

UNIVERSITY STUDENT'S PERCEPTION CHANGED BY PERMISSIVE DEMONSTRATION OF ALCOHOL CONSUMPTION

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Summary

Aim. Alcohol consumption is widely accepted among young adults. Understanding factors that influence this habit is inevitable. We report attitude changes among university students after a short movie demonstration on permissive alcohol consumption.

Material and methods. Data about drinking, socio-demographic, lifestyle factors, and subjective ratings of certain statements were obtained by a questionnaire based survey in a sample of 258 university students (128 men and 130 women) of four Hungarian universities. Participants were randomly divided into exposed and non-exposed groups. The exposed ones watched a movie suggesting positively alcohol consumption before self-administering the questionnaire. Statistically significant differences between the two groups were analysed by Pearson chi-square probe ($p < 0.05$).

Results. 93.4% of the students are consuming alcohol regularly. Agreement rate with permissive statements related to alcohol consumption were significantly higher among exposed responders confirmed by controlling for socio-demographic and lifestyle covariates.

Conclusions. Positive featuring of alcohol consumption had a strong effect on the students' attitudes.

Key words: alcohol consumption, university students, behavioural patterns, exposition, attitudes

INTRODUCTION

Adverse social and health effects of uncontrolled alcohol consumption are well known. Identification of factors leading to acute overconsumption is inevitable for researchers and stakeholders to develop effective health prevention programs.

Moderate consuming of alcohol is a socially accepted behaviour in the European culture above the legal age limit of 18 years. In Hungary, there are only 7% of young adult lifetime abstainers (1). Focusing on the age group ≤ 30 years it is essential to understand individual motivation behind this behaviour.

Advertising alcohol by certain limitations (2) is a legal practice thus the industrial lobby may influence drinking habits more or less successfully. Yet, targeted TV commercials and billboards are only external factors. Previous studies demonstrated the indirect impact of sitcoms, movies and commercials on the general population, but they did not indicate any clear statistical evidence at individual level of alcohol consumption (3). Peer pressure and other generated attitudes play an important role in decision making among young adults (4). Those people usually overestimate the frequency of peers' alcohol consumption thus they are prone even more frequent to drinking (5). Unfortunately, the Hungarian society tolerates young men's binge drinking parties. The earlier young people start drinking the stronger is the probability of the later alcohol addiction (6).

Previous studies concluded that featuring alcohol consumption in a positive way among young people has a strong effect with high probability of evolving chronic alcoholism (7, 8). The most popular movie stars while drinking regularly in their roles have the strongest impact in this regard.

Our study focused on university students' attitudes towards alcoholic drinkers and their motivations of alcohol consumption. We aimed to analyse how the impact of a promotional movie demonstration of alcohol consumption can change young adults' attitude towards drinking.

MATERIAL AND METHODS

Data collection by self-administered questionnaires was performed at four Hungarian universities, including the Faculty of Medicine at Semmelweis University in February 2011. Students in the fourth academic year were primarily invited, however, those of lower years were not excluded. Participants were aged above 18 years, applied voluntarily, and completed a written informed consent. With key items unchanged, the Hungarian questionnaire was based on internationally used and validated questions of the "student alcohol questionnaire" completed with our own items (9). We created 7 units out of 86 questions: demography, work, media usage, spare-time entertainment, general attitude to alcohol, past and present alcohol consumption, and smoking habits.

Alcohol related questions targeted beer, wine and hard drinks concerning also the amount usually consumed at a single event. Consumption of beer, wine and hard drinks above 1.5, 1.0 and 0.2 litre respectively was qualified as excessive.

Before distributing the questionnaires, a randomly selected part of the sample was exposed to a movie demonstration, *The big Lebowski*, of 119 minutes with positively featured alcohol consumption (10). The final and overall response rate was 97.7%. Individuals who refused to answer only some specific questions were all included.

SPSS 20.0 for Windows was used for data analyses. Dichotomised answers for associations were analysed by Pearson chi-square probe or the Fischer exact test at a significance level of $p < 0.05$.

RESULTS

Among 258 participants 128 males (49.6%) and 130 females (50.4%) completed the questionnaire. Mean age was 21.86 years ($SD = 1.87$). The vast majority ($n = 231$) of the sample (89.5%) was 20-24 years old. 116 (45.0%) belonged to medical school, the rest

studied at economical, law and technical schools respectively. 51 randomly selected students (19.8%) were exposed to the movie demonstration.

239 participants, i.e. 92.6% of the whole sample responded positively to the question about alcohol consumption. Beer was preferred in 61.9%, wine in 64.9% and hard drinks in 54.0%. Excessive drinking was admitted in 21.8% (beer), 12.2% (wine) and 26.2% (hard drinks). Table 1 shows the distribution by gender and training type of the exposed and non-exposed subsample. There were no significant differences in demographic and lifestyle variables. When asked about reasons and attitude towards drinking, students in both groups agreed differently with the concerned statements. Table 2 presents motivation differences in alcohol drinking.

In order to demonstrate attitude-related differences before and after exposition, tables 3-7 show changes of 8 variables related to gender, training type (medical versus non-medical), kind of preferred alcoholic drinks (beer, wine and hard drinks) and to the amount (moderate/excessive) consumed on a single event.

Table 1. Gender and school affiliations of students consuming alcohol ($n = 239$) exposed and non-exposed to the movie demonstration.

	Education	Male	Female	Total
Exposed	Non-medical Schools	11	15	26
	Medical School	10	15	25
	Total	21	30	51
Non-exposed	Non-medical Schools	63	34	97
	Medical School	33	58	91
	Total	96	92	188
Total		117	122	239

Table 2. Changes in motivations of drinking alcohol as a result of the movie demonstration.

I drink alcohol...	Exposed n (%)	Non-exposed n (%)	p-value
to have a good mood Y/N	45/6 (88.2/11.8)	134/54 (71.3/28.7)	0.013
because most friends of mine drink Y/N	32/19 (62.7/37.3)	72/116 (38.3/61.7)	0.002
to relax Y/N	42/9 (84.2/17.6)	137/50 (73.3/26.7)	0.183
to forget my problems Y/N	9/42 (17.6/82.4)	25/163 (13.3/86.7)	0.430
when celebrating positive experiences Y/N	49/2 (96.1/3.9)	143/45 (76.1/23.9)	0.001
because this is how I can party obliviously Y/N	34/17 (66.7/33.3)	64/124 (34.0/66.0)	0.001
because this is part of a party Y/N	39/12 (76.5/23.5)	136/52 (72.3/27.7)	0.555
to be braver with the opposite gender	28/23 (54.9/45.1)	68/120 (36.2/63.8)	0.016
because I like it's taste Y/N	45/6 (88.2/11.8)	144/44 (76.6/23.4)	0.070
to get drunk Y/N	11/40 (21.6/78.4)	39/149 (20.7/79.3)	0.898

Table 3. Changes in the distribution of students (n = 179) who need alcohol to have a good mood.

Variables	Exposed n (%)	Non-exposed n (%)	p-value
male/female	18/27 (40.0/60.0)	71/63 (53.0/47.0)	0.132
type of university (medical/non-medical)	21/24 (46.7/53.3)	62/72 (46.3/53.7)	0.963
drinking beer Y/N	30/15 (66.7/33.3)	81/53 (60.4/39.6)	0.457
drinking wine Y/N	30/15 (66.7/33.3)	85/49 (63.4/36.6)	0.695
drinking hard drinks Y/N	42/3 (93.3/6.7)	67/67 (50/50)	0.001
drinking beer excessively/moderately	7/38 (15.6/84.4)	31/103 (23.1/76.9)	0.282
drinking wine excessively/moderately	5/40 (11.1/88.9)	18/115 (13.5/86.5)	0.675
drinking hard drinks excessively/moderately	20/25 (44.4/55.6)	31/101 (23.5/76.5)	0.007

DISCUSSION

Watching movies promoting alcohol consumption has a considerable impact on attitudes of young people. One hour audio-visual exposition may result in additional 1.5 glass consumption of soft alcoholic drinks (11). Direct or hidden marketing has a strong impact on the drinking habits of the young population (12). Advertising may anticipate the positive change of attitudes towards a specific product even before sales figures start to grow (13).

As a result of the movie demonstration, we evaluated the quantitative outcomes of 10 specific attitudes by changing proportions of respondents. The movie had no significant impact on relaxation, forgetting the problems, and getting drunk. Students did not differ in their views about drinking alcohol as a usual part of any party, and the taste of beer, wine or hard drinks was not preferred more intensively. On the other hand, the proportion of students who drink alcohol to have a good mood, follow the peer pressure, celebrate positive experiences, party obliviously and be braver with the opposite gender rose significantly by the demonstration.

Assuming that behind these changes we can find differences among people who gave positive answer to the attitude questions, we tested gender and training type distribution of the sub-samples. Concerning traditional gender patterns, it was remarkable that boys and girls were drinking the same way to have a good mood, to comply with peer pressure, and to celebrate positive experiences. Nevertheless, more boys drink to be able to party obliviously and (following the traditional gender role) be braver with the opposite gender.

We hypothesized that professional knowledge of medical school students about alcoholism would influ-

ence all, or at least several attitudes represented by the 5 variables as listed above. However there were no significant differences between medical and non-medical school students.

Since the movie showed only hard drinks, we also tested changes in sub-groups preferring a specific type of drinks and drinking them moderately or rather excessively. The proportion of students consuming hard drinks was greater in all the five variables, and was coupled rather with excessive drinking related to 2 variables (to have a good mood, and celebrate positive experiences). Boys associated hard drinks with being able to party obliviously and being braver with the opposite gender. In this case drinking beer excessively had the same effect as well.

CONCLUSIONS

Our results are in line with previous results that portraying alcohol consumption in a positive way has a strong effect on young people's life-style attitudes (14). University students, when randomly divided into two groups, changed their actual attitudes toward alcohol after a selective exposition. We presume that broadcasting television programs and films promoting alcohol consumption contribute effectively to negative behavioural changes and sad social consequences of alcohol consumption in this highly sensitive population. We could not prove that medical students being more aware of harmful health consequences act more cautiously towards hard drinks' consumption. Our outcomes need further investigation in terms of the effectiveness of medical training programs in proto-professional education.

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Table 4. Changes in the distribution of students (n = 104) who need alcohol because most of their friends drink too.

Variables	Exposed n (%)	Non-exposed n (%)	p-value
male/female	13/19 (40.6/59.4)	44/28 (61.1/38.9)	0.053
type of university (medical/non-medical)	15/17 (46.9/53.1)	44/28 (47.2/52.8)	0.974
drinking beer Y/N	22/10 (68.8/31.2)	47/25 (65.3/34.7)	0.729
drinking wine Y/N	20/12 (62.5/37.5)	42/30 (58.3/41.7)	0.689
drinking hard drinks Y/N	28/4 (87.5/12.5)	36/36 (50/50)	0.001
drinking beer excessively/moderately	5/27 (15.6/84.4)	16/56 (22.2/77.8)	0.439
drinking wine excessively/moderately	5/27 (15.6/84.4)	9/63 (12.5/87.5)	0.667
drinking hard drinks excessively/moderately	13/19 (40.6/59.4)	17/53 (24.3/75.7)	0.093

Table 5. Changes in the distribution of students (n = 192) who need alcohol when celebrating positive experiences.

Variables	Exposed n (%)	Non-exposed n (%)	p-value
male/female	21/28 (42.9/57.1)	77/66 (53.8/46.2)	0.184
type of university (medical/non-medical)	23/26 (46.9/53.1)	65/78 (45.5/54.5)	0.857
drinking beer Y/N	33/16 (67.3/32.7)	91/52 (63.6/36.4)	0.639
drinking wine Y/N	31/18 (63.3/36.7)	93/50 (65/35)	0.823
drinking hard drinks Y/N	45/4 (91.8/8.2)	66/77 (46.2/53.8)	0.001
drinking beer excessively/moderately	8/41 (16.3/83.7)	39/104 (27.3/72.7)	0.124
drinking wine excessively/moderately	6/43 (12.2/87.8)	19/124 (13.3/86.7)	0.852
drinking hard drinks excessively/moderately	22/27 (44.9/55.1)	38/103 (27/73)	0.020

Table 6. Changes in the distribution of students (n = 96) who need alcohol to be able to party obliviously.

Variables	Exposed n (%)	Non-exposed n (%)	p-value
male/female	13/21 (38.2/61.8)	44/20 (68.8/31.2)	0.004
type of university (medical/non-medical)	15/19 (44.1/55.9)	31/33 (48.4/51.6)	0.683
drinking beer Y/N	22/12 (64.7/35.5)	42/22 (65.6/34.4)	0.928
drinking wine Y/N	24/10 (70.6/29.4)	38/26 (59.4/40.6)	0.273
drinking hard drinks Y/N	30/4 (88.2/11.8)	34/30 (53.1/46.9)	0.001
drinking beer excessively/moderately	6/28 (17.6/82.4)	24/40 (37.5/62.4)	0.042
drinking wine excessively/moderately	3/31 (8.8/91.2)	9/55 (14.1/85.9)	0.451
drinking hard drinks excessively/moderately	16/18 (47.1/52.9)	21/41 (33.9/66.1)	0.204

Table 7. Changes in the distribution of students (n = 96) who need alcohol to be braver with the opposite gender.

Variables	Exposed n (%)	Non-exposed n (%)	p-value
male/female	13/15 (46.4/53.6)	49/19 (72.1/27.9)	0.017
type of university (medical/non-medical)	13/15 (46.4/53.6)	27/41 (39.7/60.3)	0.544
drinking beer Y/N	19/9 (67.9/32.1)	48/20 (70.6/29.4)	0.791
drinking wine Y/N	19/9 (67.9/32.1)	45/23 (66.2/33.8)	0.874
drinking hard drinks Y/N	24/4 (85.7/14.3)	38/30 (55.9/44.1)	0.005
drinking beer excessively/moderately	5/23 (17.9/82.1)	27/41 (39.7/60.3)	0.039
drinking wine excessively/moderately	3/25 (10.7/89.3)	11/57 (16.2/83.8)	0.491
drinking hard drinks excessively/moderately	13/15 (46.4/53.6)	23/45 (33.8/66.2)	0.246

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