

Risky Behaviours of Working Adolescents in Turkey

Selen Ozakar Akca¹, Suzan Yildiz², Duygu Gozzen³

¹Assistant Professor, Hitit University Health School,
Corum, Turkey
Email: selenozakar {at} hotmail.com

²Professor, Istanbul University Florence Nightingale Faculty of Nursing,
Istanbul, Turkey

³Assistant Professor, Istanbul University Florence Nightingale Faculty of Nursing,
Istanbul, Turkey

ABSTRACT---- *In this study it was aimed to determine the concrete effects of risky behaviors due to the frequency of especially adolescent employees' risky behaviors and to create the basis of the education program, which is planned to be done.*

All adolescents at the vocational training center between 16-18 years constitute the research sample. Adolescent Risk Taking Questionnaire and Adolescent Identifying Form was applied to the research volunteers.

It was also determined that risk taking status of female adolescents is lower than male adolescents. Difference between female and male adolescents concerning risk taking behaviors was statistically significant ($p < 0.01$).

As a result; according to the applied ARTQ evaluation, it was seen that risk taking averages regarding substance use is higher than social position and traffic. Especially to the adolescents working in the industrial region more consulting and support must be provided as they create a risk group regarding substance use.

Keywords--- working adolescents, risky behaviors, Adolescent Risk Taking Questionnaire (ARTQ)

1. INTRODUCTION

In the adolescent period, which is the period between childhood and adulthood; the adaptation of the individual with physical changes is realized together with the social and psychological changes. Due to these changes most of the adolescents often face a number of crises and dilemmas (DiClemente, & Velasquez, 2002). Adolescents show in this period a tendency to risky behaviors (unintentional injury, intentional behaviors that cause injuries and violence, alcohol and other drug use, risky sexual behaviors, associated risks with eating habits and physical activity risks, opposing against traditional social values) due to be accepted from their fellows, to get the adult identity and their independency inside the family and in order to be able to cope with troubles (CDC, 2012; Peterson et al., 2003). It was reported that risky behaviors are more seen in between 16-18 years (Assante, 2014; Girgin, & Kocabiyik, 2003). Substance abuse, violence and early sexual activity are more frequently seen in boys, while suicide attempts are more frequent in girls (He, Kramer, Houser, Chomitz, & Hacker, 2004; Peterson et al., 2003). It was reported that an essential part of illness, death and disability reasons in that period are not only in close relation with risky behaviors but also with risky environment. (Feldman, 2000).

The adolescents at vocational training centers have completed primary education and could not continue to the next class or were left out of formal education due to various reasons. These have at least completed primary education and are between the ages of 16-18. These adolescents are employed individuals (Kutlu, 2006) and their work environment are inadequate and crowded. In addition to that health and personality developments are negatively affected by inadequate physical conditions and hard work (Dundar et al., 2008). Due to these reasons the adolescents at vocational training centers are different from adolescents receiving formal education regarding their social environment.

The professionals working with adolescents in order to develop the adolescents and maintain their health and also to remove risky behaviors, play an irrevocable role. These professionals must know the fundamental principles of appropriate approach for these adolescents and must guide the adolescents to maintain their health and to develop them (Dolgun, Inal, & Ugurlu, 2011). Avoidance and treatment of risky behaviors and care of an individual is a process that needs multidisciplinary cooperation. During this process it is the responsibility of the professional to protect the

adolescent of the risky situation and remove it by changing the present attitude with the help of education (Jansink et al., 2009).

When current literature is analyzed (e.g., Menezes, Goncalves, Anselmi, Hallal, & Araujo, 2006; Sharma, 2005; Stuart, Borland, & McMurray, 1994) it was seen, that studies were generally carried out with school children and normal population. Furthermore especially studies concerning risk groups of adolescents aged between 16-18 years, are insufficient. Adolescents working at vocational training centers are more at risk than other groups. It will be a great step to provide consulting and education services that respond to the problems caused by risky behaviors. Therefore the priorities of adolescents' risky behaviors shall be established as it constitutes a wide range. With this submitted study it was aimed to create a basis for the planned education program by determining the risky behaviors of adolescents working at vocational training centers.

2. METHOD

The study was planned to be made defining and of cross sectional type on 17±1 aged adolescents continuing their education at vocational training centers (N=386). In this study, sampling was not used. 311 volunteer participant adolescents created the sample of the study and had education at the vocational training centre between the dates of the study. Before starting with the research, the ethics committee approval was taken from the Istanbul University Istanbul Medical Faculty ethics committee (19.07.2012/21871). Furthermore the parents of volunteer adolescents were informed about the purpose of the study and their written permission has been taken.

Data Collection:

The research data were gathered using *Adolescent Identifying Form (AIF)*, *Adolescent Risk Taking Questionnaire (ARTQ)* forms. Research data have been obtained from adolescents by filling out the form in 15 minutes under the observance of the researcher.

Adolescents Identifying form;

In this, by the researcher developed form, are questions in order to determine the socio-demographic characteristics of the adolescents (age, sex, if he/she has a chronic illness, educational background, etc.).

Adolescent Risk-Taking-Questionnaire (ARTQ)

The ARTQ was developed by Gullone and Moore (2000), and the Turkish validity of the questionnaire was done by Kiran (2002). The ARTQ is a five point likert scale that demonstrates various risk-taking behaviors of adolescents. The individual evaluates himself through five categories between "1" Never Doing and "5" Always Doing. Individuals scoring above the average of the group score are considered as risk takers and individuals scoring below the group average are considered as less risk takers. The questionnaire consists of 15 articles of the sub-scale regarding Risk-Taking Respective to Social Status, 6 articles of the sub scale regarding Risk-Taking Respective to Issues in Traffic and 5 articles of the sub scale regarding Risk-Taking Respective to Substance Use. In order to determine the reliability of the scale Cronbach Alpha coefficient was used and for stability reliability the test-retest method. It is reported that the alpha reliability factor of the whole of the scale was determined as 0.88 the alpha reliability factor regarding Risk-Taking Respective to Social Status was determined as 0.84, Risk-Taking Respective to Issues in Traffic was determined as 0.74 and Risk-Taking Respective to Substance Use was determined as 0.62. The reliability of the whole of the scale finding using the test-retest method was determined as 0.85, Risk-Taking Respective to Social Status was determined as 0.76, Risk-Taking Respective to Issues in Traffic was determined as 0.67 and Risk-Taking Respective to Substance Use was determined as 0.67 (Kiran, 2002). It is reported that the correlation between the similar scales developed with ARTQ is 0.87 and the findings regarding the validity and reliability of ARTQ prove that the scale shall be used safely (Bayar, 1999; Karahan, Sardoglu, Gencoglu, & Yilan, 2006; Kiran, 2002).

Data obtained from the study have been evaluated with appropriate statistical methods. In order to analyze the relevant findings distribution concerning adolescent identifying characteristics, percentage, average and the relation between independent variables in the Adolescent Risk Taking Scale data, the Student-t importance test was used. $p < 0.05$ was accepted as statistically significant. As during the evaluation, answers of the adolescents in ARTQ were not distributed normally, besides the data average, the median, the least and the most frequent value have been determined, too. Adolescents with values over median were defined as "risky group".

3. RESULTS

45.3% (n = 141) of the adolescents included in the study were 17 ± 0.7 years old and 89.4% were male. It was determined that 39.9% adolescents use harmful substance and 86.4% consume cigarettes as harmful substance. 46.6% admitted that their friends use harmful substances, 80% that the used harmful substance by their friend, is cigarette, 12.4% cigarette-alcohol, 5.5% cigarette-alcohol-drug (Table 1).

According to ARTQ evaluation of adolescents; it was confirmed that 48.6% are in the risky group. When ARTQ subscales were analyzed; it was determined that 49.2% are in risky groups regarding social position, 45.7% regarding traffic and 45% regarding substance use (Table 2).

When ARTQ was evaluated according to their gender; risk taking status concerning social position, traffic and substance use were lower on girls in relation to boys and it was determined that this comparison is statistically significant ($p < 0.01$) (Table 3).

When ARTQ was evaluated according to harmful substance use of the friends of participant adolescents; risk taking status of adolescents with friends using harmful substances regarding social position and substance use are higher than adolescents without friends using harmful substances. It was confirmed that the comparison between ARTQ point averages are statistically significant according to harmful substance use of the friends of adolescents ($p < 0.01$) (Table 4).

4. DISCUSSION

The findings, which we have obtained with this study, are showing that the ARTQ point averages of approximately half of the working adolescents in risky environment are really high.

As risky behaviors are seen frequently in the adolescent period, the group of age, with whom the study was carried out, is constituting an important section of the society. 45.3% ($n = 311$) of the adolescents included in the research were 17 ± 0.7 years old. According to World Health Organization's identification (WHO, 2005), all adolescents in the research groups are in the adolescent period and in the group of age with the most intense risky behaviors (Table 1).

Adolescents living in a crowded family or with lots of siblings shall have an effect to their habits regarding health and attitudes in the society (Oner, Sasmaz, Bugdaycı, & Kurt, 2005; Sari, 2006). 63.7 % of the adolescents in the study had 3 or more siblings. This result is showing that the participants live with a lot of people together (Table 1).

In lots of studies whether in our country (Bilir, 2003; Erbaydar, Lawrence, Dagli, Hayran, & Collishaw, 2005; Cuhadaroglu, Canat, & Kilic, 2003), or in countries abroad (Han, Choe, Lee, & Lee, 2001; Shafey, Dolwick, & Guindon, 2003; Eaton et al. 2008), it was seen that cigarette, alcohol and drug use rates of adolescents are high. As a reason for that shall be seen the fact that due to our society's cultural characteristics, boys are allowed to display a more independent attitude than girls. In our study it was determined that the substance use rate (cigarette-alcohol-drug), of which adolescents think that it is harmful for him-/herself is at 39.9% and the substance use rate, of which his/her friend is thinking that it is harmful for him-/herself is at 46.6% (Table 1). The high rates of adolescents' cigarette, alcohol and drug use in our study are similar to the studies in the literature.

It is reported that adolescents' risk taking attitudes are related with negative family structure (Aras, Gunay, Ozan, & Orcin, 2007), intense peer pressure (Esen, 2003), psychosocial problems (Coskun, Ogel, & Isil, 2008) and inadequate environment (Dino, Kamal, Hom, Kalsekar, & Fernandes, 2004). In the submitted study was confirmed that nearly half of adolescents (48.6%) at vocational training centers in risky environments, shall take risks according to ARTQ (Table 2). Adolescents' high risk taking results in the presented study with respect to ARTQ are similar to the studies carried out before. If in our study it is taken into account that the risk taking average regarding substance use is higher than social position and traffic according to Adolescents Risk Taking Scale (Table 2); *it must be considered to insist especially on adolescents' substance use and to focus on the education program concerning this subject.* First confrontation with substances causing habit/ addiction (alcohol, cigarette, drug, etc.) is occurring generally in the adolescent period (Erginoz, 2008; Gurol, 2008) and in that period substance addiction frequency is more and more increasing in developed and in developing countries. In our study is stated that substance use between college students is spreading rapidly in our country. Furthermore the negative effects of working conditions on not studying adolescents, is an inevitable result of more substance use. As concerning risky behaviors, different factors shall come into prominence in different socio-economic conditions and working children in due course, it is helpful to evaluate risky behaviors in schools with routine screenings.

In studies relating adolescents risk taking attitudes (Alikasifoglu et al., 2004; Arslan, Terzi, Dabak, & Peksen, 2012; Goksel, Cirit, & Bayindir, 2001; Han et al., 2001; Sasmaz et al., 2006; Aras et al., 2007; Esen, 2003; Karahan et al., 2006), it was reported that male adolescents' risk taking behaviors are higher than of female adolescents. Particularly skipping school, using alcohol/substance, driving a car without licence and fast, participate in a fighting, beginning a fight, carrying fighting devices of boys have been considered high in a statistically significant level (Aras et al., 2007). National and international study results (Arslan et al., 2012; Goksel et al., 2001; Han et al., 2001; Sasmaz et al., 2006) are supporting our study results of higher risky behaviors of boys in relation to girls. (Table 3). It was determined that adolescents' risk taking behavior according to their gender is statistically significant in an advanced level ($p < 0.01$) (Table 3).

In the studies were reported that the adolescents show a tendency to try and consume alcohol, cigarette and drugs; the most have tried alcohol or drugs because of curiosity, reduce stress, to feel grown-up or feel better, be a part of the group or just because of insistence of their friends (Alikasifoglu et al., 2004; Alikasifoglu, 2008; Aras et al., 2007; Ball, Bindler, & Cowen, 2010). In our study was confirmed that the percentage of adolescents' negative responding to the question, if they are using a substance that is harmful for them, was 60.1%, percentage of their friends' harmful substance use was 46.6% (Table 1). This result is showing that some adolescents are responding to this question with "I do not use", even if they have a harmful substance use habit in order not to get any troubles with the school administration. It was determined that adolescents with friends using harmful substances take more risks regarding social position, traffic and substance use in opposite to adolescents with friends not using harmful substances (Table 4). This difference was found statistically significant with respect to the carried out statistical comparison ($p < 0.01$).

In line with the results obtained from the study;

As in the adolescent period risk taking and trying behaviors are seen frequent, the evaluation of adolescents' developmental characteristics and environmental factors are essential in order to determine how patalogic the problem is (NLM, 2013). Making initiatives regarding risky behaviors by taking the developmental and environmental characteristics of the adolescents into account, shall be helpful (PAN, 2013). For avoiding risky behaviors, it is important to give the adolescents responsibilities to make healthy selections, to support them and increase their opportunities. Furthermore the adolescents have to be educated about the influences of their fellows on their behaviors and supported to develop positive peer relationships. Emphasizing on all kinds of information oriented education activities regarding substance use and social position for adolescents with risk taking tendency have an important place in society. Studies evaluating the current situation regarding risky behaviors are of great importance in order to meet the current requirements of education activities that will be prepared by using theoretical data (Aras et al., 2007). Study results shall light the way for education. Therefore it is recommended to carry out the studies in different regions, schools and social environments routinely.

5. ACKNOWLEDGMENT

This study is accepted and presented by oral presentation in 49. Turkish Pediatrics Congress & International Association for Adolescent Health 10th World Congress & 1st Congress of Pediatric Association of the Balkan, Istanbul, Turkey at 10-13 June 2013.

Conflict of interest

The authors declare that there is no conflict of interest for this study.

6. REFERENCES

- Alikasifoglu, M. (2008). Behavioral problems of adolescents. Istanbul University Medical Faculty Continuous Medical Education Activities. *Adolescent Health Symposium Series*, 63, 55-59.
- Alikasifoglu, M., Erginoz, E., Ercan, O., Uysal, O., Kaymak, D.A., & Liter, O. (2004). Violent behaviour among Turkish high school students and correlates of physical fighting. *Eur J Public Health*, 14(2), 173-7.
- Aras, S., Gunay T., Ozan, S., & Orcin, E. (2007). Risky behaviors of adolescents in Izmir. *Anatolian Journal of Psychiatry*, 8, 186-196.
- Arslan, H.N., Terzi, O., Dabak, S., & Peksen, Y. (2012). Cigarette, Alcohol and Substance use of college students in Samsun center. *Erciyes Med J*, 34(2), 79-84.
- Assante, L.M., Chun, S., Yun, M., & Newell, M. (2014). Social supply of alcohol to Korean high school students: a cross-sectional International Alcohol Control Study. *BMJ Open*, 4: e003462 doi:10.1136/bmjopen-2013-003462.
- Ball, J. W., Bindler, R.C. & Cowen, K.J. (2010). Health promotion and health maintenance of the adolescent. J.W. Ball., R.C. Bindler and K.J. Cowen, *Child Health Nursing: Partnering with children and families* (pp. 440-60). New Jersey, NY: Pearson Education.
- Bayar, N. (1999). The Relationship of risk taking behaviour and impulsivity, family structure and some demographic variables in adolescents. *Unpublished master's thesis*, Hacettepe University, Ankara, Turkey.
- Bilir, N. (2003). Effects of cigarette consume on female health and control. A. Akin, (Ed.), *Society gender, health and women* (pp. 209-19). Ankara: Hacettepe University Publications.
- Centers for Disease Control and Prevention (CDC, 2012). Youth Risk Behavior Surveillance United States, 2011. *MMWR*, 61(4), 8.
- Coskun, S., Ogel, K., & Isil, O. (2008). Awareness education activity for adolescents using volatile substances. *Addiction Journal*, 9(3), 114-8.
- Cuhadaroglu, C.F., Canat, S., & Kilic, E. (2003). TUBA Reports: Status determination study of adolescent and mental problems. Ankara: Tubitak Press.
- DiClemente, C.C., & Velasquez, M.M. (2002). Motivational interviewing and stage of change. In W.R. Miller & S. Rollnick (Eds.), *Motivational interviewing* (pp. 201-249). 2th ed. New York, NY: Guilford.

- Dino, G., Kamal, K., Hom, K., Kaksekar, I., & Fernandes, A. (2004). Stage of change and smoking cessation outcomes among adolescents. *Addict Behav*, 29(5), 935-40.
- Dolgun, G., Inas, S., & Ugurlu, F. (2011). Nurse role on adolescent health continuing and developing. *The Turkish Journal of Pediatrics*, 46(3), 4-8.
- Dundar, P.E., Baydur, H., Eser, E., Bilge, B., Nesanır, N., Pala, T., et al. (2008). Quality of life of worker saged 14-16 years in the Manise apprentice training center. *Marmara Medical Journal*, 21(3), 210-9.
- Eaton, D.K., Kann, L., Kinchen, S., Shanklin, S.S., Ross, J., Hawkins, J., et al. (2008). Youth Risk Behavior Surveillance - United States, 2007. *MMWR Surveill Summ*, 57(SS04), 1-131.
- Erbaydar, T., Lawrence, S., Dagli, E., Hayran, O., & Collishaw, N.E. (2005). Influence of social environment in smoking among adolescents in Turkey. *Eur J Public Health*, 15(4), 404-10.
- Erginoz, E. (2008). Adolescent substance addiction and community health. *Adolescent Health Symposium Series*, 63(2), 61-64.
- Esen, K. B. (2003). Risk taking behavior evaluation according to peer pressure, academic success and age variety. *Hacettepe University Educational Sciences Journal*, 24, 79-85.
- Feldman, E. (2000). Adolescent health: risks, resilience, prevention. *Clinics in Family Practice*. 2(4), 767-790.
- Girgin, V., & Kocabiyik, A. (2003). Is described the “predisposed to traffic accidents”, who are the risky drivers? *The Journal of Psychiatry and Neurological Sciences*, 16(1), 35-38.
- Goksel, T., Cirit, M., & Bayindir, U. (2001). Factors that influence smoking habit of college students in Izmir. *Turkish Thoracic Journal*, 2(3), 49-53.
- Gullone, E., & Moore, S. (2000). The adolescent risk-taking questionnaire: development and psychometric evaluation. *Journal of Adolescent Research*, 15, 231-250.
- Gurol, D.T. (2008). Risky adolescents regarding substance addiction. *Istanbul University Cerrahpasa Medical Faculty Continous Medical Education Activities Symposium Series*, 63, 65-68.
- Han, S., Choe, M.K., Lee, M.S., & Lee, S.H. (2001). Risk taking behavior among high schools in South Korea, *J Adolesc*, 24(4), 571-574.
- He, K., Kramer, E., Houser, R.F., Chomitz, V.R., & Hacker, K.A. (2004). Defining and understanding healthy lifestyles choices for adolescent. *J Adolesc Health*, 35, 26-33.
- Jansink, R., Braspenning, J., Weijden, T., Van-Der, Niessen, L., Elwyn, G., & Grol, R. (2009). Nurse-led motivational interviewing to change the lifestyle of patients with type 2 diabetes (MILD-project): protocol for a cluster, randomized, controlled trial on implementing lifestyle recommendations. *BMC Health Services Research*, 9(19), doi:10.1186/1472-6963-9-19.
- Karahan, T.F., Sardogan, M.E., Gencoglu, C., & Yilan, G. (2006). Risk taking behavior of college students concerning traffic, substance use and social position. *Education and Science*, 31(142), 72-79.
- Kiran, B. (2002). Analyzing risk taking, smoking behavior and school success of students with different peer pressure levels. *Unpublished doctoral thesis*, Gazi University, Ankara.
- Kutlu, R. (2006). The prevalence of smoking among the students of Meram Apprentice ship school. *TAF Preventive Medicine Bulletin*, 5(6), 424-33.
- National Library of Medicine. (NLM). Chapter 1. Substance use among adolescents. Health Services/Technology Assessment Text. <http://www.ncbi.nlm.nih.gov/books/bv.fcgi?rid=hstat5.section.56308>. Access: 28 Nisan, 2013.
- Menezes, A.M., Goncalves, H., Anselmi, L., Hallal, P.C., & Araujo, C.L. (2006). Smoking in early adolescence: evidence from the 1993 Pelotas (Brazil) birth cohort study. *J Adolesc Health*, 39, 666-677.
- Oner, S., Sasmaz, T., Bugdayci, R., & Kurt, A.O. (2005). Risk factors having impact on the prevalence of addiction of cigarette, alcohol and substance in the apprentices in the Mersin vocational training and apprentice ship center. *New Symposium*, 3(1), 33-7.
- Pan American Health Organization. (PAN). Tobacco Free Youth-Taking Action. http://www.opsoms.org/English/DD/PUB/SP579_03.pdf. Access: 28 Nisan, 2013.
- Peterson, F.L., Walker, L., Whatt, T.J., Rheinboldt, K., White, C., & Hogkinson, M. (2003). Evidence-based sexuality education. *American Public Health Association 2003 Annual Conference* San Francisco California 18 Nov. <http://apha.confex.com/apha/responses/131am/397.doc>
- Sari, C. (2006). The risk health behaviors of high school students. Unpublished master's thesis, Marmara University, Istanbul, Turkey.
- Sasmaz, T., Bugdayci, R., Toros, F., Kurt, A.O., Tezcan, H., Oner, S., et al. (2006). Alcohol use prevalence and potential risk factors in adolescent: A school-based and sectional study (Turkish). *TAF Prev Med Bull*, 5(2), 94-104.
- Shafey, O., Dolwick, S., & Guindon, G.E. (2003). Tobacco control country profiles. O. Shafey, S. Dolwick and G.E. Guindon, (Eds.), 2nd edition. Atlanta: American Cancer Society, WHO and UICC.
- Sharma, M. (2005). Enhancing the effectiveness of alcohol and drug education programs through social cognitive theory. *J Alcohol & Drug Education*, 49(3), 3-7.
- Stuart, K., Borland, R., & McMurray, N. (1994). Self Efficacy, health locus of control and smoking cessation. *Addictive Behaviors*, 19(1), 1-12.

World Health Organization (WHO, 2005). Adolescent health. http://www.who.int/topics/adolescent_health/en/ Access: 28 Nisan, 2013.

Tables

Table 1. Distribution of Identifying Features of Adolescents (N=311)					
Features of Adolescents	n	%	Adolescent' or Adolescent' Friends	n	%
			Substance Use		
<i>Age</i>			<i>Adolescent substance</i>		
16	69	22.2	Use	125	39.9
17	141	45.3	Not Use	186	60.1
18	101	32.5	<i>Adolescent substance use</i>		
<i>Number of siblings</i>			Cigarette	108	86.4
None	10	3.2	Alcohol	1	0.8
1	18	5.8	Cigarette-alcohol	16	12.8
2	84	27.4	Cigarette-alcohol-substance	0	0
≥3	199	63.7	<i>Adolescent' friend substance</i>		
<i>Gender</i>			Use	145	46.6
Girl	33	10.6	Not Use	166	53.4
Boy	278	89.4	<i>Adolescent' friend substance use</i>		
<i>Count of Child</i>			Cigarette	116	80
First	108	34.7	Alcohol	3	2.1
2.	103	33.1	Cigarette-alcohol	18	12.4
3.	71	22.8	Cigarette-alcohol-substance	8	5.5
≥4	29	9.3	<i>Presence at school years</i>		
<i>Presence at school years</i>			≤1 year	126	40.5
≤1 year	126	40.5	≤2-3 year	181	58.2
≤2-3 year	181	58.2	≥4 year	4	1.3
≥4 year	4	1.3	<i>Repetition of school years</i>		
<i>Repetition of school years</i>			Yes	14	4.5
Yes	14	4.5	No	297	95.5
No	297	95.5			

Table 2. Distrubition of the Adolescent Risk-Taking Questionnaire (ARTQ) Values of Adolescents (N=311)

	n	%	Min	Max	Median	\bar{x}	Sd
<i>ARTQ Total</i>							
≤ median value	160	51.4					
>median value	151	48.6	26	91	44.00	46.3	12.96
risk-taking respective to social status							
≤ median value	158	50.8					
>median value	153	49.2	15	62	27.00	28.6	8.93
risk-taking respective to issues in traffic							
≤ median value	169	54.3					
>median value	142	45.7	6	24	9.00	9.9	3.55
risk-taking respective to substance use							
≤ median value	171	55.0					
>median value	140	45.0	5	17	7.00	7.7	2.90

Notes. Values are given either as % or arithmetic average (\bar{x}) ± standard deviation (Sd).

Table 3. Comparison of Gender Between The Adolescent Risk-Taking Questionnaire (ARTQ) Values of Adolescents (N=311)

<i>Gender</i>	Adolescent Risk-Taking Questionnaire (ARTQ) Value				
	n	\bar{x}	Sd	t value*	p value*
Girl	33	36.12	10.99	-4.778	0.000**
Boy	278	47.17	12.73		
Risk-Taking Respective to Social Status <i>Subscale' Value</i>					
Girl	33	1.50	0.49	-3.450	0.001**
Boy	278	1.80	0.52		
Risk-Taking Respective to Issues in Traffic <i>Subscale' Value</i>					
Girl	33	1.58	0.65	-2.766	0.006**
Boy	278	1.92	0.75		
Risk-Taking Respective to Substance Use <i>Subscale' Value</i>					
Girl	33	1.66	0.71	-2.419	0.016***
Boy	278	1.98	0.84		

Notes. Values are given either as arithmetic average (\bar{x}), standard deviation (Sd).

*Student-t test, **p<0.01, ***p<0.05

Table 4. Comparison of Adolescent' Friends Substance Use Between the Adolescent Risk-Taking Questionnaire (ARTQ) values of the adolescents (N=311)

<i>Adolescent' Friends Substance</i>	Adolescent Risk-Taking Questionnaire (ARTQ) Value				
	n	\bar{x}	Sd	t value*	p value*
Use	145	48.31	13.58	2.975	0.003**
Not use	166	43.97	12.14		
<i>Risk-Taking Linked to Social Position Subscale' Value</i>					
Use	145	1.88	0.55	2.478	0.014***
Not use	166	1.73	0.49		
<i>Risk-Taking Respective to Issues in Traffic Subscale Value</i>					
Use	145	1.97	0.71	2.187	0.029
Not use	166	1.81	0.63		
<i>Risk-Taking Respective to Substance Use Subscale' Value</i>					
Use	145	2.03	0.74	1.877	0.032
Not use	166	1.87	0.72		

Notes. Values are given either as arithmetic average (\bar{x}), standard deviation (Sd).

*Student-t test, **p<0.01, ***p<0.05