INVESTIGATING THE USE OF CIGARETTE, ALCOHOL, AND DRUG IN STUDENTS AND FACTORS AFFECTING IT

Robab Rahmati1, Azita Amirkhahrai2, Eshrat Karemafshar3

1Department of Pedagogy, Farhangian University, Alborz, Iran, 2Assistant Professor, Department Of Psychology, Young Research and Elite Club, Islamic Azad University, Bandar Abbas Branch, Bandar Abbas, Iran, 3Assistant Professor, Department Of Psychology, Islamic Azad University, Kerman Branch, Kerman, Iran.

Email: 1 R.Rahmati@cfu.ac, 2 afakhraie2002@gmail.com

Article History: Received on 29th September 2019, Revised on 30th October 2019, Published on 18th November 2019

Abstract

Purpose: Increasing the use of cigarettes, drug and alcohol in adolescents have nowadays become a serious challenge in communities. Thus, the present study was conducted to investigate the use of drugs, cigarettes, and alcohol and factors affecting adolescents.

Methodology: The research method was a cross-sectional survey study. The research population included all of the second-grade high school students in the Tehran province cities. Using random cluster sampling method, 448 of them were selected and responded to the test questions.

Result: The research results showed that boys used hubble-bubble (0.88), alcohol (0.51), cigarette (0.39), psychotropic pills (21) and girls used hubble-bubble (0.79), alcohol (0.29), and psychotropic pills (0.28) and cigarettes (0.17). The rate of using all drugs was higher in boys than that of girls. The use of hubble-bubble and alcohol had the highest rate and the use of heavier drugs was less prevalent. However, as the use of lighter drugs predisposed one person to use other drugs, taking preventive measures in schools and at an early age was essential.

Applications: This research can be used for universities, teachers, and students.

Novelty/Originality: In this research, the model of Investigating the Use of Cigarette, Alcohol, and Drug in Students and Factors Affecting it is presented in a comprehensive and complete manner.

Keywords: Epidemics, Cigarette, Alcohol, Psychotropic pills, Drugs.

INTRODUCTION

The adolescence is associated with a wide range of developments, forming an identity, sense of autonomy, and acquiring skills needed for adulthood. Due to these characteristics, the onset and early stages of smoking and using alcohol and drugs are common during adolescence (Botvin and McAlister, 1981). In recent years, public health professionals in developed countries have been able to reduce the rate of using substances in adults, but increased use of cigarettes is seen among adolescents and young people. It is nowadays considered a serious challenge for these communities (Hill, 1995). Studies have shown that most adults have experienced smoking and using alcohol for the first time in their early years of adolescence (Griffin, Botvin, Doyle, Diaz & Epstein, 1999). Such early experience can result in using heavier drugs at higher ages. Longitudinal studies have indicated that adolescents who have used even only few numbers of cigarettes have more likely become skilled smokers in high school three times more than others (Griffin et al., 1999). The concern with such findings is that early onset of these gateway drugs may lead to using heavier drugs. According to the hypothesis of gateway substance use at adolescence, adolescents who use cigarettes or alcohol will more likely use marijuana, and those who use marijuana will more likely use hallucinogens, opiates, and other addictive substances. In addition, experimental evidence suggested that the early onset of substance use is associated with a range of other negative consequences in the late adolescence and early adulthood, such as violence and law-abiding behavior, poor physical health, and mental health problems (Ceisil, 2018; Ellickson, Tucker & Klein, 2001). Based on the results of the Volko epidemiological studies, in addition to smoking and using alcohol, the use of psychotropic drugs such as ecstasy and crystal in recent years has increased in the world and has become a global challenge (Aziz & Abdolghader 2018).

Iran is not an exception in this regard. Based on the UN report in 2005, Iran has the highest rate of addicts using opioids and opium in the world. Thus, in its most recent report in 2005, UN reported the number of Iranian addicted people as 10 million people and announced the addiction as the fourth major global crisis. Additionally, based on the Office of Research and Training of Headquarters for Combating Drugs, over 90% of Iranians expressed serious concerns about drug use. In 2011, the prevalence rate of drug use between the ages of 15 and 64 was reported about 2.5%. Some studies have been carried out on the prevalence and trends of using cigarettes, drugs, alcohol, and other substances among adolescents in Iran, indicating an increase in adolescents’ tendency in drugs and a decrease in the age for onset of using cigarettes, drugs, and alcohol. In research on students in Tehran, Ramazan Khani et al showed that the highest frequency of using was between the ages of 14 and 15 years. The most common place for its use was public places for boys and homes for girls. Over 22% of the current users used more than 5 cigarettes over the 30 days. Heydari et al. (2004) investigated 1119 students in Tehran and found that 28% of students (25.25% of girls and 30.8% of boys) smoked occasionally and 3.4% of them (1.5% girls and 6.06% boys) smoked daily. In their study, 67.7% of the smoker students started smoking before the age of 15 and 88.7% of them started smoking before the age of 17. The most common cause of smoking in students was...
curiosity (55.3%) and fun (19.3%). Moreover, the presence of a smoker in the family was one of the effective factors in smoking of students. In a study on 300 students of Malard city, Rahmati showed that 10% of boys are smoking, 17% of them are using alcohol, 9% of them are using drugs and 3% of the girls are smoking, 4% of them are using alcohol, and 6% of them are using drugs. The results of the research conducted by Mohammad Khani on 2538 students in 10 provinces of Iran showed that the use of light substances such as cigarettes and alcoholic beverages is more common among Iranian adolescents in comparison with heavy substances. Poor Asl reported that high age, having a general risky behavior, being in an advanced stage of smoking, self-abusive experience, high socioeconomic status, and experiencing the use of psychotropic substances are associated with the experience of using alcohol and being in the stage of advanced smoking, high socioeconomic status, and experiencing the using alcohol are associated with the experience of using psychotropic substances.

Cocci examined drug use in 6 European countries and showed that family factors such as living with parents and the attention of parents and their care of children's behaviors, modeling the friends and affiliation with peer groups were associated with high-risk behaviors, including drug use. Given these results and similar results, preventive measures should be taken from an early age and continue up to older ages. One of the most important and critical periods in training the skills necessary for healthy living is the adolescence period since adolescents are at increased risk of addiction due their critical growth and internal and environmental conflicts. They are more vulnerable due to the lack of sufficient information and lack of readiness to cope with life problems. Hence, the present study was conducted to evaluate the rate of using drugs and smoking, alcohol, psychotropic drugs in female and male students.

**METHODOLOGY**

The method of this research was cross-sectional-survey. It was conducted to evaluate the prevalence and causes of adolescents' tendency towards smoking and using narcotics and psychotropic drugs, alcohol and the level of readiness of drug users in the second grade of high school. The research population included all second-grade high school students in Tehran province who were studying in the academic year of 2014-2015. A total of 448 students were selected through multistage cluster sampling. The sample size of the study was determined to be 448 people, out of which 228 were girls and 220 were boys.

**MEASUREMENT INSTRUMENT**

In order to measure the prevalence and causes, students' readiness for smoking and drug use, a researcher-made “substance use status” questionnaire was used, which included two sections of demographic information including education level, field of study, age, gender, and 13 questions assessing the substance use pattern, family status, age of onset of using, the causes of using, the tendency to use in the future and other issues.

**RESULTS**

In this study, 448 students were evaluated, out of which 220 were male and 228 were female students. The age range of them was between 15 and 18 years.

**Table 1:** If using substance drugs, what age did you first start using it?

| Gender/age | 11  | 12  | 13  | 14  | 15  | 16  | 17  |
|------------|-----|-----|-----|-----|-----|-----|-----|
| boy        | 03.0| 11.0| 39.0| 26.0| 11.0| 08.0| 02.0|
| girl       | 11.0| 26.0| 26.0| 21.0| 06.0| 06.0| 03.0|

The statistics derived from Table 1 showed that the first experience of using this substance in students was the age of 11 years. The highest prevalence rate and the riskiest ages in males were 13 and 14 years of old in boys and 12 and 13 in girls.

**Table 2:** Which of the following substances are used by your parents?

| Gender/age | Smoking | Hubble-bubble | pipe | Drug | Psychedelic pills | Alcohol |
|------------|---------|---------------|------|------|------------------|--------|
| boy        | 68.0    | 77.0          | 01.0 | 39.0 | 22.0             | 29.0   |
| girl       | 31.0    | 69.0          | 0    | 24.0 | 09.0             | 11.0   |

The rate of male students whose parents used cigarettes, hubble-bubble, pipe, drugs, psychotropic pills, and alcohol was 0.68%, 0.77%, 0.01%, 0.39%, 0.22%, 0.29%, respectively, and the rate of female students whose parents used cigarettes, hubble-bubble, pipe, drugs, psychotropic pills, and alcohol was 0.31, 0.69, 0, 0.24, 0.09, 0.11, respectively. The hubble-bubble was the most common and the pipe was the least common substance used. The report of boys on their parents' substance use was more than that of the girls. This difference was either due to the lack of interest of female students in disclosing family issues or due to the fact that parents showed less tendency to use substances at the presence of their daughters.

**Table 3:** The experience of smoking, using the drug and other substances during life, over the past month and continuously in students.
The present study was conducted to estimate the prevalence of substance use by students in cities of Tehran province. In this research, the history of using substance during the life of students showed that 0.91% of boys and 0.77% of girls stated that they would continue to use in the future and had no intention to leave.

**Table 3**: The frequency of the use of substances among students in the last month showed that 0.91% of boys and 0.77% of girls decided to leave substance use.

Based on the data presented in Table 4, investigating the first experience of using drugs and cigarettes among the students showed that they experienced it for the first time in different environments. In boys, it was as follows: 0.41% in traditional coffee shops, 21% in recreational environments, 0.12% celebrations, 0.11% at home, and 0.11% at friends' home and 0.04 in school. In girls, it was as follows: 0.51% in traditional coffee shops, 14% in recreational environments, 0.14% celebrations, 0.09% at home, and 0.10% at friends' home and 0.02 in school.

The results also showed that 83% of parents of male students and 0.91% of parents of female students had no knowledge of their children using cigarettes, drugs, alcohol and psychotropic pills.

**Table 5**: The most important cause to show the tendency for substance use.

Based on Table 5, the reasons for the use of drugs and cigarettes in male students were: persuasion of friends 0.51, having fun at the celebrations 0.21, escaping the problems 0.21, and curiosity 0.09. The reasons for the use of drugs and cigarettes in female students were: persuasion of friends 0.33, escaping the problems 0.29, curiosity 0.22, having fun at the celebrations 0.16. According to the students' statements, 83% of boys and 91% of girls decided to leave substance use. 81% of girls believed that it was easy to leave work and 81% of boys believed that it was difficult.

**DISCUSSION AND CONCLUSION**

The present study was conducted to estimate the prevalence of substance use by students in cities of Tehran province. In this research, the history of using substance in family, the environmental use, causes, age of onset and pattern of substance use during the life, over the past month and continuously in 448 adolescent girls and boys were investigated. The results of this study in investigating the experience of substance use during the life of students showed that 0.88 of boys used hubble-bubble, 0.51% of them used alcohol, 0.39 of them used cigarettes, 0.39% of them used psychedelic pills, and 0.21% of them used drugs. Moreover, 0.79 of girls used hubble-bubble, 0.29% of them used alcohol and psychotropic pills, 0.28% of them used cigarettes, and 0.17 of them used drugs. Moreover, investigating the experience of substance use by students in the last month showed that 0.91% of boys used hubble-bubble, 0.31% of them used alcohol, 0.26 of them used psychotropic pills, 0.21 of them used cigarettes, and 0.6 of them used drug. In this regard, 0.60% of the girls used hubble-bubble, 0.18% of them used psychotropic pills, 0.11% of them used cigarettes, 0.4% of them used alcohol and 0.3% of them used drugs over the last months. According to the

**Table 4**: Where did you use the substance for the first time?

| Gender | Home | School | Recreational environments | Traditional coffee shops | Friends' home | Celebrations |
|--------|------|--------|---------------------------|---------------------------|---------------|--------------|
| Male   | 11.0 | 0.04   | 21.0                      | 41.0                      | 11.0          | 12.0         |
| Female | 09.0 | 0.02   | 14.0                      | 51.0                      | 0.10          | 14.0         |

**Table 5**: The most important cause to show the tendency for substance use.

| Gender | Escaping the problems | Persuasion of the friends | Curiosity | Having fun at celebrations |
|--------|-----------------------|---------------------------|-----------|----------------------------|
| Male   | 19.0                  | 51.0                      | 09.0      | 21.0                       |
| Female | 29.0                  | 33.0                      | 22.0      | 16.0                       |
Results on the age of onset of using different types of substances in girls and boys showed that the onset of experience of using substances was the age of eleven years in both genders. The onset of drug substance was 11 years of old in 0.3% of boys, 12 years of old in 0.11% of them, 13 years of old in 0.39% of them, 14 years of old in 0.26% of them, 15 years of old in 0.11% of them, 16 years of old in 0.08 of them, and 17 years of old in 0.02% of them. The onset of drug substance was 11 years of old in 0.11% of girls, 12 years of old in 0.26% of them, 13 years of old in 0.26% of them, 14 years of old in 0.21% of them, 15 years of old in 0.06% of them, 16 years of old in 0.06 of them, and 17 years of old in 0.03% of them. Reducing the age of substance use among adolescents was consistent with the results of the studies conducted both in Iran and foreign countries. Henry (2002) stated that the age of onset was between the ages of 11 and 15. Moreover, Heydari et al. stated that 0.88% of adolescents started using cigarettes under the age of 17 years. The increasing tendency of adolescents to use all kinds of substances at lower ages was very worrying, since early onset of using gateway drugs may lead to use of heavier substances. Most adults have experienced using cigarettes and alcohol for the first time in their early years of adolescence (Griffin et al., 1999). Moreover, the early onset of substance use was associated with a range of other negative consequences in late adolescence and early adulthood, such as violence and law-abiding behavior, poor physical health, and mental health problems. As a result, based on the results, experts recommend that preventive measures be taken from an early age. Investigating the first experience of using drugs and cigarettes among the students showed that they experienced it for the first time in different environments. In boys, the environments were as follows: 0.41% in traditional coffee shops, 21% in recreational environments, 0.12% celebrations, 0.11% at home, and 0.11% at friends' home and 0.04 in school. In girls, it was as follows: 0.51% in traditional coffee shops, 14% in recreational environments, 0.14% celebrations, 0.09% at home, and 0.10% at friends' home and 0.02 in school. The results of this section showed that the most important environments for experience of substance-using were public places and along with the peer group and the pattern of use and places of use were similar in adolescent girls and boys in Tehran. This pattern was very close in the past years. It seems to be due to girls' efforts to gain a social status equal to that of the boys.

Based on the statements of the students, 0.83% of parents of male students and 0.91% of parents of female students did not know their children's use of cigarettes and drugs. As families play an important role in supervising and controlling students, most families need help to be saved from the risks faced by their children. Parents should have adequate knowledge about alcohol and drugs to give their children accurate information and care about their children with full vigilance. Another part of the research investigated the reasons for the use of drugs, cigarettes, alcohol and other substances. The reasons for the use of drugs and cigarettes in male students were: persuasion of friends 0.51, having fun at the celebrations 0.21, escaping the problems 0.2, and curiosity 0.09. The reasons for the use of drugs and cigarettes in female students were: persuasion of friends 0.33, escaping the problems 0.29, curiosity 0.22, having fun at the celebrations 0.16.

The importance of peers in the tendency of adolescents to use substances as the most important factor deserves paying more attention since as individuals approach to adolescence period, the level of influence of the parents is reduced, while the influence of friends and other socializing agents increases. Findings of the increasing tendency of adolescents to consume cigarettes, alcohol, drugs and psychotropic pills and high rates of drug use indicated the need for preventive measures. These measures should be taken at the first and second-grade high school students at the wide level, as limited studies have been conducted on them and figures suggest that the onset of use in both boys and girls has been from this period. As the most commonly used substances among adolescents in Tehran's cities were hubble-bubble and cigarettes and as the use of light substances was a gateway for using heavier substances, a prevention plan should target these two substances. Educational authorities and planners should use new preventive approaches in schools and implement preventive plans in order to reduce the rate of substance use (Alwahdani, 2019).

ACKNOWLEDGMENT

The author confirms that the data do not contain any conflict of interest.

REFERENCES

1. Ajallooeian, E., Gorji, Y., & Niknejadi, F. (2015). Evaluate the Effectiveness of Social Skills Training through Group Therapy Play on Reducing Rational Aggression Boy Elementary School Student in Esfahan City. UCT Journal of Social Sciences and Humanities Research, 3(1), 1-4.
2. Alwahdani, A. (2019). The Impact of Trust and Reciprocity on Knowledge Exchange: A Case Study in IT Outsourcing. Journal of Information Systems Engineering & Management, 4(1), em0084. https://doi.org/10.29333/jisem/5738
3. Aziz H, Abdolghader F. Investigation of International Students Quality on Educational Services. Journal of Humanities Insights. 2018; 02(03): 118-23.
4. Botvin, G. J. (2000). Preventing drug abuse in schools: social and competence. [https://doi.org/10.1016/S0306-4603(00)00119-2]
5. Botvin, G., Eng, A., & Williams, C. (1978). The ethnography of teenage cigarette smoking. Paper presented at the annual meeting of the American Public Health Association, Los Angeles
6. Ceisil U. E-Awareness of University Student through Smart Phones and Developing Social Networks. Journal of Humanities Insights. 2018; 02(03): 139-45.
7. Ellickson, P. L., Tucker, J. S., & Klein, D. J. (2001). High-risk behaviors associated with early smoking: results from a 5-year follow-up. Journal of Adolescent Health, 28(6), pp 465-473. [https://doi.org/10.1016/S1054-139X(00)00119-2]
8. Fahimeh Khorasani Baghini, mahboobeh khosravani, Azadeh Amiri, Evaluation of the effect of the provided training in delivery preparation classes on awareness and attitude of pregnant mothers toward delivery type in Razi Hospital of Saravan, Revista Latinoamericana de Hipertensión. Vol. 13 - Nº 6, 2018, [http://saber.ucv.ve/ojs/index.php/rev_lh/article/view/15949].
9. Gahramani, A (2001). Students' knowledge on drugs and prevention methods
10. Griffin, K. W., Botvin, G. J., Doyle, M. M., Diaz, T., & Epstein, J. A. (1999). A six-year follow-up study of determinants of heavy cigarette smoking among high-school seniors. Journal of Behavioral Medicine, 22(3), pp 271-284. [https://doi.org/10.1023/A:1018772524258]
11. Hawkins JD, Catalano RF, Miller JY. Risk and protective factors for alcohol and other drug problems in adolescence and early adulthood: Implications for substance abuse prevention. Psychol Bull 1992; 112(1): 64-105. [https://doi.org/10.1037/0033-2909.112.1.64]
12. Hawkins JD, Catalano RF, Miller JY. Risk and protective factors for alcohol and other drug problems in adolescence and early adulthood: Implications for substance abuse prevention. Psychol Bull 1992; 112(1): 64-105. [https://doi.org/10.1037/0033-2909.112.1.64]
13. Henry L.K. (2002). A latent class growth model of rural adolescent drinking: An examination of the antecedents to and young adult consequences of adolescent alcohol use trajectories. The Pennsylvania State University, 2002; pp 1-16.
14. Heydari, Gh. Sharifi, H, Hosseini, M, Masjedi, MR (2004). Investigating the smoking status and its associated factors in high school students in Tehran in 2003. Issue 41. pp. 255-256
15. Hill D, White V, Segan C. Prevalence of cigarette smoking among Australian secondary school students in 1993. Aust J Public Health 1995; 19(5): 445–9. [https://doi.org/10.1111/j.1753-6405.1995.tb00408.x]
16. Patterson, F., Lerman, C., Kaufmann, V. G., Neuner, G. A., & Audrain-McGovern, J. (2004). Cigarette smoking practices among American college students: review and future directions. Journal of American College Health, 52(5), 203-212. [https://doi.org/10.3200/JACH.52.5.203-212]
17. Schweizer, C. A., Roesch, S. C., Khoddam, R., Doran, N., & Myers, M. G. (2014). Examining the stability of young-adult alcohol and tobacco co-use: A latent transition analysis. Addiction Research & Theory, 22(4), 325-335. [https://doi.org/10.3109/16066359.2013.856884]
18. Suldo, S. M., Mihalas, S., Powell, H., & French, R. (2008). Ecological predictors of substance use in middle school students. School Psychology Quarterly, 23(3), 373. [https://doi.org/10.1037/a0017565]
19. Piko, B. (2000). Perceived social support from parents and peers: Which is the stronger predictor of adolescent substance use?. Substance use & misuse, 35(4), 617-630. [https://doi.org/10.3109/1082608009147475]
20. Moore, M. J., & Chudley, E. (2005). Sport and physical activity participation and substance use among adolescents. Journal of Adolescent Health, 36(6), 486-493. [https://doi.org/10.1016/j.jadohealth.2004.02.031]