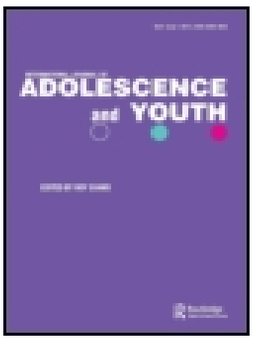

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Psychoactive substance use and preventive trends in higher education institutions in Lithuania

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ABSTRACT

This paper focuses on the analysis of psychoactive substance use situation and preventive trends within communities of HE institutions in Lithuania. The researchers used a questionnaire, thus applying the quantitative research method. The research results: strong alcohol drinks among students of HE institutions are not popular; the respondents used psychoactive substances for the first time while still at secondary school; more than one tenth of the respondents indicated having driven a vehicle while under alcoholic intoxication at least once over the last 12 months. The alcohol, tobacco and other psychoactive substance use situation among students could be related to psychosocial factors: the possibility to relax, to reduce stress, to experience pleasure, to overcome boredom and to communicate. The results of the survey reveal an imperative to start a discussion about the formation and implementation of preventive measures against psychoactive substance use within communities of Lithuanian HE institutions.

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Psychoactive substance; preventive strategies; higher education institutions

Introduction

The abuse of psychoactive substances is one of the crucial points for social health and societal issues in the European Union. Research indicates that Europe leads in alcohol use and alcohol quantity per population numbers in the world. Alcohol usage accounts for 11.8% of health problems and for premature death (World Health Organisation, 2012). The European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) in its annual report shows that over 93% of adults or slightly over one quarter of European Union citizens aged 15–64 have been exposed to illicit drug usage at least once in their lifetime, which indicates an increase in number by 5 million compared to 2016. The drug use index over the last 12 months indicates the highest prevalence among young adults (15–34 year-olds).

Jurgaitienė, Stasiuvienė, and Grubliauskienė (2010), Narkauskaitė, Juozulynas, Jurgelėnas, and Venalis (2011), Šaulinskienė, Bartkevičienė, Žiliukas, and Razbadauskas (2012), Newbury-Birch, Walshaw, and Kamali (2001), Tandheelkd, Plasschaert, Hoogstraten, and van Emmerik (2002), Hibell et al. (2009) and Kounenou (2011, 2010) emphasize the seriousness of the problem of the use of psychoactive substances among students: the use of the substance is related not only to health issues but also to the individual's quality of life (the effects on social behavior in the family, in the labor market, in public). Sakamaki, Amamoto, Mochida, Shinfuku, and Toyama (2005), Škėmienė, Ustinavičienė, Piešinė, and Radišauskas

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(2007) apply systemic analysis to the internal and external factors that determine health issues and behavioral patterns of young people. The target of their attention has been moving towards an irregular lifestyle and health-related problems of younger age groups. The research of Pope, Ionescu-Pioggia, and Pope (2001), Read, Wood, Davidoff, McLacken, and Campbell (2002), Williams (2003), Johnston, O'Malley, Bachman, and Schulenberg (2005), Simons, Gaher, Correia, Hansen, and Christopher (2005), and Wagner, de Andrade Stempliuk, Zilberman, Barroso, and de Andrade (2007) reveal the fact that the numbers of young people using psychoactive substances are growing in many countries and one of the largest risk groups within the psychoactive substance use context is students.

Charila (2005) and Bachman, O'Malley, Schulenberg, Johnston, and Bryant (2002) report that university students regard the use of psychoactive substances both as having constructive (eases adaptation to higher education school life; experimenting with the use of the substance is considered a norm; a declared intention to abstain from substance use after graduation) and destructive effects (a negative effect on study results and study quality; a long-term effect on psychological and bodily health, etc.).

In recent years research carried out in Lithuania (Narkauskaitė et al., 2011; Dobrovolskij & Stukas, 2014) revealed that the consumption of alcohol and tobacco among students of Lithuanian higher education institutions prevails: the majority of students use alcohol, smoke every day, and almost half of all the student population use energy boosting drinks; nearly one tenth of all students use drugs. Key reasons for use of psychoactive substances in the students' view are their intention to relax and curiosity.

Stukas and Dobrovolskij (2009) associate the university period in one's life with a multitude of new experiences and discoveries, formation of new habits and lifestyles, and tensions experienced in academic studies, and, therefore, stress becomes part and parcel of one's life. Students have to become used to a self-dependent life, to become responsible individuals, and to face many unexpected challenges. Read et al. (2002) consider that the period of studies at a higher education institution is the period of transition from senior adolescence to the young adulthood state, which is characterized by the delay of adulthood commitments (marriage, parenthood, permanent employment) and by the orientation to the normative goals in life (new friendships, contacts, self-dependence, and separation from parents). Researchers characterize this period by the individual's ability to alternate habits rapidly and to assume new models of behavior, which may cause negative outcomes in the future (Read et al., 2002).

Thus, a more intensive use of psychoactive substances during the study period and the problems this behavior causes calls for the need to apply preventive measures counteracting psychoactive substance use tendencies among the students of higher education institutions (Wagner et al., 2007) and for the importance of effective interventions in this age group (Baltrušaitytė & Bulotaitė, 2011; Istomina, Perminienė, Suhonen, & Leino-Kilpi, 2013).

Researchers Bankauskienė (2013), Murphy, Correia, Colby, and Vuchinich (2005) indicate that the use of some psychoactive substances enhances the risks that other psychoactive substances will be used also; a direct correspondence between students' engagement in studies and their use of alcohol and drugs exists: the more students are occupied with their studies, the less they abuse substances. Bennett and Holloway (2014), based on their survey data, insist that universities must start drug prevention actions since students may be regarded as a high-risk group: studies are often started in late adolescence; the social environment pitches high standards; they experience pressure from peers; students are psychologically vulnerable; and they seek the experience of new freedoms. Individual health is in direct dependence to social and economic indications. Preventative programs at the universities should be targeted towards strengthening cognitive capacities (Bennett & Holloway, 2014) and towards developing students' self-observation, assessment and self-assessment of advancement and the adaptation of life goals. Though, as a rule, preventative measures against psychoactive substance use do not include physical and medical interventions. These, too, may have a positive effect upon changes in an individual's life. Therefore, preventive programs have to be drawn on the basis of empirical survey data and be processed by applying quantitative and qualitative research methods.

Table 1. Internal correspondence of the questionnaire scales.

Subscale	Cronbach's alfa (α) coefficient
Assessment of feeling	$\alpha = .847$
Experiences of alcohol, tobacco and other psychoactive substance consumption over 12 months	$\alpha = .800$
Experiences of alcohol, tobacco and other psychoactive substance consumption over the last 30 days	$\alpha = .782$
Factors inducing alcohol, tobacco and other psychoactive substance use	$\alpha = .892$
Alcohol, tobacco and other psychoactive substance consumption consequences	$\alpha = .819$

The aim of the article is to analyze psychoactive substance use situation and preventive trends within communities of higher education institutions in Lithuania.

Methods

The quantitative research method based on the neopositivist approach is taken. Thus, the assumption is that the causes most often determine the outcomes (Babbie, 2007; Cargan, 2007). It is a reductionist approach since the ideas are attempted to be split into idea clusters and confirm the variables which form the basis of the research tool – a questionnaire (Ornstein, 2013). The key feature is a belief that the participants' answers reveal their opinions and attitudes towards themselves as individuals and towards other people as well as the phenomena in the social environment (Babbie, 2007; Ornstein, 2013). That means that statistically it is attempted to identify the key characteristics of the object of study, to reduce the number of primary features, to reveal the pattern of their function and their importance (Nardi, 2006).

Measure

The research tool is a questionnaire. The researchers relied on questionnaires prepared by the Indiana Collegiate Action Network, USA and Indiana Prevention Resource Center, USA, questionnaire to identify the spread of psychoactive substance use among students and reasearch data on national psychoactive substance use among students and research data on national psychoactive substance use among Lithuanian higher education institutions (Study of the use of psychoactive substance among Lithuanian students of higher education, 2008; Narkauskaitė et al., 2011; Bilevičiūtė & Jonušauskas, 2011; Dobrovolskij & Stukas, 2014; The prevalence of use of psychoactive substances among Lithuanian nightclub visitors, 2014) were used. The research data of Lammers, Goossens, Lokman, et al. (2011); Strom, Adolfsen, Fossum, Kaiser, and Martinussen (2014); Gottfredson et al. (2015) and Dymnicki, Henry, and Myford (2015) helped construct the question section on alcohol, tobacco and other psychoactive substance use prevention at school. The research data of Larimer, Kilmer, and Lee (2005), Charila (2005) and Kounenou (2011) helped construct the question section on alcohol, tobacco and other psychoactive substance use prevention at university.

To measure the internal correspondence of the questionnaire scales, Cronbach alfa (α) coefficient was counted, based on correlation of opposing core statements in the questions and on the degree of revealing the issue under the analysis through proposed statements (Table 1).

The obtained results lead to the conclusion (Table 1) that the indicators selected with the questionnaire directly define the characteristics under analysis. Therefore, the analysis of these characteristics allows for the representation of the psychoactive substance use situation in Lithuanian higher education institutions and for the identification of the need of preventive programs at higher educational institutions. It should be noted that in this article, the subscales of 'Assessment of feeling', 'Experiences of alcohol, tobacco and other psychoactive substance consumption over the last 30 days' and 'Alcohol, tobacco and other psychoactive substance consumption consequences' are not analyzed.

Sample and participants

One thousand one hundred eighteen students from Lithuanian higher education institutions (567 university students and 551 college students) took part in the survey. To select a representative sample of the population We used a multi-stage sampling method in which we carried out purposive selction by using reasonably smaller and smaller target groups at each stage.

At the first stage, by using the stratified selection method, two groups of the target population were identified according to the type of the higher education institution: university population (this group consists of $N_1 = 99{,}030$ elements) and college population (this group consists of $N_2 = 41{,}517$ elements). After the calculation of the stratified sampling, the sample population of the survey was identified with 95% of precision to 5% tolerance ration: $n_1 = 383$ – university students and $n_2 = 381$ – college students. In the second stage, through a systemic selection, the group of higher education institutions was selected: from the university list, every third university was included in the group and from the list of colleges, every third college was selected.[1] Simple random selection from each higher education instituion identified five study programs during the third stage. The researchers collected university and college student group records indicating their study programs, course and group number during the fourth stage.

The sample of population included five groups from university study programs and five groups from college study programs.

31.4% of the sample population were male students and 68.6% female students. The analysis of the survey shows that 42.0% of the respondents were aged 20–21. 31.2% respondents were 22 years old and older (16.5% were 22–23 years old; 6.0% 24–26 years old; 8.7% 27 years old and older). Slightly over one fourth of all survey participants (26.7%) were 18–19 years old. 50.9% of university students and 49.1% college students participated in the survey (1st year students – 36.6%; 2nd year students – 31.2%; 3rd year students – 19.7%; 4th year students – 12.5%).

Ethical approval

All the survey respondents were treated as individuals who can exercise independent control of their own actions. The selection of the sample group was guided by scientific criteria (multi-stage purposive selection method chosen). Before distributing questionnaires, the respondents were briefly but not exhaustively introduced to the goals of the survey so that the participants were secured from advance attitudes, the information gave the details of the questionnaire data use and the expected date of the completed questionnaire return. To assure the anonymity of the respondents and the confidentiality of the presented data, the participants completed the questionnaires anonymously. The anonymity of student survey participants was fully secured. The students were not asked to indicate their higher education institution. The questionnaires were distributed after researchers received permission from the administration of the higher education institution and students assent. The respondents agreed to take part in the survey guided by their free choice and could terminate participation in the questionnaire survey at any moment. Data accumulated from the quantitative survey were thoroughly reviewed. From 1129 returned questionnaires, 1118 questionnaires were flawlessly completed; therefore, the responses of 1118 participants were processed by statistical data analysis system.

Data analysis

Statistical analysis of the research data was carried out through the application of statistical data processing program SPSS19.0 (*Statistical Package for the Social Sciences*). For the identification of the relationship between variables and data significance on student use of alcohol, tobacco and other psychoactive substances, correlation analysis was applied. Spearman rank (r_s) correlation coefficient was applied to measure the degree of all possible associations that affect student use of alcohol, tobacco and other

psychoactive substances. Spearman rank correlation coefficient was chosen because distribution of its variables is distant from normal distribution.

For non-parametric compatibility criterion chi, the chi-square was calculated for data cross-linking, which helps to determine the relation between the attribute of the estimator and its determinant (Pearson χ^2), with the chosen significance level $p < .05$ so that it was possible to determine student use of alcohol, tobacco and other psychoactive substances in relation to students' gender, type of higher education institution, actual income and environment.

The Mann-Whitney test as a non-parametric criterion for comparing two independent samplings, ranking variable distributions when the distribution is not normal was used for the identification of the differences in student alcohol, tobacco and other psychoactive substance use according to higher education institution type, course and age of respondents.

Results

For the identification of the alcohol, tobacco and psychoactive substance use situation in Lithuanian higher education institutions, the experience of the respondents over the last 12 months was measured. It was found out that over the last 12 months, 42.7% of the respondents used cigarettes/cigars. More than one third of the respondents (38.2%) stated that they never used tobacco, 19.2% could not give an answer. More than one tenth (11.6%) stated that they smoked cigarettes/cigars only once or twice. 18.2% of the survey respondents stated that they used cigarettes/cigars 40 and more times.

Chewing/non-smoking tobacco (snuff) use among the students of higher educational institutions is not popular; the absolute majority (93.1%) of the respondents stated that they are not using snuff. Electronic cigarettes were more popular by a fraction among the survey respondents. The respondents who smoked electronic cigarettes over the last two months once or twice count up to 15.1%.

Almost one fourth of the surveyed students of the higher education institutions (24.2%) stated that they had used energy boosting drinks over the last 12 months 1–2 times; and more than one tenth (12.8%) used them 3–5 times. Beer and cider was used by the majority of students (66.2%). More than one tenth of students indicated using this type of alcohol in each frequency group 3–5 times, 10–19 times, 40 times and more.

Wine and champagne were rather popular among the respondents. Over the last 12 months, almost three quarters of all respondents, used this type of alcohol. 15.3% stated never using it. More than half of the respondents (57.2%) over the last 12 months used liquor and alcohol cocktails. 31.2% of the students of higher education institutions answered that they have never used strong alcohol such as vodka or cognac (Chart 1). Almost one fifth (18.9%) of respondents answered that they used this type of alcohol up to two times a year and more than one tenth of respondents (11.8%) up to 3–5 times.

About one fifth of the students of the higher education institutions over the last 12 months used 'weed,' marijuana/hashish. More than one tenth (11.9%) used it one to two times. 1.7% of respondents used 'weed,' marijuana/hashish 40 or more times over the last 12 months. Narcotic substances were the least popular among students of higher education institutions. The absolute majority indicated that they never used drugs. Over the last twelve months, ecstasy, amphetamine/methamphetamine, cocaine, heroin, LSD, hallucinogenic mushrooms, or inhalants were used by 1.0% of respondents. Less than one tenth (8.9%) of respondents indicated use of sedatives, sleeping medications or stimulants not for medical purposes over the past 12 months.

Students admitted to using all types of alcohol, cigarettes and energy drinks for the first time before university studies. Over three-fourths of respondents used soft alcohol drinks (wine, champagne, cider, beer) for the first time before university studies. Sixty-eight percentage of respondents started smoking before university studies, 57.7% of respondents started using energy drinks. One fifth (20.2%) of respondents having used or using 'weed', marijuana/hashish tried it for the first time before their university studies.

Boys significantly more often than girls tried chewing/non-smoking tobacco (snuff) before university studies ($\chi^2 = 46.137$; $p < .000$), smoking electronic cigarettes ($\chi^2 = 37{,}770$; $p < 0{,}000$), 'weed',

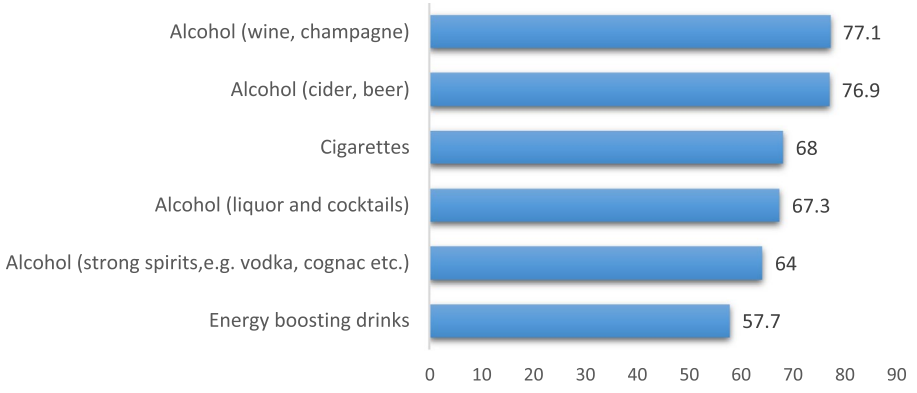

Chart 1. Part of the students of a higher education institution that started using psychoactive substances before their studies at a higher education institution (%).

Table 2. Correlation between the age of the respondent and frequency of psychoactive substance use (r_s).

	Statistical significance	Spearman's ranking (r_s) correlation coefficient
Cigaretes/Cigars/Pipe	$p = .002$	$r_s = -.099^{**}$
Chewing/non-smoking tobacco (snuff)	$p = .065$	$r_s = -.059$
Electronic cigarettes	$p = .000$	$r_s = -.208^{***}$
Energy boosting drinks	$p = .000$	$r_s = -.127^{***}$
Alcohol (beer, cider)	$p = .043$	$r_s = -.065^{*}$
Alcohol (wine, champagne)	$p = .530$	$r_s = -.020$
Alcohol (liquor and alcohol infused cocktails)	$p = .014$	$r_s = -.078^{*}$
Alcohol (strong spirits e.g. vodka, cognac et al.)	$p = .000$	$r_s = -.126^{***}$
'Weed,' marijuana/hashish	$p = .007$	$r_s = -.086^{**}$
Ecstasy	$p = .786$	$r_s = .009$
Amphetamine/methamphetamine	$p = .998$	$r_s = .000$
Cocaine	$p = .154$	$r_s = .046$
Heroin	$p = .918$	$r_s = .003$
LSD	$p = .466$	$r_s = .023$
Hallucinogenic mushrooms ('magic mushrooms, 'mushrooms')	$p = .696$	$r_s = .012$
Inhalants (glue, petroleum fuels, solvents, ether, aerosol sprays, gases)	$p = .194$	$r_s = -.042$
Medicine for non-medical purposes (sedatives/ sleeping medications/activity boosting medications)	$p = .908$	$r_s = .004$

*Statistical significance .05 value; **Statistical significance .01 value; ***Statistical significance .001 value.

marijuana/hashish ($\chi^2 = 34.607$; $p < .000$), ecstasy ($\chi^2 = 14.671$; $p < .012$), amphetamine/methamphetamine ($\chi^2 = 17.944$; $p < .001$), cocaine ($\chi^2 = 13.811$; $p < .017$), hallucinogenic mushrooms ('magic mushrooms', 'mushrooms') ($\chi^2 = 17.758$; $p < .003$). While girls had most often drunk wine and champagne before their studies ($\chi^2 = 13.745$; $p < .017$).

First year university dormitory residents responded to having used alcohol in their 1st year of studies more often than the students residing with parents or caretakers ($\chi^2 = 81.259$; $p < .039$).

The survey attempted to find out if a direct correlation between the respondents' age and the frequency of the alcohol, tobacco and other psychoactive substance use over the last 12 months existed (Table 2).

When counting Spearman's correlation coefficient among variables, it turned out that the older the students are, the less frequently they resort to electronic cigarette use ($r_s = -.208$; $p < .0001$), energy boosting beverages ($r_s = -.127$; $p < .0001$) and strong alcoholic beverages such as vodka or cognac ($r_s = -.126$; $p < .0001$).

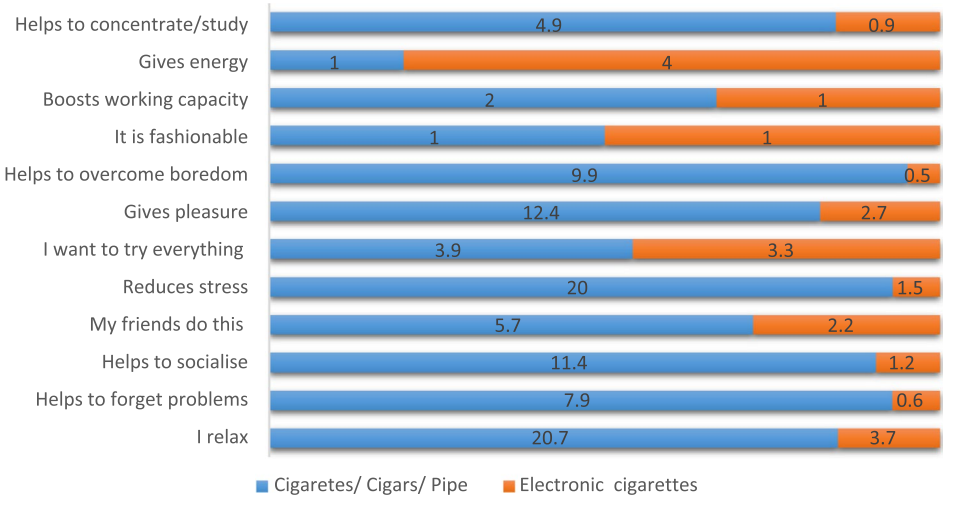

Chart 2. Smoking factors, students' opinion (%).

The resulting analysis reveals that, in students' opinion, smoking cigarettes, cigars or pipes is mostly associated with the possibility of relaxation (20.7%), stress reduction (20.0%), to experiencing pleasure (12.4%) or for facilitating socialisation (11.4%), and for overcoming boredom (9.9%) (Chart 2).

The participants of the survey use all kinds of alcohol mostly to relax (36%) or for better communication (17.5%).

Comparative analysis of the students' responses by the type of higher education institution (a college or a university) indicated a statistically relevant difference in responses in all five sections ($p < .05$). University students (*mean rank* = 495.90, $p = .028$) more often than college students (*mean rank* = 481.85) name peer pressure as a factor influencing the habit of cigarette/cigar/pipe smoking and chewing/non-smoking tobacco use. University students (*mean rank* = 492.85, $p = .013$) more often than college students (*mean rank* = 485.02) use chewing/non-smoking tobacco, or soft alcoholic drinks (beer, cider, wine, champagne) as a means to facilitating socialization.

The resulting revealed that the respondents have experienced negative effects of alcohol and other psychoactive substance use over the last 12 months. Most often, the listed negative effects of alcohol and other psychoactive substance use are conflicts with family and friends (22.8%), health problems (12.2%) or misplaced possessions (11.4%). Every tenth respondent confessed that after using alcohol or other psychoactive substances, they engaged in a fight, were injured physically, or had casual sex. As many as one tenth of the respondents (13.2%) drove a vehicle while intoxicated and 2.1% after using drugs at least once a month.

Comparative analysis of female and male responses to the section questions revealed that men more tham women are inclined to drive while intoxicated by alcohol (men's *mean rank* = 537.21; women's *mean rank* – 469.09, $p = .000$) or after using drugs (men's *mean rank* = 514.31; women's – 479.59, $p = .000$).

Students' opinion to the preventive measures implemented at secondary education schools was analyzed to estimate the directions of organising and implementing preventive action in higher education institutions. The researchers attempted to identify the types of preventive actions against alcohol, tobacco and other psychoactive substance use carried out in the former schools of the respondents. The majority of the respondents (45.0%) named class meetings at schools as the most efficient form of the preventive actions since these gave students relevant information and skills; the second largest group (43.8%) mentioned preventive events (actions, drawing contests, or dedicated theme days), subject lessons (39.0%), preventive programs (34.6%) and project work (26.9%).

The research aimed to determine what preventive measures/programs could be continued/implemented in a higher education institution. Nearly half of the respondents (49.6%) mentioned that a

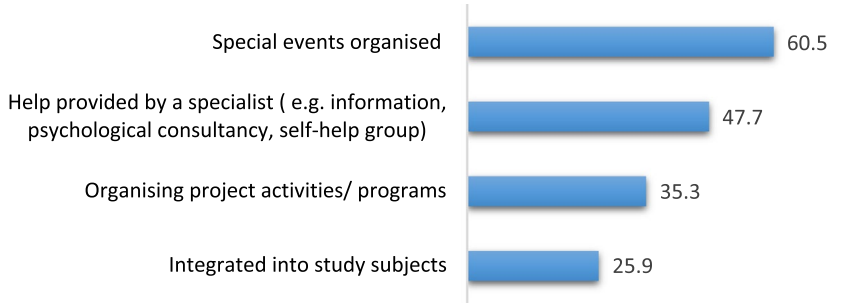

Chart 3. Preventive action, which could be continued/implemented at a higher education institution in the opinion of the students (%).

higher education institution should implement/continue implementing alcohol, tobacco and other psychoactive substance use provention programs/measures, 30.4% had no opinion on this issue, while 17.9% of the respondents did not agree with the statement.

The majority of respondents (60.5%) consider that certain preventive events should be organized at higher education institutions About half of the students (47.7%) are of the opinion that specialized assistance has to be provided (e.g. information, psychological help, and self-help groups). More than a third expressed the opinion that a project activity/program could be organised. More than one fourth of the respondents consider the possibility of integrating preventive themes into study subjects (Chart 3).

In the opinion of the students (51.0%), a higher education institution should appoint a dedicated professional for the implementation of preventive measures. Student associations should also take responsibility for the implementation of such measures (43.0%). One fifth of the students stated that teachers, study committees and faculties also should bear the responsibility for the implementation of preventive measures at higher education institutions.

University students more often than college students tend to agree with the statement that student associations should take responsibility for the preventive actions at the higher education institution (college *mean rank* = 471.88; university – 505.53) (p = .031).

Concluding remarks

The research revealed that strong alcohol drinks are not popular among students of Lithuanian higher education institutions. However, the international research 'Comparative monitoring of alcohol epidemiology across the EU' (2016) results reveal that in Lithuania among persons aged 18–64 years old, strong alcoholic drinks are the most popular followed by beer and wine. The proposed conclusion is that strong alcoholic drinks are more popular among elder people.

Half of the respondents used cigarettes/cigars over the last 12 months. Chewing/non-smoking tobacco (snuff) and electronic cigarettes are not popular. The research shows the shrinking number of tobacco, energy drinks and marijuana/hashish users in Lithuania within the context of other national research (Dobrovolskij & Stukas, 2014; Research of the need for preventive measures against alcohol use and smoking and their implementation in target groups of young people, 2013).

The respondents used alcohol, tobacco and other psychoactive substances for the first time while still at secondary school. These results of the research correspond to the data of ESPAD research, 2015, which stresses that alcohol, tobacco and other psychoactive substances in Lithuania are first used at a young age – at the age of 13 and younger. Simons-Morton et al. (2009) explain this young age of users to loosening parental control and dimishing social responsibility to the community.

More than one tenth of the respondents indicated having driven a vehicle while under alcoholic intoxication at least once over the last 12 months. Juxtaposing research to results of the research carried out by the Lithuanian Drug, Tobacco and Alcohol Control Department (2008) determines that the situation among students of driving in a state of alcoholic or drug intoxication remains unchanged.

The alcohol, tobacco and other psychoactive substance use situation among students of higher education institutions could be related to psychosocial factors: the possibility to relax, to reduce stress, to experience pleasure, to overcome boredom and to communicate. These conclusions are also found in Narkauskaitė et al. (2011), Bulotaitė and Baltrušaitytė (2010), Jurgaitienė et al. (2010), Baltrušaitytė and Bulotaitė (2011), Read et al. (2002) and Skibniewska, Radzymińska, Jaworska, and Babicz-Zielińska (2009) research results, which highlighted that experienced tensions and stress influence alcohol, tobacco and other psychoactive substance use. The prevalence of psychoactive substance use is determined by the challenges of adulthood which lead to new behavioral models.

Targeted preventive trends for reducing psychoactive substance use in higher education institutions should be directed towards publicising the effects of the use of such substances and toward providing specialised assistance in dealing with students' problems individually. For this purpose higher education institutions should create and develop assistance measures for students, particularly for those encountering academic problems (Amaro et al., 2010).

It has been determined that the implementation of preventive measures against psychoactive substance use should be delegated to a professional. The role of students associations is of equal importance, particularly, for encouraging social and cultural self-realisation and for developing students' awareness. Such trends are seen in global university practice by embracing the function of student help centres, multistructured university intervention strategies, forming task-groups for extending help, public relations strategies, and cooperation with other institutions in solving students' problems. (DeJong, 2002; Amaro et al., 2010).

The results of this research emphasise the necessity for the communities of the Lithuanina higher education institutions to start discussions on creating and implementing special preventive alcohol, tobacco and other psychoactive substance use programs.

Note

1. The list of higher schools is compiled according to the Lithuanian ethnographic regions: the list of 20 Lithuanian universities and the list of 22 Lithuanian colleges.

Disclosure statement

No potential conflict of interest was reported by the authors.

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