression coefficient; *OR* = odds rate; *CI* = confidence interval.
* *p* < 0.05 level of significance.

The result of the Omnibus Test of Model Coefficients is significant ($p = 0.001$). The -2 log-likelihood value of the model is 804.29, Cox & Snell's $R^2 = 16\%$, and Nagelkerke R^2 for the model = 24.8%. The *CCR* for alcohol consumers is 24.2 % and 98.1% for non-consumers (see Table 7)**.**

According to the model results, boys are 1.7 times more likely to use alcohol than girls. Students whose mothers use alcohol are 13.7 times more likely to use alcohol than students whose mothers don't use alcohol. Students whose fathers use alcohol are 4.3-times more likely to use alcohol than students whose fathers don't use alcohol (see Table 7).

Table 7

Multiple Binary Logistic Regression Model for Determining Important Factors on Alcohol Usage (N = 940)

VARIABLES	*ß*	*OR*	95% CI		*p*
			Lower	Upper	
Gender *Male vs. Female*	0.557	1.746	1.133	2.690	**0.012***
Live with *Family vs. Alone*	0.149	1.160	0.544	2.472	0.700
Live in *Dormitory vs. Alone*	0.665	1.944	0.838	4.512	0.122
Live with *Friends vs. Alone*	0.665	1.944	0.623	6.063	0.252
Status of mother alcohol usage *Yes vs. No*	2.623	13.781	5.321	35.691	**0.001***
Status of father alcohol usage *Yes vs. No*	1.465	4.327	2.955	6.336	**0.001***
Do you feel yourself alone? *Yes vs. No*	-0.150	0.860	0.531	1.395	0.542
Do you feel yourself academic fails? *Yes vs. No*	0.244	1.276	0.853	1.910	0.235
Can you able to contact people easily? *Yes vs. No*	0.524	1.689	1.034	2.759	0.360
Are you supported by your friends when you have a problem? *No vs. Yes*	-0.065	0.937	0.562	1.561	0.802
Are you supported by your family when you have a problem? *No vs. Yes*	0.210	1.233	0.659	2.307	0.512
PSCS Total score	-0.035	.966	0.925	1.008	0.115

ß = regression coefficient; *OR* = odds rate; *CI* = confidence interval.

* *p* < 0.05 level of significance.

Discussion

This study has been conducted to identify the role of perceived social competence on cigarette and alcohol usage among Faculty of Health Sciences students; 16.1% of the students stated still using cigarettes, and 21.1% stated still using alcohol (see Table 2). Karakoyun et al. (2013) reported that 14.3% of students in the Faculty of Medicine smoke and 4% use alcohol; Avcı et al. (2014) found that 18.8% of students in the Faculty of Medicine use tobacco and tobacco products, and 22.5% use alcohol and alcohol products; Allahverdipour et al. (2015) stated that 15.8% of students at a university in Iran smoke; and Taheri et al. (2014) identified that 9.8% of the students in the Medical Faculty smoke. Berg et al. (2015) stated that 48.4% of university students use cigarettes. Rahman et al. (2014) determined that 14.6% of university students use cigarettes, and 60.9% use alcohol. Kruger, Van Walbeek, and Vellios

(2016) found students at the Faculty of Health Sciences in South Africa to smoke less than other faculties' students. When examining the results of the current study, Faculty of Health Sciences students clearly use less cigarettes and alcohol than other students. The Ministry of Health indicated that, according to the results of the Global Adult Tobacco Survey Turkey Report 2012, the rate of smoking in Turkey has decreased from 31.2% to 27.1%. When interpreting these studies' results with this report, most of the smokers in Turkey can be said to be youths. Because the students who will become health care professionals in the future are expected to be a role model for society, to observe such a high rate is depressing.

Most students in this study stated not using alcohol and cigarettes due to harmful effects and their religious beliefs (see Table 3). Karaçam and Totan (2014) stated that the students with strong religious beliefs and high academic success avoid smoking and alcohol usage. Yalçın et al. (2009) stated substance use to be less for students with high/average academic success and strong religious beliefs. Taheri et al. (2014) determined 69.1% of students in a medical faculty to not smoke due to religious beliefs.

The study identified that most students began smoking out of curiosity due to stress and peer pressure, and began using alcohol for fun and curiosity (see Table 4). The literature states students' smoking and drinking to be mostly due to peer pressure. Huang et al. (2014) stated adolescents with friends that drink to have higher risk-levels for using alcohol. Brooks-Russell et al. (2014) determined that adolescents influence their friends to use cigarettes and alcohol, but male students are more affected by their friends. Taheri et al. (2014) determined 24.9% of students in the Medical Faculty to have started smoking due to peer pressure and 27.6% due to stress. Bravo et al. (2017) stated that students began alcohol usage to cope with their problems. Saddleson et al. (2016) stated that 57.9% of university students use e-cigarette for enjoyment. Baykan et al. (2013) stated that students in the Medical Faculty had started smoking mostly due to stress. Erol Yayla (2012) and Yengil (2014) stated students to have started smoking or drinking alcohol due to its pleasure-giving effects. In the results of this study, students can be said to have mostly started smoking and drinking alcohol due to peer pressure, out of curiosity, and to relieve stress. Students' perceived social competence being undeveloped or having a lack of support from their family causes them to tend to use cigarettes and alcohol for coping with their problems and for relaxing.

Our study determined that most students use cigarettes and alcohol when they experience stress, feel angry, or feel desperate about the future (see Table 5). Murphy and Flory (2017) stated that college students use cigarettes because of social/environmental influences, to develop their tolerance, and for cognitive enhancement. Gebreslassie et al. (2013) determined 40.6% of the students to have used alcohol

for relaxation and 37.7% to have used cigarettes for stress relief. Allahverdipour et al. (2015) determined that university students use cigarettes when they feel alone or when they have had problems with their family; Karaçam (2014) found that university students use cigarettes and alcohol when they feel insecure, alone, or angry. Piko et al. (2015) stated that male students smoke for relief. Roberts et al. (2010) found smoking to be related to university students' depression, and 47% of smokers had moderate depression levels. According to the results in the literature and our findings, students can be said to use cigarettes and alcohol for relief when they experience problems, don't have enough support from their friends and parents, or don't want to experience depression, stress, or anxiety.

Additionally, the results of this study reveal that student who are male, who live dormitories or with friends, whose mothers use cigarette, and who are unsupported by their family when experiencing problems are more at risk for cigarette use (see Table 6). Our results parallel the literature's, where males smoke and use alcohol more than females (Allahverdipour et al., 2015; Colder, Shyhalla, & Frndak, 2018; Littlefield, Gottlieb, Cohen, & Trotter, 2015; Taheri et al., 2014). Sutfin et al. (2015) stated that college students start cigarettes because of parental effects. Pentz et al. (2015) found that adolescents are affected by their parents in using e-cigarettes. Huang et al. (2014) stated adolescents whose mother and father use cigarettes or alcohol are at risk for alcohol and cigarette use. Other studies conducted with university students have determined that students who live alone or with their friends (Allahverdipour et al., 2015; Karakoyun et al., 2013) smoke and drink alcohol more than students who live in dormitories or with their families (Ulukoca et al., 2013).

Another result of this study reveals that students who are male or whose mothers and fathers use alcohol are more at risk for using alcohol (see Table 7). Conducted research states that males consume more alcohol than females (Forster, Grigsby, Bunyan, Unger, & Valente, 2015; Huang et al., 2014; Piko, Varga, & Wills, 2015). Meanwhile, mother and fathers' alcohol usage has been accepted as a risk factor for students' alcohol use in the present study. Parents, who are known to play a most important role in child care, are role models to their children through their behaviors. However, when we consider our results, parents can be said to be a bad role model for students through their unhealthy behaviors. Baykan et al. (2013) stated that the students whose parents use cigarettes smoke more than those with parents who don't. Akçalı et al. (2013) stated students' smoking habits to not be related to parental cigarette usage but rather to their friends cigarette usage.

In this study, we found no relation for perceived social competence scores with students' alcohol or cigarette usage. More students stated being supported by their family/friends when experiencing problems, but students who use cigarettes stated

not being supported by their family when experiencing a problem. According to this result, we can say that students who are unsupported or whose perceived social competence has not been developed tend to use cigarettes or alcohol. In others research, Khajehdaluee et al. (2013) stated students who use cigarettes and alcohol to have low self-esteem scores. Zullig et al. (2014) stated African female adolescents to have low emotional self-efficacy and more had tried smoking and alcohol use than the other students. Huang et al. (2014) determined adolescents with few friends to be at greater risk of using cigarettes than students with more friends.

Conclusion

In conclusion, students who are male, who live alone or with friends, whose mother and father use cigarettes or alcohol, and who are unsupported by their families when having a problem are more at risk for using cigarettes and alcohol.

Students are considered to be aware of the unhealthy effects of cigarette and alcohol usage, but they continue to exhibit these risky behaviors because they are unsupported when experiencing stress, anger, depression, or loneliness and when they have a problem they cannot cope with without using these substances. Thus, organizing training programs is suggested for coping with their problems, and training programs should include students' families and friends, as they have a big influence on cigarette and alcohol usage. Another recommendation is that mothers and fathers should know the meaning of perceived social competence, parents should be aware of their child's competence, and they should support their children's competent behaviors.

References

Akın, A., Akın, U., Gediksiz, E., Arslan, S., Sarıçam, H., & Yalnız, A. (2012, September). *Algılanan Sosyal Yetkinlik Ölçeği Türkçe Formu: Geçerlik ve güvenirlik çalışması* [The Adaptation of Perceived Social Competence Scale to Turkish: The study of validity and reliability]. Paper presented at the III. Ulusal Eğitimde ve Psikolojide Ölçme ve Değerlendirme Kongresi, Bolu Abant İzzet Baysal Üniversitesi.

Allahverdipour, H., Abbasi-Ghahramanloo, A., Mohammadpoorasl, A., & Nowzari, P. (2015). Cigarette smoking and its relationship with perceived familial support and religiosity of university students in Tabriz. *Iranian Journal of Psychiatry*, *10*(3), 136–143.

Anderson-Butcher, D., Iachini, A. L., & Amorose, A. J. (2008). Initial reliability and validity of the perceived social competence scale. *Research on Social Work Practice*, *18*(1), 47–54.

Avcı, E., İlhan, M., Civil, E. F., Özdemirkan, T., & Bumin, M. (2014). Bir Tıp fakültesi öğrencilerinin tütün, alkol ve ürünlerini kullanım sıklığı ve risk etmenleri [Prevalance of the tobacco alcohol and products use of a faculty of medicine students and risk factors]. *Bağımlılık Dergisi*, *15*(2), 48–55.

Baykan, Z., Naçar, M., Bayazıt, M., Tanşu, M. S., Muslu, M., Arslan, E., & Şahan, M. (2013, 27-37 Ekim). *Erciyes Üniversitesi Tıp Fakültesi dönem I öğrencilerinin sigara içme durumları ve "Tütün Ürünlerinin Zararlarının Önlenmesi ve Kontrolü Hakkında Kanuna" ilişkin bazı görüşleri.* Paper presented at 16.Ulusal Halk Sağlığı Kongresi, Antalya, Turkey.

Berg, C. J., Stratton, E., Schauer, G. L., Lewis, M., Wang, Y., Windle, M., & Kegler, M. (2015). Perceived harm, addictiveness, and social acceptability of tobacco products and marijuana among young adults: Marijuana, hookah, and electronic cigarettes win. *Substance Use & Misuse*, *50*(1), 79–89.

Bravo, A. J., Pilatti, A., Pearson, M. R., Mezquita, L., Ibáñez, M. I., & Ortet, G. (2017). Depressive symptoms, ruminative thinking, drinking motives, and alcohol outcomes: A multiple mediation model among college students in three countries. *Addictive Behaviors*, *76*, 319–327. http://dx.doi.org/10.1016/j.addbeh.2017.08.028

Brooks-Russell, A., Simons-Morton, B., Haynie, D., Farhat, T., & Wang, J. (2014). Longitudinal relationship between drinking with peers, descriptive norms, and adolescent alcohol use. *Prevention Science*, *15*(4), 497–505.

Colder, C. R., Shyhalla, K., & Frndak, S. E. (2018). Early alcohol use with parental permission: Psychosocial characteristics and drinking in late adolescence. *Addictive Behaviors*, *76*, 82–87.

Cooke, M. E., Neale, Z. E., Barr, P. B., Myers, J., Dick, D. M., Kendler, K. S., & Edwards, A. C. (2017). The role of social, familial, and individual-level factors on multiple alcohol use outcomes during the first year of university. *Alcoholism: Clinical and Experimental Research*, *41*(10), 1783–1793.

Erol Yayla, M. (2012). Afyon Sultandağı Meslek Yüksekokulu öğrencilerinde alkol kullanım yaygınlığı ve alkol kullanımını etkileyen faktörler [Alcohol consumption prevelance and factors affecting alcohol consumption among Afyon Sultandagi Vocational High School students]. *Smyrna Tıp Dergisi*, *2*(2), 28–31.

Evans-Polce, R., Lanza, S., & Maggs, J. (2016). Heterogeneity of alcohol, tobacco, and other substance use behaviors in US college students: A latent class analysis. *Addictive Behaviors*, *53*, 80–85.

Forster, M., Grigsby, T. J., Bunyan, A., Unger, J. B., & Valente, T. W. (2015). The protective role of school friendship ties for substance use and aggressive behaviors among middle school students. *Journal of School Health*, *85*(2), 82–89.

Gebreslassie, M., Feleke, A., & Melese, T. (2013). Psychoactive substances use and associated factors among Axum University students, Axum Town, North Ethiopia. *BMC Public Health*, *13*(1), 693.

Haardörfer, R., Berg, C. J., Lewis, M., Payne, J., Pillai, D., McDonald, B., & Windle, M. (2016). Polytobacco, marijuana, and alcohol use patterns in college students: A latent class analysis. *Addictive Behaviors*, *59*, 58–64.

Hagger-Johnson, G., Bell, S., Britton, A., Cable, N., Conner, M., O'Connor, D. B., & Bewick, B. M. (2013). Cigarette smoking and alcohol drinking in a representative sample of English school pupils: Cross-sectional and longitudinal associations. *Preventive Medicine, 56*(5), 304–308.

Helmer, S. M., Sebena, R., McAlaney, J., Petkeviciene, J., Salonna, F., & Mikolajczyk, R. T. (2016). Perception of high alcohol use of peers is associated with high personal alcohol use in first-year university students in three central and Eastern European Countries. *Substance Use & Misuse, 51*(9), 1224–1231.

Hodder, R. K., Freund, M., Bowman, J., Wolfenden, L., Campbell, E., Dray, J., & Wiggers, J. (2017). Effectiveness of a pragmatic school-based universal resilience intervention in reducing tobacco, alcohol and illicit substance use in a population of adolescents: Cluster-randomised controlled trial. *BMJ Open, 7*(8), e016060.

Horgan, A., Sweeney, J., Behan, L., & McCarthy, G. (2016). Depressive symptoms, college adjustment and peer support among undergraduate nursing and midwifery students. *Journal of Advanced Nursing, 72*(12), 3081–3092.

Huang, G. C., Unger, J. B., Soto, D., Fujimoto, K., Pentz, M. A., Jordan-Marsh, M., & Valente, T. W. (2014). Peer influences: The impact of online and offline friendship networks on adolescent smoking and alcohol use. *Journal of Adolescent Health, 54*(5), 508–514.

Jalilian, F., Karami Matin, B., Ahmadpanah, M., Ataee, M., Ahmadi Jouybari, T., Eslami, A. A., & Mirzaei Alavijeh, M. (2015). Socio-demographic characteristics associated with cigarettes smoking, drug abuse and alcohol drinking among male medical university students in Iran. *Journal of Research in Health Sciences, 15*(1), 42–46.

Karaçam Ö, T. T. (2014). Ege Üniversitesi öğrencileri arasında bağımlılık yapıcı madde kullanımının çok boyutlu ölçekleme yöntemiyle incelenmesi [Investigation to the use of the addictive substances among the students of Ege University via multidimensional scaling]. *Anatolian Journal of Psychiatry; 15*, 116–123.

Karakoyun, A. R., Sayın, E., Kıran, S., Bektaş, N. E., Şeylan, N., Küçüktürkmen, İ., & Şendur, İ. (2013, 27-31 Ekim). *Bir tıp fakültesi öğrencilerinde alkol ve sigara kullanma durumunun incelenmesi.* Paper presented at 16.Ulusal Halk Sağlığı Kongresi, Antalya, Turkey.

Khajehdaluee, M., Zavar, A., Alidoust, M., & Pourandi, R. (2013). The relation of self-esteem and illegal drug usage in high school students. *Iranian Red Crescent Medical Journal, 15*(11), e7682

Lehmann, F., von Lindeman, K., Klewer, J., & Kugler, J. (2014). BMI, physical inactivity, cigarette and alcohol consumption in female nursing students: A 5-year comparison. *BMC Medical Education, 14*(1), 82. http://dx.doi.org/10.1186/1472–6920–14–82

Littlefield, A. K., Gottlieb, J. C., Cohen, L. M., & Trotter, D. R. (2015). Electronic cigarette use among college students: Links to gender, race/ethnicity, smoking, and heavy drinking. *Journal of American College Health, 63*(8), 523–529.

Murphy, K. G., & Flory, K. (2017). Motives underlying smoking in college students with ADHD. *The American Journal of Drug and Alcohol Abuse, 43*(3), 350–359.

O'Loughlin, J. L., Dugas, E. N., O'Loughlin, E. K., Karp, I., & Sylvestre, M. P. (2014). Incidence and determinants of cigarette smoking initiation in young adults. *Journal of Adolescent Health, 54*(1), 26–32. http://dx.doi.org/10.1016/j.jadohealth.2013.07.009

Pentz, M. A., Shin, H., Riggs, N., Unger, J. B., Collison, K. L., & Chou, C.-P. (2015). Parent, peer, and executive function relationships to early adolescent e-cigarette use: A substance use pathway? *Addictive Behaviors, 42*, 73–78.

Piko, B. F., Varga, S., & Wills, T. A. (2015). A study of motives for tobacco and alcohol use among high school students in Hungary. *Journal of Community Health, 40*(4), 744–749.

Potter, C. M., Galbraith, T., Jensen, D., Morrison, A. S., & Heimberg, R. G. (2016). Social anxiety and vulnerability for problematic drinking in college students: The moderating role of post-event processing. *Cognitive Behavioral Therapy, 45*(5), 380–396. http://dx.doi.org/10.1080/16506073.2016.1190982

Rahman, S., Chang, L., Hadgu, S., Salinas-Miranda, A. A., & Corvin, J. (2014). Peer reviewed: Prevalence, Knowledge, and practices of hookah smoking among university students, Florida, 2012. *Preventing Chronic Disease, 11*, E214.

Roberts, S. J., Glod, C. A., Kim, R., & Hounchell, J. (2010). Relationships between aggression, depression, and alcohol, tobacco: Implications for healthcare providers in student health. *Journal of the American Academy of Nurse Practitioners, 22*(7), 369–375.

Saddleson, M., Kozlowski, L., Giovino, G., Goniewicz, M., Mahoney, M., Homish, G., & Arora, A. (2016). Enjoyment and other reasons for electronic cigarette use: Results from college students in New York. *Addictive Behaviors, 54*, 33–39.

Sarıçam, H., Akın, A., Akın, Ü., & Çardak, M. (2013) Algılanan Sosyal Yetkinlik Ölçeğinin Türkçeye Uyarlanması: Geçerlik ve güvenirlik çalışması [The Adaptation of Perceived Social Competence Scale to Turkish: The Study of Validity and Reliability]. *The Journal of Academic Social Science Studies, 6*(3), 591–600.

Sutfin, E. L., Sparks, A., Pockey, J. R., Suerken, C. K., Reboussin, B. A., Wagoner, K. G., & Wolfson, M. (2015). First tobacco product tried: Associations with smoking status and demographics among college students. *Addictive Behaviors, 51*, 152–157.

Taheri, E., Ghorbani, A., Salehi, M., & Sadeghnia, H. R. (2014). Cigarette smoking behavior and the related factors among the students of Mashhad University of medical sciences in Iran. *Iranian Red Crescent Medical Journal, 17*(1), e16769.

Traş, Z., & Arslan, E. (2013). Ergenlerde sosyal yetkinliğin, algılanan sosyal destek açısından incelenmesi [An investigation of perceived social support and social self efficacy in adolescents]. *İlköğretim Online, 12*(4), 1133–1140.

Ulukoca, N., Gökgöz, Ş., & Karakoç, A. (2013). Kırklareli Üniversitesi öğrencileri arasında sigara, alkol ve madde kullanım sıklığı [Prevalence of tobacco, alcohol, and substance use in Kirklareli University students]. *Fırat Tıp Dergisi, 18*(4), 230–234.

Yalçın, M., Eşsizoğlu, A., Akkoç, H., Yaşan, A., & Gürgen, F. (2009). Dicle üniversitesi öğrencilerinde madde kullanımını belirleyen risk faktörleri [Risk factors associated with substance use among Dicle University students]. *Klinik Psikiyatri Dergisi, 12*(3), 125–133.

Yayan, E. H., & Çelebioğlu, A. (2016). Çocuk-Ergen Sağlık Davranışları Sosyal Destek Ölçeğinin geçerlik ve güvenirlik çalışması [Validity and reliability study of Child-Adolescentsocial Support Scale for Health Behaviors]. *Journal of Anatolia Nursing and Health Sciences, 19*(2), 79–85.

Yengil, E. (2014). Tıp fakültesi öğrencilerinin sigara içme durumu ve sigara ile ilgili tutumları [Smoking among medical school students and attitudes against smoking]. *Konuralp Tıp Dergisi, 2014*(3), 1–7.

Zullig, K. J., Teoli, D. A., & Valois, R. F. (2014). Emotional self-efficacy and alcohol and tobacco use in adolescents. *Journal of Drug Education, 44*(1–2), 51–66.