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## Analiza porównawcza ryzykownych zachowań zdrowotnych studentów Wydziału prawa Uniwersytetu Szczecińskiego oraz Wydziału Prawa Uniwersytetu w Lund w Szwecji

## Comparative analysis of health risk behaviours demonstrated by law students of the University of Szczecin in Poland and the University of Lund in Sweden

### Streszczenie

**Wstęp.** Świadomość zdrowotna i styl życia w największym stopniu bezpośrednio determinują zdrowie społeczeństwa. Problem podejmowania przez młodzież rozmaitych zachowań ryzykownych jest zjawiskiem ogólnoswiatowym wykazującym tendencję wzrostową. Skutki zdrowotne i społeczne podejmowania takich zachowań ponosi całe społeczeństwo.

**Cel.** Przeprowadzone badania miały na celu analizę opinii studentów na temat palenia tytoniu i spożywania alkoholu w środowisku uniwersyteckim. Celem badań było także przeanalizowanie, czy powyższe zachowania antyzdrowotne są związane z okresem studiów.

**Materiał i metody.** Badaniami objęto 70 studentów Wydziału Prawa Uniwersytetu Szczecińskiego oraz 62 studentów Wydziału Prawa Uniwersytetu w Lund. Wybraną metodą badawczą był sondaż diagnostyczny przeprowadzony w oparciu o kwestionariusz ankiety.

**Wyniki.** Analiza zebranego materiału badawczego wykazała, że 24,2% ogółu badanych potwierdza fakt aktualnego palenia tytoniu. Około 56,5% studentów polskich i 64,5% studentów szwedzkich uważało, że palenie tytoniu ma negatywny wpływ na zdrowie człowieka. Ponadto 40% badanych Polaków i 52,9% Szwedów deklarujących palenie regularne bądź okazjonalne rozpoczęło palenie tytoniu podczas studiów. Około 58,6% studentów polskich i 38% studentów szwedzkich uważało, że spożywanie alkoholu ma negatywny wpływ na zdrowie człowieka, jednakże 12,8% badanych Polaków i 9,7% Szwedów przyznało się do regularnego spożywania alkoholu. Ponadto dla 3,5% aktualnie pijących Polaków i dla 65% aktualnie pijących Szwedów istotnym momentem rozpoczęcia spożywania alkoholu okazał się okres studiów.

**Wnioski.** Większość badanych respondentów ma świadomość negatywnych skutków palenia tytoniu i spożywania alkoholu, nie wpływa to jednak na ograniczenie ich używania. Negatywne zachowania zdrowotne stanowią niekorzystną prognozę dla zdrowia badanej młodzieży akademickiej. Większość badanych studentów ma doświadczenia związane z paleniem tytoniu i spożywaniem alkoholu jeszcze zanim rozpoczną studia w uczelni wyższej. Palenie tytoniu i spożywanie alkoholu nie wykazało zależności istotnej statystycznie z uwzględnionymi cechami demograficzno-społecznymi.

**Słowa kluczowe:** ryzykowne zachowania zdrowotne, palenie tytoniu, spożywanie alkoholu, studenci, Polska, Szwecja.

### Abstract

**Introduction.** Lifestyle and health awareness are the factors which have the greatest and direct impact on the health of a society. Problem of risky behaviours in the teenage population is a global phenomenon showing an upward tendency. Social and health costs of risky behaviours are borne by a whole society.

**Aim.** The aim of this study was to analyse students' opinions about cigarette and alcohol consumption by students' community and to investigate if the above mentioned risk behaviours are associated with the period of studying.

**Material and methods.** The study was performed on 70 law students of the University of Szczecin in Poland and 62 law students of the University of Lund in Sweden. The method used in the study was a diagnostic survey.

**Results.** About 24.2% of all surveyed students admit to current cigarette smoking. About 56.5% of the Polish and 64.5% of the Swedish think that smoking is detrimental to health. Some 40% of the Polish and 52.9% of the Swedish who declare smoking, either regularly or occasionally, began smoking during their studies. Moreover 58.6% of the Polish and 38% of the Swedish regard drinking alcohol as having harmful effect on health. Nevertheless, 12.8% of the surveyed Poles and 9.7% of the surveyed Swedes confess to drinking alcohol regularly. Furthermore, 3.5% of the Polish and 65% of the Swedish current alcohol users claim that the beginning of studies was a factor which contributed to their drinking alcohol.

**Conclusions.** 1. The majority of respondents from Poland and Sweden were aware of detrimental effects of cigarette and alcohol consumption on health, but it did not motivate them to reduce the use of these stimulants. Due to health-risk behaviours, a prognosis for respondents' health is unfavourable. 2. Most of respondents from Poland and Sweden had tried cigarettes and alcohol before they undertook their studies. 3. Cigarette and alcohol consumption did not statistically significantly correlate with the selected sociodemographic factors.

**Key words:** health-risk behaviour, smoking, drinking alcohol, students, Poland, Sweden.

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## INTRODUCTION

The World Health Declaration states that „the highest attainable standard of health is one of the fundamental rights of every human being”. Lifestyle and health awareness are the factors which have the greatest and direct impact on the health of a society. The goals of public health include identifying and eliminating health risk factors in various settings, as well as promoting healthy lifestyle and thus, encouraging a society to take up pro-health actions. So as to help individual people to make right choices, it is necessary to adopt public health policy, to create a living, learning and working environment which is conducive to health, and also to promote activities which improve health potential [1].

Problem of risky behaviours in the teenage population is a global phenomenon showing an upward tendency. It is among others an expression of social non-adjustment. Constantly increasing number of young people who take risky actions like smoking or using psychoactive substances, despite evidence for their detrimental effect on human health, is a global menace. Social and health costs of risky behaviours are borne by a whole society [2].

The last years have seen younger and younger people initiating alcohol use, and an increasing number of teenagers who smoke and take various toxic substances. It is very disturbing as the consequences of health-risk behaviours in young people are usually more serious than in adults due to their biological, intellectual, emotional and social development.

Early maturity and specificity of adolescence period cause teenagers to be particularly prone to addictions. The factors which especially increase addictive substance abuse are immaturity and emotional instability, as well as a low resistance to stress and frustration.

The beginning of studies is a turning point in a young person's life, the one which creates favourable conditions for the mentioned risky behaviours. These, in turn, may be a peculiar antidote against everyday problems of student life. Therefore, the learning and working environment should provide appropriate social conditions to promote, maintain and protect health [3,4].

## AIM

The aim of this study was to analyse students' opinions about cigarette and alcohol consumption by students' community and to investigate if the above mentioned risk behaviours are associated with the period of studying.

## MATERIAL AND METHODS

The study involved 132 students including 70 third-year law students of the University of Szczecin, aged 22-25 (the mean age – 22.4) and 62 third-year law students of the University of Lund, aged 21-25 (the mean age – 21.9).

Participation in the study was voluntary and all full-time third-year students at the Faculty of Law could take part. It was assumed that third-year students could look at the prob-

lem from a wider perspective than their younger colleagues. They could also provide more accurate answer to the question if their lifestyles were modified by the fact of studying and participating in the 'student life'.

The group of Polish students consisted of 43 women (61%) and 27 men (39%); the group of Swedish students comprised 38 women (51%) and 24 men (49%). About 7.2% of the Polish and 24.2% of the Swedish respondents came from the country, 38.6% and 24.2% of the surveyed respectively, lived in a town having a population of 10-100 thousand. More than 14% of the Poles and 16% of the Swedes came from a town with a population of 100-200 thousand, 12.8% and 29% respectively, dwelt a town having a population of 200-400 thousand. Some 27.2% of the Polish and 6.5% of the Swedish students lived in a town having a population exceeding 400 thousand.

A diagnostic survey based on the questionnaire of the author's own design was applied to collect empirical data. All questionnaires were given back but only those properly completed were subjected to analysis. In accordance with the rules of law in force on 17.02.2004, research in Poland requires the approval of the Bioethical Commission if it is a medical experiment based on biological material, either human or animal. Our research was not a medical experiment in that sense, so it did not need this approval. We did not know the identity of any research participants. The patients participated in the study voluntarily and gave their oral consent to take part in the study. Statistical analysis was done using Statistica for Windows PL. The relationship between qualitative variables was assessed with the chi-squared independence test. A significance level of  $p < 0.05$  was chosen.

## RESULTS

It was assumed that prevalence of smoking and drinking alcohol may depend on a country, gender, and the place of residence during studies.

Analysis of the collected data proved that 24.2% of all respondents admitted to current smoking. About 7% of the Poles and 21% of the Swedes smoked regularly, while over 14% of the Poles and 6.4% of the Swedes did it occasionally. Among the respondents who declared being 'current smokers', women predominated – 17.1% of all surveyed Poles and 14.5% of all surveyed Swedes, while the percent of men was merely 4.3% of all surveyed Poles and 12.9% of all surveyed Swedes. Some 25.8% of the surveyed students from Poland and 50% from Sweden have never smoked (Fig.1). The majority of them lived in their family homes during studies (50% of the Polish and 70.9% of the Swedish) (Tab.1).

Using Pearson's chi-square test with a significance level of 0.05, we rejected a hypothesis that the frequency of smoking depends on the country of origin (the chi-square test;  $p=0.36$ ) or a gender (the chi-square test;  $p=0.44$ ). It was not proved that the frequency of smoking was determined by the place of residence during studies, either (the chi-square test;  $p=0.805$ ).

About 56.5% of the Polish and 64.5% of the Swedish students thought that smoking negatively affected human health; in the group of the Polish and the Swedish students smoking either regularly or occasionally, 73.3% and 58.8%

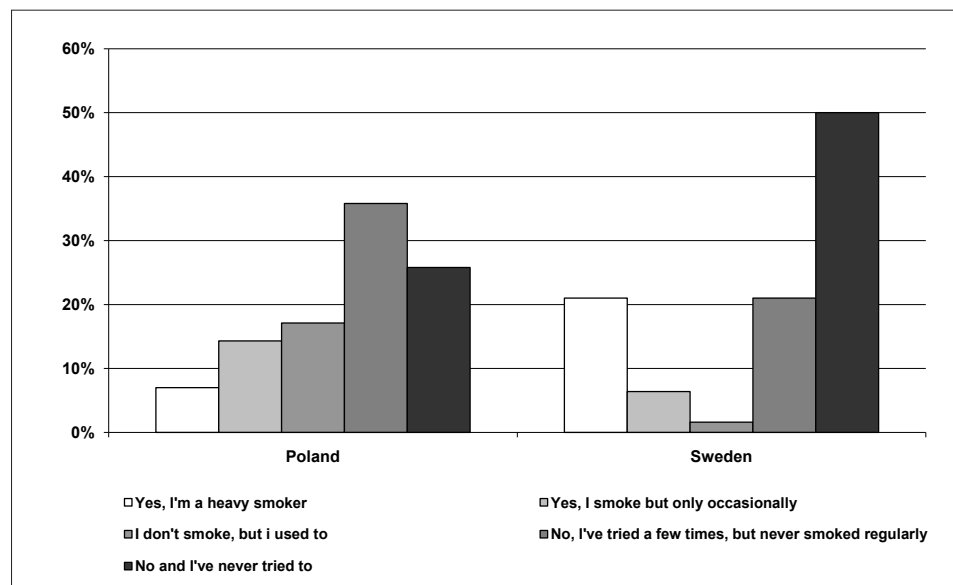


FIGURE 1. Tobacco and alcohol consumption among the surveyed students.

TABLE 1. Smoking vs. the place of residence during studies.

	Poland				Sweden			
	Halls	Lodgings	Family home	Others	Halls	Lodgings	Family home	Others
Yes, I smoke habitually	40%	0%	60%	0%	15,4%	0%	46,1%	38,5%
Yes, but only occasionally	0%	50%	50%	0%	25%	0%	75%	0%
I'm not a smoker now, but I used to be	8,3%	58,3%	16,7%	16,7%	0%	0%	0%	100%
No, I've tried several times but never smoked regularly	24%	36%	28%	12%	23%	0%	77%	0%
No and I've never tried to	22,2%	22,2%	50%	5,6%	9,7%	3,3%	70,9%	16,1%

respectively, regarded smoking as detrimental to health. Even so, 27% of the Poles and 23.5% of the Swedes smoked 10-20 cigarettes a day. What is more, 46.6% of the Polish and 47.1% of the Swedish "current smokers" did not plan to give up smoking. Whereas 46.6% of the Polish and 29.4% of the Swedish "current smokers" claimed they would like to stop smoking. Out of them 71.4% and 80% respectively, lived in their family homes. Furthermore, 40% of the Polish respondents and 52.9% of the surveyed Swedes who admitted to either regular or occasional smoking started using cigarettes during their studies. (Fig.2) Out of them 66.6% and 55.6% respectively, lived in their family homes and not in a student hostel as it could have been expected.

Using Pearson's chi-square test, we proved no correlation between the initiation of smoking during studies and the country of origin (the chi-square test;  $p=0.46$ ). A hypothesis about correlation between the initiation of smoking and the place of residence during studies was also rejected (the chi-square test;  $p=0.91$ ).

Almost 40% of the Polish and 34% of the Swedish students held that any efforts made by university authorities to decrease smoking among students were ineffective. Whereas, in the group of respondents admitting to inhaling tobacco smoke either regularly or occasionally, that opinion was shared by 73,3% of the surveyed from Poland and 52.9%

from Sweden. Only a few students believed that alcohol and tobacco consumption could be reduced by means of restriction/control or information campaigns.

The results obtained show that 58.6% of the Polish and 38% of the Swedish students regarded drinking alcohol as detrimental to human health. Nevertheless, 12.8% of the surveyed Poles and 9.7% of the surveyed Swedes admitted to drinking alcohol regularly. They were women who predominated, and they constituted 38.6% of all surveyed Poles and 43.5% of all surveyed Swedes, while the percentage of men was 34.3% of all surveyed Poles and 17.7% of all surveyed Swedes. About 67% of the Polish and 51.6% of the Swedish respondents drank alcoholic beverages only when an opportunity occurred. A total percentage of the students who admitted to drinking alcohol currently, either regularly or occasionally, was 71.2% of all the surveyed.

Thus, the above data show explicitly that almost 19% of all respondents confessed to both current smoking and drinking alcohol (Poland – 15.7%, Sweden – 22.6%) (Fig.1). The women and students living in their family homes prevailed in both subgroups. About 11.4% of the Polish and 10% of the Swedish students have never drunk alcohol. The majority of them lived in their family homes during studies (Poland – 37.5%, Sweden – 85.7%) (Tab.2).

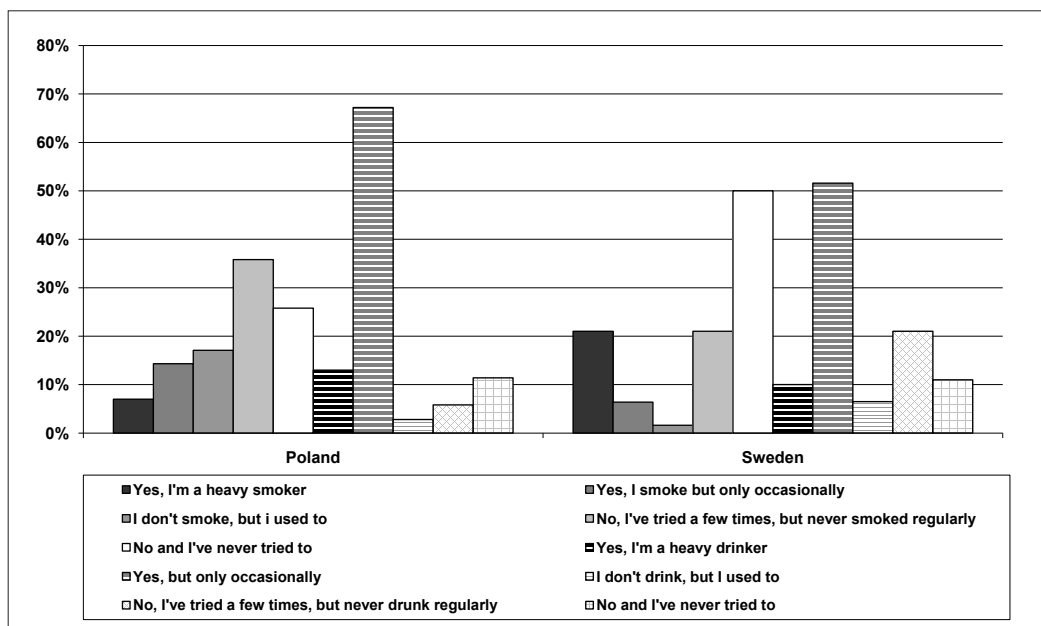


FIGURE 2. Frequency tobacco consumption among the surveyed students.

Using Pearson’s chi-square test with a significance level of 0.05, we rejected a hypothesis that the frequency of drinking alcohol depends on the country of origin (the chi-square test;  $p=0.64$ ). The frequency of drinking alcohol was not determined by gender (the chi-square test;  $p=0.48$ ) either. There was no correlation between drinking alcohol and the place of residence during studies (the chi-square test;  $p=0.43$ ).

From among Polish and Swedish respondents who drank ethyl alcohol, either regularly or occasionally, 60.7% and 36.9% respectively regarded consuming alcohol as detrimental to human health. Some 39.2% and 34.2% respectively, drank 3-6 drinks at one-time. An assumed dose of ethyl alcohol was so called „a drink” that is one full beer, a standard glass of wine or 40 ml of Polish vodka. At the same time, 91.1% of the Polish and 81.6% of the Swedish respondents did not intend to give up drinking alcohol, out of which 39.2% lived in lodgings during their studies and 64.5% in their family homes, respectively.

Furthermore, 3.5% of the Polish alcohol users regarded the beginning of studies as a factor which contributed to their drinking alcohol, while 96.5% had drunk alcohol even before studies (Fig.2). Over 65% of the current drinkers from Sweden said that they started drinking at the beginning of studies, out of which only 16% lived in a student hostel, and as many as 64% in their family homes. Thus, our results did not confirm the stereotype of drinking ethyl alcohol in a student residence.

Using Pearson’s chi-square test with a significance level of 0.05, we rejected a hypothesis that alcohol consumption during studies depends on the country of origin (the chi-square test;  $p=0.46$ ). The correlation between drinking alcohol and the place of residence during studies was not observed either (the chi-square test;  $p=0.08$ ). Almost 69% of the Polish and 48.4% of the Swedish students thought that university authorities had no influence on student alcohol consumption. The above opinion was shared by 73.2% of the Polish and 52.6% of the Swedish students who admitted to drinking alcohol, either regularly or occasionally.

Very few respondents believed that university authorities could do something to reduce alcohol intake among students. Those who did, however, when asked the open question on how university authorities could achieve that goal, said that they should introduce restrictions and greater control, for ex. discipline in halls of residence, official bans and orders, and depriving students of rewards and scholarships. Others held an opinion that this problem could be solved by improving students’ awareness of health damages caused by alcohol abuse.

## DISCUSSION

The question of drug abuse by college students is one of the key issues in public health, and a very up-to-date social and health problem in Poland and in the world [1]. Actions undertaken in recent years suggest an increasing interest in preparing young people to take care of their own physical condition and to act for public health protection, as well [1].

The core of many health promotion projects initiated by WHO (the World Health Organization) in Europe in the last decade is so called setting approach – a new method in public health practice. One of such projects is the Health Promoting University initiative the imperative of which is healthy lifestyle of academic community [1,5].

Nicotinism as an element of social customs and negative behaviour patterns causes a number of disorders, like tobacco-based diseases, and thus reduces quality of life and contributes to untimely mortality. Nicotine, similarly to ethyl alcohol, is associated with „student life” stereotype. Adolescent alcohol consumption is the most common social pathology in Poland. Availability and common use of ethyl alcohol and tobacco are also alarming [1].

Based on the analysis of the collected data, students take stimulants deliberately to create pleasant and commonly known sensations. About one quarter of all surveyed students admitted to be current smokers and almost three fourths of all respondents declared drinking alcohol currently.

Our results coincide with those reported by Malara et al. [6]. Nearly 23% of the students of the Technical University of Silesia who participated in her studies inhaled cigarette smoke currently and 84% drank alcohol, either regularly or occasionally [6].

Alarming results were also reported by Krzych, who carried out research on the lifestyle of respondents from the Medical University of Silesia [7]. They show that about 30% of medical students are current smokers. Whereas 41% drink alcohol at least a few times a month, out of which 2% do it every day, and 4% several times a week. Thus, as future doctors propagating pro-health behaviours, they cannot be regarded as authority [7].

As world reports show, the percentage of medical students who exhibit the above mentioned health-risk behaviours is high, so is the percentage of those declaring their intention to change their habits [8,9]. Rather few Polish respondents start their studies having neither tobacco nor alcohol experiences. In addition, as Kawczyńska-Butrym reports „initiation is not as much trying alcohol for the first time as rather drinking alcohol in the amount leading to intoxication” [10].

As it results from research performed by Kubera et al. on the group of 12–19-year-old pupils, smokers constituted over 23% of all surveyed children. It is worth mentioning that in the group of 15-year-olds this percentage was twice higher than in the group of 12-year-old children [3].

Łepecka-Klusek carried out research on middle school students, which revealed that 51,5% of pupils admitted to smoking, and 75% had already tried ethyl alcohol [11]. Suliga's study on health behaviours demonstrated by secondary school students shows that more than 20% of girls and over 30% of boys admit to smoking, while 60% and 80% respectively, confess to drinking alcohol [12]. Research carried out by Piwoński proves that one fifth of middle school students, aged 13–14, confess to smoking and drinking alcohol several times a month.

At the same time, Piwoński informs that the percentage of drinking adolescents is relatively high, considering that according to similar research conducted in 1994–1998 on the all-Polish sample of 11–15-year-olds, the problem of drinking ethyl alcohol was only found in about 3% of the surveyed altogether [4].

Our results coincide with alarming reports from the world. As Lee et al. state, research on the teenagers from Malaysia showed that 14% of the surveyed population inhaled tobacco smoke [13]. Greek researchers report that 56,6% of boys and 48,4% of girls admit to drinking alcohol, and to having alcohol initiation at the age of 13 [14]. According to Canadians, 9% of boys and 11,5% of girls confess to smoking, and as many as 39,5% and 31,4% respectively, admit to drinking alcohol [15]. Research conducted by Johansen et al. on the 14–16-year-olds in Denmark suggests that 13,3% of respondents declare smoking and 32,7%-drinking alcohol several times a week [2]. Based on our results it may be assumed then that students who did not notice any relationship between the beginning of their studies and their cigarette/alcohol intake, had had their first drinking/smoking experiences before the beginning of studies.

The above reports are very disturbing, especially that the surveyed college students demonstrate health-risk be-

haviours, even though they know how damaging they are Malara [6], Suliga [12] and many other authors have drawn similar conclusions.

Analysis of the results proved that no Polish students and less than 3% of the surveyed Swedes planned to give up drinking alcohol. Also Kawczyńska-Butrym reports on merely 6% of students who have such intention [10]. Podstawski found that only 8% of women and 15% of men who drank alcohol wanted to quit it [5].

This phenomenon may be associated with liberal attitude toward ethyl alcohol consumption observed in the student subculture. The period of studies and the character of student life, as well as various social situations create favourable conditions for risky behaviours.

It can be additionally increased by possible adaptive problems and a need to recover from stress and frustration, which are inseparable from student life. It is upsetting that respondents seem convinced that university authorities have practically no influence on cigarette and alcohol intake among students. It can mean that such actions were either ineffective or were not undertaken at all. Most respondents who saw the possibility of reducing cigarette/alcohol consumption by university authorities, thought it could be done by imposing sanctions, while the most effective method could be health education, making attempts to establish positive health attitudes, and the introducing of effective prevention initiatives consistent with the goals of the National Health Programme [1,5].

Students themselves should initiate various forms of health education and thus, set a good example and change the smoking/drinking stereotype of the student subculture. Following the idea of the Health Promoting University initiative of WHO, the college students supported by university authorities could shape public awareness and create physical and social conditions conducive to health protection and maintenance. They could both facilitate active participation of the academic community in pro-health actions and promote positive health behaviour patterns among students, who in the future may have high social standing and, thus, inspire future generations, influence their system of values and attitudes toward health [1,5].

## CONCLUSIONS

1. The majority of respondents from Poland and Sweden were aware of detrimental effects of cigarette and alcohol consumption on health, but it did not motivate them to reduce the use of these stimulants. Due to health-risk behaviours, a prognosis for respondents' health is unfavourable.
2. Most of respondents from Poland and Sweden had tried cigarettes and alcohol before they undertook their studies.
3. Cigarette and alcohol consumption did not statistically significantly correlate with the selected social-demographic factors.

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