

Alcohol-Related Risks for Slovene Secondary School Students on Graduation Trips: Ten Years Later

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Abstract - The purpose of the research was to study the characteristics of risky alcohol use and alcohol-related risky behaviour of Slovene secondary school students attending graduation trips in the period of ten years (in 2007 and in 2017). We used the questionnaire from the first research study which we modified with questions addressing sexual behaviour of adolescents. The final sample included 371 students of the last years of secondary school (44.9% of boys and 55.1% of girls, the mean age was 17.8 years) attending graduation trips. The sample was unrepresentative and based on self-selection. Both research studies gave comparable results in the categories of alcohol use and risky alcohol use before the trip. The most notable increase was seen in the categories of lifetime prevalence and frequency of use of marijuana. The most common alcohol-related risks remain property damage, accidents, and issues arising from relations with friends. In addition to that, the following categories stand out: sharing embarrassing photos via social media, establishing sexual contacts which would not take place if sober, and unwanted sexual experiences. Almost half of them consumed alcohol before the last sexual intercourse. In the last decade, graduation trips have retained the status of specific environments, in which, compared with the period before the trip, the use of alcohol is characterised by greater risks for a higher percentage of adolescents. Given the results, the recommendations focus on interventions aimed at reducing specific risks related to the use of alcohol on graduation trips.

Key words: alcohol; secondary school graduation trips; alcohol-related risks; adolescents; binge drinking

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Introduction

In 35–36 European countries, the ESPAD methodology provides a relatively good insight with continuous monitoring of the use of alcohol and risky use of alcohol among adolescents aged 15 and 16 [1-3]. The average lifetime prevalence of the use of alcohol in all European countries which were included in

the ESPAD 2015 research was 80%, whereas in Slovenia the average was 89% [3]. In addition, Slovenia ranked above average for some of the indicators of heavy episodic drinking and use of marijuana (ibid.). Research data show that in Europe and (North) America alcohol use and intoxication prevalence among adolescents has been in decline in the last twenty years [4-9]. ESPAD research studies observed a decline in the lifetime prevalence and use of alcohol in the last 30 days for the period from 2003 to 2015, while heavy episod-

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ic drinking remains at a level, comparable with that of 2003 [3].

However, data are less systematic for older adolescents who are finishing secondary school. The only research that focused on the use of alcohol of the same generation of Slovene secondary school students in year 1 and 4, was conducted in 2002 [10]. The lifetime prevalence of alcohol use has not changed significantly, yet the percentage of those who used alcohol at least 40 times, increased by 30.7%. In addition, the percentage of intoxicated and often intoxicated secondary school students rose by 18%. Moreover, the prevalence of the use of (any) other drugs increased by 20%. In the USA, the use of alcohol among students of the last years of secondary school almost doubled, while binge drinking, defined as consuming five or more alcoholic beverages successively at one occasion, increased from 47.0% in year 1 to 61.9% in the last year of secondary school [7].

According to the research findings, the use of alcohol and intoxication may be linked to other risks, such as unprotected sexual intercourse, unwanted sexual intercourse, violence, injuries etc. [2,10-12]. Research conducted in 2001 showed that one in ten adolescents regretted having sexual intercourse under the influence of alcohol [12]. In Slovenia, 8.0% students of the last year of secondary school reported having unwanted sexual experiences due to the use of alcohol, while 11.4% reported having unprotected sexual intercourse [10]. The ESPAD research from 2011 reports similar results [12], with an average of 8.0% experiencing sexually-related problems due to alcohol use (regretted sexual intercourse, unprotected sexual intercourse).

The purpose of this research is to identify the characteristics of alcohol use and alcohol-related risks, and the characteristics of sexual behaviour on graduation trips, to then compare the results in the period of ten years. Graduation trips in Slovenia take place

in the last years (between year 3 and year 4, and in year 4) of secondary school. The trips are usually one week long and the students travel abroad (to Greece, Spain, Turkey etc.). Generally, the trips are not organised by secondary schools, instead students travel with (specialised) tourist agencies. Adolescents view such trips as the end of secondary school and the opportunity to engage in parties, accompanied by greater alcohol-related risks [13]. The MOND research, named after Mondial Travel agency or Collegium Mondial Travel agency, was first conducted in 2007; its main findings indicated that the already high prevalence (98.9%) of alcohol use at the end of secondary school did not increase on the trip, while this happened for risky alcohol use. 83.2% of respondents reported being intoxicated, 83.9% of them consumed at least five alcoholic beverages successively, while 21.0% needed others' help due to intoxication ($n = 1630$). We repeated the MOND research after ten years, adding the part on alcohol-related sexual behaviour of adolescents on graduation trips.

Subjects and Methods

Study design

We used the questionnaire from the 2007 study on the use of alcohol and other drugs on graduation trips, which we modified [13]. We upgraded the questionnaire and added questions on the use of NPS, and the part concerning risky sexual behaviour of adolescents as a consequence of the use of alcohol and other psychoactive substances. To foster participation and increase the number of returned questionnaires, we offered respondents the possibility to participate in a prize competition. With their consent, the data of those respondents who were willing to participate in the prize competition were stored separately and were used in accordance with publicly available rules only with the aim to inform the prize winners. Such data was then destroyed.

The sample included 385 secondary school students from different Slovene regions who attended a graduation trip with Collegium Mondial Travel agency in 2017. During the research period, 3994 students attended the trip, organised by the above-mentioned agency. We succeeded in distributing 1150 questionnaires, 33.5% of which were returned to us. According to the data from the Statistical Office of the Republic of Slovenia, 15,924 students were enrolled in year 4 of secondary school in the school year 2016/2017 [14], yet not all of them attended graduation trips. Therefore, our sample is considered rather small considering the total enrolment numbers, and is unrepresentative, since it is based on self-selection. Upon receipt, we first reviewed the questionnaires and excluded those which were empty or inappropriately completed. To this end, we excluded 8 questionnaires and entered the remaining ones into the database. In the data entry phase, we examined the accuracy on every tenth questionnaire and inserted eventual corrections. After this phase, we examined the reliability and validity of 377 questionnaires included in the database. The reliability of data was examined on a series of interconnected questions addressing psychoactive substances (PAS), specifically asking the respondent which PAS have they had used so far (lifetime prevalence) and how many times they had used it. The reliability of the questionnaire was very good, since there were only between 0.27% and 1.34% inconsistent questions which is comparable with the MOND07 research from 2007 (up to 1.8%) and other comparable research studies [10,15]. Separately, we examined the reliability for alcohol-related questions (lifetime prevalence and use in the last month before the research). The rate of inconstancy in answers (0.0%) was similar to that of the MOND07 research (0.3%). We tested the validity with a question that included a fictional drug. The use of this drug was reported by only one respondent. In addition to questionnaires which were excluded at the beginning, we subsequently excluded six other questionnaires before the processing phase (one reporting the use of the fictional drug and five lacking an answer about the gender). In the end, the sample included 371 answers which were then further processed.

Sample

The sample included 44.9% of boys and 55.1% of girls ($n = 371$) with the average age of 17.8 years ($SD = 0.69$). Most respondents (71.1%) were 18 years old, while 23.7% of them were 17 years old at the time of the survey. The majority of them were students of grammar schools (58.1%), while others attended four- (40.2%) or three-year vocational schools (1.7%). From among 12 Slovene statistical regions, the highest number of respondents came from the Central Slovenia Statistical Region (65.9%).

Data collection

Data collection took place between July and August 2017. DrogArt Association distributed questionnaires in collaboration with the largest Slovene travel agency specialised in the organisation of graduation trips, Collegium Mondial Travel. A meeting with the agency was scheduled to address questionnaire distribution before it took place. The agency was provided with detailed instructions on the course of the survey and the collection of questionnaires; great emphasis was put on ensuring anonymity. The guides were given written instructions, and they distributed the questionnaires and invited respondents to participate in the prize competition on the coach journey returning from the trip. To participate in the prize competition, the respondent had to return a fully completed questionnaire. Questionnaires were collected separately from the prize competition coupons, therefore personal data could not be linked to individual questionnaires. Past experience led us to expect a larger sample, yet, as reported by the agency, there were issues with the distribution, therefore we collected fewer questionnaires than in 2007, when the number was 1630. At the beginning of the trip, students were handed informative materials of the Your Choice programme (part of Association DrogArt) which addresses alcohol-related harm reduction with such topics as helping a friend, hydration, food, safe sex, driving and alcohol.

Results

Alcohol use

Almost all respondents (99.7%) declared that they had tried alcohol, while 69.1% of them confirmed that they had tried alcohol on 40 or more occasions ($n = 363$). 99.2% of respondents had used alcohol in the last 12 months, and 91.2% had used alcohol in the last 30 days before the graduation trip ($n = 364$). 96.7% of adolescents used alcohol on the trip ($n = 365$). With regard to the frequency of alcohol use, statistically significant differences between sexes were identified in the category addressing the use of alcohol in the last year ($t(360) = 2,87, p < 0.01$), and in the category of alcohol use on graduation trips ($t(363) = 2,36, p < 0.05$); in both cases boys used alcohol more frequently than girls. These results are comparable with those from the 2007 research (Author, 2009), with the difference that the first study saw substantial differences between sexes with all four questions. The majority of respondents (79.5%) are of the opinion that they will continue using alcohol at age 25 ($n = 371$), while ten years ago this percentage was lower (66.5%) ($n = 1630$).

Comparing the frequency of alcohol use in both research studies gave statistically significant differences only for one category in Table 1, namely the frequency of alcohol use in the last 30 days before the research ($t(1955) = 9,23, p < 0.001$); according to this, adolescents used alcohol more frequently in 2007.

The results concerning intoxication and heavy episodic drinking are comparable for both research studies (Table 2). 86.9% of adolescents were intoxicated at least once on the trip. A third of respondents indicated that they had been intoxicated between 6 and 9 times on the trip ($n = 360$). Both research studies also gave comparable results in the category of heavy episodic drinking of five or more alcoholic beverages with a relatively high percentage of such users. In 2017, 71.7% of respondents engaged in such drinking practice more than three times on the trip. Both research studies gave statistically significant differences in favour of boys being more intoxicated and more frequently engaging in heavy episodic drinking. More than three quarters of respondents indicated that they had engaged in heavy episodic drinking (binge drinking) before the trip

Table 1. A comparison of alcohol use between the two research studies. The table shows exclusively the percentages of secondary school students using alcohol in specific categories, while statistically significant differences are calculated based on the frequency of use.

	MOND, 2007 $n = 1584-1596$ %	MOND, 2017 $n = 362-365$ %
Prevalence of alcohol use		
Lifetime prevalence of the use of alcohol	98.9***	99.7
Alcohol use in the last 12 months	98.4***	99.2**
Alcohol use in the last 30 days before the research	96.4***	91.2
Alcohol use in the last week	96.4***	96.7*

* Statistically significant differences between sexes ($p < 0.05$)

** Statistically significant differences between sexes ($p < 0.01$)

*** Statistically significant differences between sexes ($p < 0.001$)

Table 2. A comparison of risky use of alcohol between the two research studies. The table shows exclusively the percentages of secondary school students who were intoxicated in specific categories, while statistically significant differences are calculated based on intoxication frequency or binge drinking.

Risky use of alcohol	MOND, 2007 n = 1577–1607 %	MOND, 2017 n = 356–371 %
Intoxicated in lifetime	93.2***	94.0*
Intoxicated in the last 12 months	88.7***	91.1***
Intoxicated in the last 30 days before the research	82.5***	76.7**
Intoxicated on graduation trip	83.2***	86.9**
Consumed at least 5 alcoholic beverages successively 30 days before graduation trip	76.4***	78.7*
Consumed at least 5 alcoholic beverages successively during graduation trip	83.9***	87.5**

* Statistically significant differences between sexes ($p < 0.05$)

** Statistically significant differences between sexes ($p < 0.01$)

*** Statistically significant differences between sexes ($p < 0.001$)

(78.7%) as well as on the trip (87.7%) ($n = 367$). A comparison between research studies showed that in both cases, before and during the trip, adolescents in 2017 statistically significantly more often engaged in binge drinking ($t(564,95) = 2,44$, $p < 0.05$).

A comparison of the intoxication category of both research studies showed that there are statistically significant differences in the intoxication in the last 30 days before the research ($t(1931) = 4,34$, $p < 0.001$), with adolescents in 2007 being intoxicated more often. A slight difference was also identified in the category addressing intoxication on the trip ($t(546,72) = 2,42$, $p < 0.05$), with adolescents in 2017 being intoxicated more often.

Table 3 includes a comparison of the most commonly experienced issues by respondents in both research studies (issues which more than 20% of respondents encountered at least once). A significant deviation was identified in the categories of accidents

and injuries, reported by more respondents from the last research study. In comparison with respondents from 2007 (9.4%), more adolescents (10.7%) reported having an unwanted sexual experience due to the use of alcohol in 2017. 12.2% of adolescents engaged in unprotected sex due to the use of alcohol (10.2% in 2007). The questionnaire used in the last research study also included the question on whether respondents established sexual contacts which they would refrain from if sober. 23.4% of respondents reported experiencing such sexual contact at least once. A relatively high percentage of adolescents (21.6%) reported that an embarrassing photo of them was published on social media as a consequence of alcohol use. A tenth of respondents reported that they had been left alone by their friends while intoxicated. When asked about the risks related to driving, 15.6% declared that they occasionally (or more often) ride mopeds ($n = 289$),

Table 3. The most common issues related to alcohol use encountered by the respondents so far.

Issues related to alcohol use	MOND, 2007	MOND, 2017
	n = 1602–1611 %	n = 365–371 %
Damage to property and clothing	51.6	57.6
Disputes and arguing	46.5	49.6
Accident or injury	30.7	48.5
Losing money or other valuables	26.8	33.4
Issues arising from relations with friends	25.7	23.7
Pushing or fighting	22.5	23.8

while 35% admitted riding bikes ($n = 357$) under the influence of alcohol.

The most common issues experienced by adolescents due to the use of alcohol on graduation trips were: damage to property and clothing (24.0%), accident or injury (19.9%), disputes or arguing (17.0%), loss of money or other valuables (11.9%), and sharing embarrassing photos via social media (10.5%) ($n = 371$). 2.4% of graduation trip participants reported having an unwanted sexual experience, while 2.2% engaged in unprotected sexual intercourse ($n = 310/371$). Almost half of respondents (45.0%) reported drinking too much on the trip which led to vomiting and loss of memory ($n = 371$); this is 8.6% more compared to ten years ago. Because of that, a quarter of respondents needed assistance from others.

Use of other PAS

In addition to alcohol, the research sought to explore the use of other PAS and tobacco, which 75.1% of respondents had already tried ($n = 370$). Much like ten years ago, marijuana is the most commonly used psychoactive substance. From among all PAS indicated in Table 4, marijuana saw the major increase in use (to 64.4%). The use of other PAS is comparable

to the previous research study, with the most significant decrease in the use of poppers and tranquillisers. Given the use of new psychoactive substances (NPS) within specific populations in Slovenia, we added the question about their use, however, a relatively low percentage of respondents (1.2%) reported trying them. Synthetic cathinone 3-MMC which is characterised by relatively wide use in specific populations in Slovenia, had been tried by 0.8% of respondents.

With regard to marijuana use, the highest percentage (18.2%) of respondents used it at least 40 times, while in 2007 such frequency of use was reported by 10.6% of respondents. 12.7% of respondents used marijuana on one or two occasions ($n = 369$). Once again, statistically significant differences between sexes ($t(335,86) = 5,41$ $p < 0.001$) were identified, as boys used marijuana more often than girls. Adolescents in 2017 used marijuana statistically significantly more often compared to 2007 ($t(517,86) = 5,63$, $p < 0.001$). Other PAS were used considerably less.

Sexual behaviour, protection and the use of alcohol

The last research sought to explore some aspects of the sexual behaviour of adolescents

Table 4. Lifetime prevalence of PAS use, comparison between the two research studies

Lifetime prevalence	MOND, 2007 n = 1515–1620 %	MOND, 2017 n = 370–371 %
Marijuana	46.6	64.4
Ecstasy	4.9	5.9
Cocaine	3.6	4.9
Tranquillisers and sedatives	8.1	4.6
Volatile inhalants/solvents	/	4.3
Poppers	20.9	3.5
Amphetamines	6.8	3.0

and the potential risky sexual behaviour due to the use of alcohol and other PAS. During the research period 35,1% of respondents were in a relationship or had had a stable partner for a longer period of time (n = 365), and 62.9% of respondents had already had sexual intercourse (n = 364). The majority of respondents had had one (50.5%), two (17.6%), or three (9.0%) sexual partners (n = 188). 92.0% of respondents who confirmed having sexual intercourse reported using protection (e.g. condom, the withdrawal method, contraceptive pills) (n = 226). To the question addressing the use of a condom, 12.6% of respondents responded that they never use this type of protection, while 18.8% of them reported using it occasionally, 20.8% reported using it often, and 47.8% reported that they always use it (n = 207). Besides condoms, contraceptive pills are the most widely used form of protection.

On a scale from 1 to 4, respondents indicated that protection is important both, to prevent unwanted pregnancy (89.9%) and to prevent sexually transmissible infections (84.1%) (n = 208). The statistically significant differences can be identified with preventing unwanted pregnancy ($t(96,08) = 4,30, p < 0.001$) which is more important to girls than boys.

16.4% of respondents reported engaging in sexual intercourse on the trip (n = 371); 19.4% of these reported never using condoms, 1.6% used condoms occasionally, 0.7% often, and 69.4% always (n = 62). Nearly a half (45.3%) used alcohol before the last sexual intercourse and 9.4% used illegal PAS (n = 212).

Following instructions for risk reduction

The research further sought to identify measures taken by adolescents with the aim to reduce certain short-term adverse effects of alcohol use. Most adolescents (97.2%) stated that they make sure to eat enough before consuming alcohol, with 67.4% of these reporting doing so often or always (n = 359). 76.3% of adolescents only consume one type of alcoholic beverages, 21.1% (combined categories) of which do this often or always. A third of respondents (32.5%) stated that they (often and always) drink non-alcoholic beverages along with alcohol. A mere 16% of respondents reported not drinking non-alcoholic beverages along with alcohol (n = 357).

During the journey, the guides distributed preventive materials about less risky alcohol use. The survey included questions exploring adolescents' response to those materi-

als. 23.5% of respondents had already heard about DrogArt, and 9.9% of them knew about the Your Choice programme ($n = 362$). While the percentage of respondents who knew DrogArt was similar to the one ten years ago, knowledge of the programme was more limited compared to 2007, when 16.6% of respondents were familiar with it. Nearly half of respondents (48.9%) received the preventive materials which is more than ten years ago ($n = 360$).

Three quarters of respondents (74.5%) liked the materials design and 72.2% stated that they were satisfied with the content ($n = 185$). The percentages pertaining to the analyses of the assessment of the preventive materials and observation of instructions reflect combined assessments of 4 and 5 on a scale from 1 to 5, from "I don't like it at all/I didn't observe it at all" to "I like it very much/I very much observed that". Half of respondents (53.3%) confirmed that they followed the instructions for reducing the risks associated with alcohol use ($n = 186$). The majority (67.2%) indicated that they like such incentives and approaches to alcohol-related issues ($n = 186$). The 2007 research observed a statistically significant link between observing instructions from the preventive materials, and less risky use of alcohol on graduation trips. We failed to prove such a link with the later research study.

Discussion

The research focused on studying certain characteristics of risky alcohol use on graduation trips which are specific environments where for one week at the end of secondary school, adolescents' use of alcohol is characterised by greater risks. In addition to that, the research study addressed the lifetime prevalence of alcohol use, and the use of alcohol one year, and one month before the trip. According to research studies, alcohol use among adolescents in Slovenia, the EU, and the USA

is in decline [3,4,6,7], however its use increases among adolescents in years 1 to 4 of secondary school [7].

The comparison of our research study findings with the findings of ESPAD and other research studies stated below must be considered bearing in mind the limitations of our relatively small and unrepresentative sample. Nonetheless, our findings offer an insight in the under-researched area of alcohol and PAS use in the final years of secondary school. Our research indicates that by year 4 of secondary school almost all adolescents in our sample had already tried alcohol (99.7%), which is ten per cent more compared to those in year 1 [3], despite the fact that in 2003 the difference between year 1 and year 4 students in Slovenia was not so significant (4.4%) [10]. In the USA, the use in the period from the beginning to the end of secondary school almost doubled [7]. Our sample indicated that 91.2% of respondents had used alcohol in the last 30 days before the research (graduation trip), while for year 1 students in Slovenia the percentage was 52.0% [3]. Similar findings apply for intoxication in the last 30 days, where 76.6% of year 4 students and 14% of year 1 students reported being intoxicated in the last 30 days (*ibid.*). Similar applies for consuming at least five alcoholic beverages successively, where 78.7% of year 4 students reported engaging in such drinking practice in the last 30 days, compared to 44.0% of year 1 students (*ibid.*). Our results indicate a higher degree of risky alcohol use at the end of secondary school. According to research data on the use of alcohol in the general Slovene population, the age group between 15 and 17 years includes a statistically significant higher proportion of those who engage in excessive drinking (77.3%) compared to all the other age groups [16]. The percentage of adolescents in this age group who experienced high-risk intoxication at least once was 53.9% (*ibid.*).

The ten-year period has not seen a significant difference in the percentage of alcohol use and intoxication before the trip; in fact, the percentage of intoxication in the last 30 days before the research was the only one which was lower in 2017. With the exception of the above, there are no statistically significant differences referring to the frequency of drinking between the two research studies, while the practice of consuming at least 5 alcoholic beverages successively was more frequent in 2017.

One of the more pronounced differences compared to 2007 was the increase of the prevalence of the use of marijuana in the last years of secondary school, and a substantial increase in the frequency of its use (40 times or more). Compared to year 1 students where the prevalence of use in Slovenia was 25% [3], there is a significant increase in this category with year 4 students (64.4%). According to the data from previous research studies [10,13] the prevalence of the use of marijuana among year 4 students was around 50%. A research study on the use of marijuana in general population showed that 27.3% of respondents from the 15–24 age group had used it which is significantly less than our research [17]. The data also indicate an above average use compared to the general population and the population of younger secondary school students in Europe [18], and the population of the students of the last years (12th graders) in the USA, where the lifetime prevalence of use was 45.0% [19]. Given the increased prevalence of use and frequency of use of marijuana (at least 40 times) we recommend that the EU give more focus to researching the use of alcohol and drugs among older secondary school students, since this is an important transition period.

Given the results of the research study focusing on the use of alcohol on graduation trips in the last ten years, the relatively high percentage of binge drinking is also characterised by a statistically significant increase in

the frequency of such use before and during the trip. Binge drinking had seen an increase among younger adolescents (15–16 years) in Europe until 2007 [18], while in the period until 2015 it remained relatively stable and even slightly decreased [3]. According to our research, binge drinking on graduation trips was 43.5% above the typical average for year 1 students, which is per se above the European average (*ibid.*). In the USA, the prevalence of binge drinking experienced a rise between year 1 (47.0%) and year 4 (61.0%) [7]. The results of the online research [21] with a high score on the AUDIT scale in the category of heavy occasional drinking indicate that binging is the prevalent drinking pattern in Slovenia (the highest AUDIT score was achieved for men aged 18 to 24).

In addition to binge drinking, other issues that adolescents face when using alcohol have to be taken into consideration when planning interventions to reduce risks associated with alcohol use. Considering the period before the trip, the main issues faced by more than 20% of respondents due to alcohol use did not change compared to 2007, however a higher percentage of adolescents in 2017 experienced them. Nearly half of respondents (45%) reported excessive intoxication on the trip (nausea and vomiting or loss of memory), while a quarter of them needed assistance from others. Considering that 4.1% of respondents were left alone on the trip while intoxicated, excessive intoxication may represent increased health and other risks for such individuals.

The percentage of adolescents who reported experiencing unwanted sexual contacts due to alcohol before and during the trip is similar for both research studies, however additional questions in the last one revealed that nearly a quarter of all respondents had experienced sexual contacts which they would refrain from if sober before the trip. A tenth of adolescents included in the sample reported engaging in unprotected sexual intercourse due to alcohol.

Up until now, links have been established between drinking alcohol and deciding to engage in sexual intercourse (sex expectancy theory) [22,23], yet this link is weaker in the case of unprotected sex [22]. Our research failed to prove the link between risky alcohol use and unprotected sexual intercourse. An important finding refers to a relatively high percentage of adolescents who had a bad experience due to publication of embarrassing photos on social media as a consequence of alcohol use. Our research study, as well others, reflects one of the aspects of the transition of the drinking culture into the online environment through various representations of intoxication on social media [24,25].

Strengths and limitations

The limitations to the research consisted in the fact that the sample was relatively small, unrepresentative, and based on self-selection. The planned sample size was similar to that in 2007, however, in the end, it was smaller due (as reported by the agency) to difficulties with distribution and some unexpected events during graduation tours in 2017. Regardless of the smaller sample, the methodology and data collection were comparable between the two studies. Therefore, the findings have to be considered bearing in mind these limitations, despite their reliability and validity. The advantage of the research is that the sample includes a target group which is difficult to reach, and that the sample provides an insight into some of the characteristics of the risky alcohol use at the end of secondary school.

The results show that graduation trips are characterised by increased risky alcohol use which is accompanied by risky sexual behaviours and other risks. This said, these environments should be subject to interventions

or adolescents should be informed about the risks beforehand. With regard to preventive measures, specific and other preventive programmes in connection with events characterised by an increased use of alcohol may be beneficial [26,27]. Ten years later, adolescents (or those of them who are more motivated) follow instructions from preventive materials. However, in addition to the categories of driving and intoxication, efforts should also be targeted to less common, yet highly risky behaviours derived from alcohol use, such as unwanted sexual intercourse, use of protection, looking after intoxicated friends, and sharing embarrassing photos via social media. The latter has not yet gained much attention as part of harm reduction programmes aimed at the use of alcohol.

Acknowledgments

Tanja Drole participated in the preparation and distribution of the questionnaire, and coordination activities with the agency, Marko Verdenik participated in the preparation of the database, and Špela Dovžan participated in the preparation of the research and data processing (all from Association DrogArt).

Conflict of Interest

The authors declare that they have no conflict of interest.

Funding Sources

The research was funded by the Ministry of Labour, Family, Social Affairs and Equal Opportunities (contract no. 41020-15/2016/21). The financing did not affect the results of the study.

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S alkoholom povezani rizici na maturalnim putovanjima učenika slovenskih strukovnih škola: deset godina poslije

Sažetak - Svrha istraživanja je bila istražiti karakteristike rizične uporabe alkohola i s alkoholom povezanog rizičnog ponašanja učenika srednjih škola u Sloveniji koji su polazili na maturantska putovanja u 2007 i 2017. Koristili smo upitnik iz prve istraživačke studije kojeg smo nadgradili s pitanjima o seksualnim ponašanjem adolescenata. Konačni uzorak obuhvatio je 371 učenika posljednjih godina srednje škole (44,9% dječaka i 55,1% djevojčica, prosječna dob 17,8 godina) koji su pohađali maturantska putovanja. Uzorak je bio nereprezentativan i zasnovan je na samoselekciji. Objе istraživačke studije dale su usporedive rezultate u kategorijama konzumiranja alkohola i rizičnoj uporabi alkohola prije puta. Najznačajnije povećanje zabilježeno je u kategorijama životne prevalencije i učestalosti korištenja marihuane. Najčešći rizici povezani s alkoholom ostaju oštećenje imovine, nesreće i problemi koji proizlaze iz odnosa s prijateljima. Pored toga, ističu se i sljedeće kategorije: dijeljenje neugodnih fotografija putem društvenih medija, uspostavljanje seksualnih kontakata koji se ne bi dogodili ako bi bili trijezni i neželjena seksualna iskustva. Gotovo polovica njih konzumirala je alkohol prije posljednjeg spolnog odnosa. U posljednjem desetljeću, maturantska putovanja zadržala su status specifičnih okruženja u kojima, u usporedbi s razdobljem prije putovanja, uporabu alkohola karakteriziraju veći rizici za veći postotak adolescenata. S obzirom na rezultate, preporuke se usredotočuju na intervencije usmjerene na smanjenje specifičnih rizika vezanih uz uporabu alkohola na maturantskim putovanjima.

Ključne riječi: alkohol; maturalna putovanja; alkoholni rizici; adolescent; binge pijenje