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Extended Abstract

Factors Affecting Substance Non-Use Behaviors of High School Students*

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Abstract

This study was performed to determine the factors affecting the substance non-use behaviors of adolescents. This cross-sectional and correlational study was conducted with 983 students studying at three high schools during the 2015-2016 academic year and who were not using substances. The study was designed by cluster sampling method, and all volunteer students were included in the study. Data were collected using the Personal Information Form, Substance Abuse Information Questionnaire, and Self-Efficacy Scale in Preventing Abuse. Appropriate statistical analyses were used to assess the data. It was determined that 43% of the individuals not using substances were females and 57% were males. When the reasons for their non-use were examined in terms of sex, type of school, class, age group, addiction information score, and self-efficacy, statistically significant differences were seen between groups (p < .05). It was determined that students abstained from using substances because they were afraid of becoming addicted and of suffering psychological and physical problems, because addiction contradicted their beliefs, their families did not approve of such use, they did not want to associate with individuals who used addictive substances, and their friends did not use such substances, because substance use was expensive, contradicted their principles, and led to a loss of energy, ambition, and control, and because they were afraid of being caught by the police.

Keywords

Adolescent • Nursing • Reasons for non-use • Substance abuse • Self-efficacy

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Addictive substance abuse, a risky behavior among adolescents, is a common problem globally (Kann et al., 2014; Marschall-Lévesque et al., 2014). Individual and environmental risk factors and protective factors should be investigated to determine the reasons for substance abuse in adolescents (Albayrak & Balcı, 2014). Some studies emphasize adolescents' reasons for not using addictive substances. Based on the results of these studies, adolescents do not use addictive substances because of the potential harm to human health (Koca & Oğuzöncül, 2015; Küçükkavruk, 2002; Pirinçci & Erdem, 2004), because their religion considers it a sin (Hemphill et al., 2011; Pirinçci & Erdem, 2004; Razali & Kliewer, 2015), or because it can affect their academic success (Razali & Kliewer, 2015).

A multidisciplinary team approach is necessary to fight against addictive substance use and dependency effectively (Albayrak & Balci, 2014). Prevention of harmful habits such as substance abuse should be the primary goal of nurses working in the units where care service is offered to a healthy population, such as in schools, in workplace nursing, and in community health centers. Nurses in these units can take the initiative to evaluate each person they serve and their families in terms of substance abuse risk, identify individuals who display potential for risk, and avoid those risks (Asi-Karakas & Ersöğütçü, 2016). Nurses can develop plans for treatment and rehabilitation of adolescents who have a diagnosis of substance abuse and, if necessary, refer their families to the relevant health institutions. In this context, having knowledge of adolescents whose behaviors do not include using addictive substances will guide nurses in the prevention and treatment process of substance abuse in other adolescents. Most studies of substance abuse have focused on substance abuse frequency and the identification of groups at risk. There have been no studies conducted in Turkey to determine behavior of adolescents who do not use addictive substances. Therefore, this study aims to determine the factors that affect behavior among those adolescents who do not use addictive substances.

Method

The population of this cross-sectional and relational study consisted of high school students who were educated in the 2015–2016 academic year in the Düzce province center in Turkey. There are 18 public and 9 private high schools in Düzce and a total of 19,908 students (9,517 female, 10,292 male). A disproportionate cluster sampling method was used to select the study sample of 983 students who did not use addictive substances, who voluntarily agreed to participate in the study, and who filled out the relevant data collection forms completely.

Research data were collected using a personal information form, a questionnaire on substance abuse, and the Self-Efficacy in Protecting from Substance Dependence Scale. The IBM SPSS 22 program was used for statistical evaluations: p < 0.05 was considered statistically significant. The normality and variance homogeneity

assumptions of quantitative variables were examined using the Kolmogorov-Smirnov and Levine tests, respectively. The Kruskal-Wallis (post-hoc Dunn test) and Mann-Whitney U tests were used to compare quantitative variables (i.e., dependency knowledge score, total, and subscale self-efficacy scores) of the groups organized according to participating students' socio-demographic characteristics. Chi-square (post-hoc Bonferroni adjusted method) and binomial tests were used to compare the ratios of the students' reasons for not using addictive substances.

Results

The students' reasons for not using addictive substances were examined in terms of gender, school type, age group, addiction information score, and self-efficacy. The ratios of the male students who did not use addictive substances because of fear of having mental disorders (p = .001), physical discomfort caused by substance use (p = .003), fear of becoming addicted (p = .001), contradicting their religious beliefs (p = .001), family disapproval (p = .031), not wanting to be with addictive substance users (p = .001), having no friends who used an addictive substance (p = .001), cost of using those substances (p = .003), and that those substances contradict their principles (p < .001) were found to be significantly higher than those of the female students. Only the ratio of the female students who did not use addictive substances because of fear of being caught by the police was found to be significantly higher than those of the male students (p = .001).

Table 1 Distribution of Students' Reasons for not Using Substance by Gender (n = 983)

	$Gender^{\scriptscriptstyle{arphi}}$							
	Female		Male		Total			
	n	%	n	%	N	%		
Fear of suffering mental disorders	98	39.7	149€	60.3	247	0.25		
Concern for physical discomfort	48	36.6	83€	63.4	131	0.13		
Fear of being caught by the police	39*	73.6	14	26.4	53	0.05		
Fear of becoming addicted	150	41.4	212^{ε}	58.6	362	0.37		
Contradictory to religious beliefs	129	40.6	189€	59.4	318	0.32		
Leading to loss of energy and ambition	53	58.9	37	41.1	90	0.09		
Losing self-control	71	42.3	97	57.7	168	0.17		
Uninteresting	44	44.4	55	55.6	99	0.10		
Family disapproval	94	42.5	127€	57.5	221	0.22		
Friend disapproval	36	53.7	31	46.3	67	0.07		
Not wanting to be with addictive substance users	65	40.4	96€	59.6	161	0.16		
No friends who use an addictive substance	22	30.1	51€	69.9	73	0.07		
Being expensive	17	29.8	40^{ϵ}	70.2	57	0.06		
Being unable to find	8	34.8	15	65.2	23	0.02		
Being against their principles	108	34.1	209^{ϵ}	65.9	317	0.32		
Other reasons	34	54.8	28	45.2	62	0.06		

j: Binomial test, \in : p < .05 and significantly higher percentage value.

The ratios of the students who did not use addictive substances because of fear of suffering a mental disorders (p = .003), physical discomfort being caused by substance use (p = .006), fear of being caught by the police (p < .001), fear of becoming addicted (p = .001), contradiction with religious beliefs (p = .001), loss of energy and ambition caused by substance use (p < .001), not wanting to lose self-control (p < .001), family disapproval (p = .001), not wanting to be with addictive substance users (p = .001), having no friends who use an addictive substance (p = .001), its high cost (p = .001), contradiction of their principles (p < .001), and other reasons (p = .007) were found to be significantly different according to school types.

Table 2 Distribution of Students' Reasons for not Using Substance by School Type (n = 983)

	School Type ^φ								
	Girls' Vocational H.S.		Industrial Vocational H.G:		Düzce Anatolian H.S.				
							Total		
	n	%	n	%	n	%	n	%	
Fear of suffering mental disorders *&	96	38.9	57	23.1	94	38.1	247	0.25	
Causing physical discomfort*\$	61	46.6	35	26.7	35	26.7	131	0.13	
Fear of being caught by the police *&	1	1.9	32	60.4	20	37.7	53	0.05	
Fear of becoming addicted &\$	100	27.6	92	25.4	170	47.0	362	0.37	
Contradictory to religious beliefs *&	123	38.7	75	23.6	120	37.7	318	0.32	
Leading to loss of energy and ambition *S	10	11.1	35	38.9	45	50.0	90	0.09	
Losing self-control &§	48	28.6	38	22.6	82	48.8	168	0.17	
Unamusing	40	40.4	31	31.3	28	28.3	99	0.10	
Family disapproval &§	63	28.5	57	25.8	101	45.7	221	0.22	
Friend disapproval	21	31.3	25	37.3	21	31.3	67	0.07	
Not wanting to be with substance users &\$	47	29.2	38	23.6	76	47.2	161	0.16	
No friends who use an addictive substance s	38	52.1	22	30.1	13	17.8	73	0.07	
Being expensive *§	35	61.4	14	24.6	8	14.0	57	0.06	
Being unable to find	8	34.8	6	26.1	9	39.1	23	0.02	
Being against the principles *&	131	41.3	43	13.6	143	45.1	317	0.32	
Other reasons &	0	0.0	20	32.3	42	67.7	62	0.06	

j: Chi-square test (post hoc Bonferroni adjusted method), *: For girls' vocational high school-industrial vocational high school p < .05, &: For industrial vocational high school-Düzce Anatolian high school p < .05, \$: For girls' vocational high school-Düzce Anatolian high school p < .05.

The ratios of 14 to 16 year old students who did not use addictive substances for fear of suffering mental disorders (p = .001), fear of getting caught by the police (p < .040), contradiction with religious beliefs (p = .001), not wanting to lose self-control (p < .0017), family disapproval (p = .001), friend disapproval (p = .001), its cost (p < .001), being unable to find such substances (p = .011), and contradiction with personal principles (p < .033) were found to be significantly higher than those of the students aged between 17 and 19 (p < .05).

The ratios of the students who did not use addictive substances because of fear of becoming addicted (p = .001), being unable to find sources of those substances (p = .009), and contradictions with personal principles (p < .001) were found to be significantly different by grade or class (p < .05), whereas no significant difference was found between the students who did not use substances for other reasons by grade or class (p > .05).

Discussion

This study determined that male students did not use addictive substances because of fear of having mental and physical problems, fear of becoming addicted, contradictions to their religious beliefs, family disapproval, not wanting to be with people who abuse substances, not having friends who use addictive substances, the cost of those substances, and the use of such substance being contradictory to their principles. Female students, however, did not use addictive substances only because of fear of being caught by the police. The study results are similar to the results of other studies on this subject. Koca and Oğuzöncül (2015) and Pirinçci and Erdem (2004) found that students did not use addictive substances because of the potential harm to their health caused by substance use and because they considered addictive substance use as a sin based on their religious beliefs.

Parents, siblings, and friends are powerful determinants of adolescents' behavior as to whether they will or will not use addictive substances (Alikaşifoğlu, 2005). Studies determined a strong relationship (r=0.43-0.60) between current and future substance abuse in adolescents and their status of having close friends who abused addictive substances (Allen et al., 2003; Branstetter et al., 2011; Marschall-Lévesque et al., 2014; Simons-Morton, 2004). The present study found that the status of having friends who do not abuse addictive substances was very influential, especially on male students' behavior of not abusing substances.

Previous studies with adolescents showed that male students had higher rates of substance abuse and substance-abuse related problems than female students. However, recent studies revealed the exact opposite of that result, stating that the rate of substance abuse in female adolescents has been increasing rapidly, and that they use more harmful substances than male adolescents (Landsverk & Reid, 2013; Mitchell et al., 2016; Schinke et al., 2008). Despite the present increase in substance abuse, women still want to avoid involvement with the police and the justice system than do men and so commit fewer crimes (Hodgins et al., 2014: Mitchell et al., 2016). This study suggests that the female students' fear of being caught by the police arises from sociocultural expectations from the female gender and through perception of females' committing crime as a humiliating and stigmatizing phenomenon in society.

This study determined that industrial vocational high school students did not use substances only for fear of being caught by the police. Secondary education in Turkey is divided into two types: (i) general secondary education and (ii) vocational and technical education. Vocational schools are the schools easiest to enter and have the worst reputation among Turkish secondary education institutions (Günbayı & Tokel, 2014). Akkuş et al. (2016; 2017) found that the frequency of smoking and abusing alcohol, marijuana, and ecstasy among students in industrial vocational schools was significantly higher than that among students from general secondary education schools.

The fact that the students aged 14 to 16 years received higher addiction information scores and had more reasons for not using addictive substances is thought to arise from their developmental period. This result also shows that the effects of education and conferences on prevention of substance dependence in primary education should continue during the first years of secondary education.

Kaynakça/References

- Akkuş, D., Karaca, A., Konuk Şener, D. & Ankaralı, A. (2016). Lise öğrencileri arasında madde kullanım sıklığı ve etkileyen faktörler. *Bağımlılık Dergisi*, *17*(4), 139–152.
- Akkuş, D., Karaca, A., Konuk Şener, D. & Ankaralı, A. (2017). Lise öğrencileri arasında sigara ve alkol kullanma sıklığı ve etkileyen faktörler. *Anadolu Kliniği*, 22(1), 36–45.
- Aksoy, K. (2006). *Lise öğrencilerinin bağımlılık yapan maddelere ilişkin tutumları ve bu tutumlara etki eden değişkenlerin incelenmesi (Malatya ili örneği)* (Yüksek lisans tezi, İnönü Üniversitesi, Sosyal Bilimler Enstitüsü, Malatya). https://tez.yok.gov.tr/UlusalTezMerkezi/adresinden edinilmiştir.
- Albayrak, S. & Balcı, S. (2014). Gençlerde madde bağımlılığı ve önlenmesi. *Hemşirelikte Eğitim* ve Araştırma Dergisi, 11(2), 30–37.
- Alikaşifoğlu, M. (2005). Madde kullanımı risk faktörleri ve koruyucu faktörler. *Adolesan Sağlığı Sempozyum Dizisi*, 43, 73–83.
- Allen, M., Donohue, W. A., Griffin, A., Ryan, D., & Turner, M. M. M. (2003). Comparing the influence of parents and peers on the choice to use drugs a meta-analytic summary of the literature. *Criminal Justice and Behavior*, 30(2), 163–186.
- Asi Karakaş, S. & Ersöğütçü, F. (2016). Madde bağımlılığı ve hemşirelik. *Sağlık Bilimleri ve Meslekleri Dergisi*, *3*(2), 133–139.
- Ball, J. W., Bindler, R. C., & Cowen, K. J. (2010). *Child health nursing: Partnering with children & families* (2nd ed.). Upper Saddle River, NJ: Pearson Education.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavior change. *Psychological Review*, 84(2), 191–215.
- Bandura, A. (1989). Human agency in social cognitive theory. *American Psychologist*, 44(9), 1175–1184.
- Branstetter, S. A., Low, S., & Furman, W. (2011). The influence of parents and friends on adolescent substance use: A multidimensional approach. *Journal of Substance Use*, *16*(2), 150–160. http://dx.doi.org/10.3109/14659891.2010.519421
- Bulduk, S., & Erdogan, S. (2012). Sexual risk reduction among Turkish university students. *Journal of the Association of Nurses in AIDS Care*, 23(3), 233–243.

- Chitwood, D. D., Weiss, M. L., & Leukefeld, C. G. (2008). A systematic review of recent literature on religiosity and substance use. *Journal of Drug Issues*, 38, 653–688.
- Connor, J. P., Gullo, M. J., Feeney, G. F, Kavanagh, D. J., & Young, R. M. (2014). The relationship between cannabis outcome expectancies and cannabis refusal self-efficacy in a treatment population. *Addiction*, 109(1), 111–119. http://dx.doi.org/10.1111/add.12366
- Dilbaz, N. (2013). *Madde kullanım riski ve madde bağımlılığından korunma*. Ankara: T.C. Aile ve Sosyal Politikalar Bakanlığı Aile Eğitim Programı.
- Dönmez, F. & Azizoğlu, N. (2010). Meslek liselerindeki öğrencilerin bilimsel süreç beceri düzeylerinin incelenmesi: Balıkesir örneği. *Necatibey* Eğitim Fakültesi Elektronik Fen ve Matematik Eğitimi Dergisi, 4(2), 79–109.
- T.C. Millî Eğitim Bakanlığı Eğitim Araştırma ve Geliştirme Dairesi. (2008). *Öğretmenlerin şiddet konusundaki bilgileri, gözlemleri, değerlendirmeleri ve çözüm önerileri*. Ankara: Yazar.
- Easom, L. R. (2003). Concepts in health promotion. Perceived self-efficacy and barriers in older adults. *Journal of Gerontal Nursing*, 29(5), 11–19.
- Eker, F., Akkus, D. & Kapısız, Ö. (2013). Ergenler için Madde Bağımlılığından Korunma Öz-Yeterlik Ölçeği'nin geliştirilmesi ve psikometrik değerlendirilmesi. *Psikiyatri Hemşireliği Dergisi*, 4(1), 7–12.
- Ekşi, A. (2011). *Ben hasta değilim. Çocuk sağlığı ve hastalıklarının psikososyal* yönü. İstanbul: Nobel Tıp Kitabevleri.
- Elliott, J. O., Jacobson, M., & Seals, B. (2006). Self-efficacy, knowledge, health beliefs, quality of life and stigma in relation to osteoprotective behaviors in epilepsy. *Epilepsy & Behavior*, *9*, 478–491. http://dx.doi.org/10.1016/j.yebeh.2006.07.007
- Emiroğlu, O. N. (2002). Deneysel tasarımlar. İ. Erefe (Ed.), *Hemşirelikte araştırma ilke, süreç ve yöntemleri* içinde (s. 91–96). Ankara: Odak Ofset.
- Ergene, T., Cok, F., Tumer, A., & Unal, S. (2005). A controlled-study of preventive effects of peer education and single-session lectures on HIV/AIDS knowledge and attitudes among university students in Turkey. *AIDS Education & Prevention*, 17, 268–278. http://dx.doi.org/10.1521/aeap.17.4.268.66533
- Ghebreyohans, G., Khalil, E. A. G., Tsige, Z., & Ali, F. (2015). The effect of peer education on peer educators' reproductive health knowledge, attitude, health service use and their personal development. *International Journal of Sciences: Basic and Applied Research*, 20(1), 294–312.
- Gözcü Yavaş, C. Ö. (2012). Orta ve geç ergenlik dönemindeki ergenlerde tutum ve davranış farklılıkları. *Ankara Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 3(2), 113–138.
- Guo, G., Li, Y., Owen, C., Wang, H., & Duncan, G. J. (2015). A natural experiment of peer influences on youth alcohol use. *Social Science Research*, *52*, 193–207. http://dx.doi.org/10.1016/j. ssresearch.2015.01.002
- Güler, N., Güler, G., Ulusoy, H. & Bekar M. (2009). Lise öğrencileri arasında sigara, alkol kullanımı ve intihar düşüncesi sıklığı. *Cumhuriyet Tıp Dergisi*, *31*(4), 340–345.
- Günbayı, İ. & Tokel, A. (2014). Teknik ve meslek liselerinde meslek derslerinin etkililiğine ilişkin yönetici, öğretmen ve öğrenci görüşleri. *Eğitim ve Öğretim Araştırmaları Dergisi, 3*(4), 59–73.
- Hemphill, S. A., Heerde, J. A., Herrenkohl, T. I., Patton, G. C., Toumbourou, J. W., & Catalano, R. F. (2011). Risk and protective factors for adolescent substance use in Washington State, the United States and Victoria, Australia: A longitudinal study. *Journal of Adolescent Health*, 49, 312–320. http://dx.doi.org/10.1016/j. jadohealth.2010.12.017

- Hodgins, S., Lovenhag, S., Rehn, M., & Nilsson, K. W. (2014). A 5-year follow-up study of adolescents who sought treatment for substance misuse in Sweden. *European Child & Adolescent Psychiatry*, 23, 347–360.
- İlbars, Z. (2007). Suç antropolojisi: Kadın ve suç. *Ankara Üniversitesi Dil ve Tarih Coğrafya Fakültesi Antropoloji Dergisi*, 22, 1–13.
- Kann, L., Kinchen, S., Shanklin, S. L., Flint, K. H., Kawkins, J., Harris, W. A., ... Centers for Disease Control and Prevention. (2014). Youth risk behavior surveillance—United States, 2013. *Morbidity and Mortality Weekly Report*, 63, 1–168.
- Karatay, G. & Kubilay, G. (2004). Sosyoekonomik düzeyi farklı iki lisede madde kullanma durumu ve etkileyen faktörlerin belirlenmesi. *Hemşirelikte Araştırma Geliştirme Dergisi, 1*(2), 57–70.
- Kayır, Ö., Kılıç, H., Erdek, D., Erdek, M., Dev, D. & Kocataş, B. (2004). *Meslek liseleri araştırması*. Ankara. https://yzstrateji.com/dokumanlar/MESLEKIEGITIM-RAPOR.pdf adresinden edinilmiştir.
- Koca, B. & Oğuzöncül, A. F. (2015). İnönü Üniversitesi Sağlık Yüksekokulu öğrencilerinin sigara, alkol, madde kullanımı, madde kullanımına etki eden etmenler ve aileden aldıkları sosyal desteğin etkisi. *Kocaeli Tıp Dergisi*, 4(2), 4–13. http://dx.doi.org/10.5336/nurses.2015-46630
- Konuk Şener, D. & Ocakçı, A. (2014). Yoksulluğun çocuk sağlığı üzerine çok boyutlu etkileri. *Ankara Sağlık Hizmetleri Dergisi, 13*(1), 57–68.
- Küçükkavruk E. (2002). Atatürk Sağlık Yüksekokulunda okuyan öğrencilerin sigara içme sıklığı ve bunu etkileyen faktörler (Yüksek lisans tezi, Erciyes Üniversitesi, Sağlık Bilimleri Enstitüsü, Kayseri). https://tez.yok.gov.tr/UlusalTezMerkezi/ adresinden edinilmiştir.
- Landsverk, J., & Reid, J. B. (2013). Introduction to evidence-based interventions for girls: From prevention to treatment. *Journal of Child & Adolescent Substance Abuse*, 22(5), 365–369. http://dx.doi.org/10.1080/106782 8X.2013.788875
- Mahat, G., Scoloveno, M. A., Ann, M., Leon, T. D., & Frenkel, J. (2008). Preliminary evidence of an adolescent HIV/AIDS peer education program. *Journal of Pediatric Nursing*, 23(5), 358–363. http://dx.doi.org/10.1016/j.pedn.2007.12.007
- Marschall-Lévesque, S., Castellanos-Ryan, N., Vitaro, F., & Séguin, J. R. (2014). Moderators of the association between peer and target adolescent substance use. *Addictive Behaviors*, *39*(1), 48–70. http://dx.doi.org/10.1016/j.addbeh.2013.09.025
- Mitchell P. F., Kutin, J. J., Daley, K., Best, D., & Bruun, A. J. (2016). Gender differences in psychosocial complexity for a cohort of adolescents attending youth-specific substance abuse services. *Children and Youth Services Review*, 68, 34–43. http://dx.doi.org/10.1016/j. childyouth.2016.06.016
- Ocakçı, A F. (2015). Ergenlik dönemi özellikleri. A. F. Ocakçı & F. Üstüner Top (Ed.), *Yetişkinliğe* bir adım kala ergen sağlığı içinde (s. 1–7). Ankara: Göktuğ Basım ve Yayın Dağıtım.
- Osborn, L. M., Dewitt, T. G., First, L. R., & Zenel, J. A. (2011). Adolescent care. In M. Yurdakök (Ed.), *Pediatrics* (pp. 1494–1641). Istanbul: Gunes Publishing.
- Ögel, K. (2005). Madde kullanım bozuklukları epidemiyolojisi. Türkiye Klinikleri, 1(47), 61–64.
- Pirinçci, E. & Erdem, R. (2004). Fırat Üniversitesi Sağlık Hizmetleri Meslek Yüksekokulu öğrencilerinin alkol kullanma alışkanlıkları. *Atatürk Üniversitesi Tıp Dergisi*, *36*, 71–76.
- Razali, M. M., & Kliewer, W. (2015). Risk and protective factors for recreational and hard drug use among Malaysian adolescents and young adults. *Addictive Behaviors*, *50*, 149–156. http://dx.doi.org/10.1016/j.addbeh.2015.06.022

- Ryzin, M. J., Fosco, G. M., & Dishion, T. J. (2012). Family and peer predictors of substance use from early adolescence to early adulthood: An 11-year prospective analysis. *Addictive Behaviors*, *37*, 1314–1324. http://dx.doi.org/10.1016/j.addbeh.2012.06.020
- Seitz, C. M., Wyrick, D. L., Orsini, M. M., Milroy, J. J., & Fearnow-Kenney, M. (2013). Coverage of adolescent substance use prevention in state frameworks for health education: 10 year followup. *Journal of School Health*, 83(1), 53–60. http://dx.doi.org/10.1111/j.1746-1561.2012.00747.x
- Schinke, S. P. Fang, L., & Cole, K. C. A. (2008). Substance use among early adolescent girls: Risk and protective factors. *Journal of Adolescent Health*, *43*, 191–194. http://dx.doi.org./10.1016/j.jadohealth.2007.12.014
- Simons-Morton, B. (2004). Prospective association of peer influence, school engagement, drinking expectancies, and parent expectations with drinking initiation among sixth graders. *Addictive Behaviors*, 29(2), 299–309.
- Torrecillas, F. L., Cobo, M. A. T., Delgado P., & Ucles, I. R. (2015). Predictive capacity of self-efficacy in drug dependence and substance abuse treatment. *Journal of Psychology and Clinical Psychiatry*, *2*(3), 1–7. http://dx.doi.org./10.15406/jpcpy.2015.02.00073
- Youth Peer Education Network. (2004). Peer education training and trainers manual. Retrieved from http://lft.ee/admin/upload/files/Peer%20education%20training%20materials%202003%20eng.pdf