

## STUDY OF A SEGMENT OF PEOPLE WITH PHYSICAL DISABILITIES, FOCUSING ON DEPENDENCY BEHAVIOR

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*Petr KACHLÍK, Marie HAVELKOVÁ*

**Abstract:** *A total of 228 motor disability clients from a social care institution were asked to complete an anonymous questionnaire. Frequent cases of life-long use of a number of addictive substances and of activities displaying characteristics of addictive behaviour were found among the interviewees. It follows from the survey that these people mostly observe advice of their parents, teachers and therapists, and show a greater resistance to massive dabbling in or continued use of drugs than the majority population with no disabilities. The survey's results were compared with results of several Czech and Slovak studies of persons without disabilities. One of surprising findings was, e.g., lower numbers of tobacco and marihuana users.*

**Keywords:** *questionnaire, addictive substance, physical disability, attitudes, social care institution, drug use, dependence*

### Introduction

According to a number of epidemiological studies (*Youth and Drugs 2000; ESPAD, 2003,2007, the work of Nešpor, Csémy, Sovinová, Miovský; in Slovakia for example Novotný, Kolibáš, Kovářová, Pavúk, and others*) children, adolescents, and young adults, and especially pupils at elementary and secondary schools, are among the at-risk groups in terms of the epidemiology of addiction.

They are threatened by a number of socially pathological phenomena, among them substance dependence, virtual drugs (for example gambling, internet, mobile phones, computers) and addictive behavior (for example sects, compulsive shopping, mental anorexia and bulimia). Their value system is still being formed, or has not yet organized itself; they seek ways to express their own opinions, attitudes; and they often come into conflict with parents, teachers, and care providers. They are sensitive to the positive or negative models around them; they are curious, and have the will and the courage to try new, unknown things; they yearn for recognition and satisfaction. Insufficient communication within the family, social pressure, and the consumer way of life may cause children and young people to seek experimentation with addictive

substances or behavior. With this they hope to escape from reality, to discover pleasant feelings, camaraderie, and new experiences; they refuse to recognize the possible risks (health, social), and tend to have a high level of the personal immunity syndrome (“it can’t happen to me”).

The Czech drug scene is developing. The age of first experimentation with drugs remains low; “safer” methods of applying drugs are preferred (for example inhalation, sniffing, ingestion); alcohol, tobacco, and cannabis are at the forefront of interest, as well as the easy-to-get hallucinogens and dance drugs, and recently cocaine as well, or the sniffing of various volatile organic substances as a substitute. The so-called “legal” drugs are still very much tolerated socially, despite a number of legislative measures (such as the minimum age of 18 for alcohol and tobacco use). Children and the adolescent population are also influenced by gambling in various forms (games for pleasure, games for money or other material advantages), watching television, videos, frequent surfing, internet shopping and auctions, and use of mobile technology and telebanking (Csémy *et al.*, 2007).

Unlike the above information on the non-handicapped population, there is relatively little information available on problems of addiction in specific population groups such as people with disabilities. It can be assumed that because of their handicap they may suffer more from exclusion, difficulty of finding a partner, friends (depending on their degree of handicap and integration), employment, and self-realization. They may experience their emotions with greater intensity or in a different manner than do “healthy” people. If they are unable to find a helping hand, there is a danger that some will attempt to deal with their problems through substance abuse or other addictive activities.

In the USA, *Kessler and Klein (1995)* carried out an extensive comparative study of nearly 41,000 non-handicapped secondary school students and nearly 500 physically handicapped students. It was shown that handicapped persons more frequently experienced negative emotions, have lower self-esteem, and just as often or even more frequently than the non-handicapped population resort to using addictive substances including alcohol and tobacco.

*Pančocha (2006)* studies in detail the special pedagogical dimensions of addictive behavior. He lists a number of risk factors threatening persons with some kind of disability. This often takes the form of more frequent use of medicaments, weakened metabolism and organ systems, atypical activity of the central nervous system, and decreased ability to predict risk. Even for experts it is sometimes difficult to identify the indicators of substance abuse among handicapped people, because they are often masked by manifestations of the disability itself. In his publication the author analyzes in detail various types of disability, and their relation to addictive behavior.

When we focus on disabled persons (*according to Vitková, 2006*: these are defects of the motor and skeletal system, as well as defects or damage to the nervous system resulting in limited mobility). The risk of drug problems is greater among these people than in the general population. Their resulting condition is often associated with abuse of alcohol or other habit-forming substances. Continuing consumption of alcohol and/or other drugs can go hand in hand, but can also be also completely independent of one another (*Heinemann, 1993*).

Another group consists of persons with chronic algic syndromes and spastic conditions. Among them overuse of alcohol and its combination with other substances, especially painkillers, is frequently observed. Epidemiological studies carried out abroad using small sample groups of physically handicapped people show that people are more inclined to use drugs if their handicaps were caused by post-natal consumption of drugs (in adulthood) than people whose conditions appeared pre- or peri-natally. Addictive substances are most often obtained from friends and family members; there are many reports of dealers specializing in providing drugs to handicapped persons (*Pančocha, 2006*).

According to *Glass (1980)*, handicapped people with substance abuse problems can be divided into two types: type A displays the signs of addictive behavior before the onset of the handicap; type B afterwards. According to *Heinemann et al. (1989)*, type A predominates; physical handicaps are often the result of an injury that occurs in the direct context of drug use. The incidence of drug use occurring after the onset of the handicap is relatively low. Persons with handicaps are given greater attention in dealing with their health problems and living alongside majority non-handicapped society; but mapping and long-term monitoring of pathological dependence is more common abroad than in this country. Effective community primary prevention must rely on knowledge of the local environment. Without this the necessary contacts cannot be made, and proper preventive strategies chosen and implemented.

To acquire the relevant knowledge on the state of the drug scene among handicapped persons, their opinions and attitudes towards addiction, and come up with proposals for preventive measures, it was deemed necessary to address a pilot sample of respondents. After evaluating the results and correction of the methodology using feedback from the field, a larger study can be made later (with a broader range of disabilities, more respondents, visits to facilities, mapping the situation on the regional and national level, and with a multicentric character).

## **Material and methodology**

The questionnaire was addressed to a pilot sample of 228 young adult clients with motor disabilities at the ÚSP Kociánka Brno social care institution, who were also secondary schools students. Respondents were given anonymity; no sensitive personal information was collected or processed during the study. After preliminary discussions and obtaining permission to carry out the survey, the management of ÚSP Kociánka was sent an official letter of request; no objection to the research was raised. After the study was concluded, the institution was given the final research findings.

The pilot study on a segment of ÚSP Kociánka clients was carried out by means of an anonymous printed questionnaire, consisting of a standardized main part (on the topic of lifetime experience with drugs, drug use within the past six months and last month before the study, the circumstances of the drug experiment, opinions, attitudes), and basic socio-economic indicators. Standardized items were used taken from similar surveys conducted within the EU (for example *ESPAD*) to make the data comparable.

The questionnaire itself consisted of 20 questions, of which 3 represented basic identifiers (school grade, sex, age), 13 questions were close-ended and 4 partially close-ended. The questionnaire was slightly modified from similar research on the majority

“healthy” population (formulation of answers, graphics); likewise its administrators were re-trained. Before filling out the form, respondents were given all the necessary information on the project and the researchers, and they could decide freely whether to take part in the study.

The answers provided by the respondents were processed en masse; reverse identification of the individual questionnaires was impossible. The questionnaires (in their paper version) were destroyed after their contents were entered into electronic form. All of the information was regarded as confidential; the only people to handle the returns were the implementers and other trained individuals; the returns were not provided to any third parties.

The responses were transferred into numerical codes; with the semi-open questions they were copied verbatim. Using the EpiInfo statistical packages, v. 6 cz (CDC, Atlanta, 1991-2004; SZÚ, Praha, 1996-2000) and Statistics for Windows, v. 7 cz (Stat-Soft Inc., 2005), univariate and bivariate statistical analysis of the collected data was carried out. The sample was sorted according to gender and age, and characterized using descriptive statistics methods. The significance of the difference between groups after sorting (categorical data) was verified by statistical test ( $\chi^2$  and its modification according to the Yates, Fisher exact test).

On the basis of information from the professional literature, comparison was made of the study’s results with those of similar surveys of the majority population of adolescents and young adults. A later repeat of the survey over a more extensive sample will allow more precise comparison and reveal trends.

The tables show levels of statistical significance of differences as follows:

\* 5 %, \*\* 1 %, \*\*\* 0.1 %.

## Results

### *Basic description of the studied sample (tab.1-3)*

The sample consisted of 228 clients of ÚSP Kociánka with physical disabilities, of which 126 (55.3 %) were men and 102 were women (44.7 %). The average age of the respondents was 20.37 years, the standard deviation 3.85. The clients surveyed attended secondary school, most of them in the first to third classes.

Table 1: Class level of entire sample

Class level	Absolute frequency (n)	Relative frequency (%)
First	63	2.6
Second	84	36.8
Third	51	22.4
Fourth	18	7.9
Fifth	12	5.3

Table 2: Gender composition of entire sample

Gender	Absolute frequency (n)	Relative frequency (%)
Men	126	55.3
Women	102	44.7

Table 3: Age composition according to class

Class level	Arithmetic average (years)	Standard deviation (SD)
First	19.86	5.51
Second	19.57	2.38
Third	19.94	1.94
Fourth	24.33	3.24
Fifth	24.50	2.81

*Smoking tobacco (tab. 4a, 4b)*

Almost half of the respondents had consumed tobacco some time in their lives (lifelong prevalence). No statistically significant difference was found between the sexes on this. The most first-time experiments took place between the age of 15-18 (one quarter of the sample); one tenth between ages 10-14, and around 7 % under the age of 10. Only about 7 % smoked tobacco for the first time “legally”, that is after 18 years of age (10 % of men, 3 % of women;  $p < 0,05$ ,  $\chi^2$ ). About one fifth of respondents had smoked tobacco the day of the survey (29 % of men, 9 % of women;  $p < 0,001$ ,  $\chi^2$ ) or a week before; 15 % can be regarded as ex-smokers (last used tobacco more than 6 months ago).

Table 4a: Age of first use of tobacco

Group	All		Men		Women	
	abs.	%	abs.	%	abs.	%
Less than 10 years old	15	6.6	9	7.1	6	5.9
10-14 years	24	10.5	9	7.1	15	14.7
15-18 years	54	23.7	33	26.3	21	20.6
Over 18 years	15	6.6	12	9.5*	3	2.9*
Never smoked + no response	120	52.6	63	50.0	57	55.9
Totals	228	100.0	126	100.0	102	100.0

Table 4b: Last experience consuming tobacco

Group	All		Men		Women	
	abs.	%	abs.	%	abs.	%
Today	45	19.7	36	28.6***	9	8.8***
Within last week	3	1.3	0	0.0	3	2.9
Within last month	6	2.6	3	2.4	3	2.9
Within last six months	21	9.2	9	7.1	12	11.8
Longer ago	33	14.6	15	11.9	18	17.7
Never smoked + no response	120	52.6	63	50.0	57	55.9
Totals	228	100.0	126	100.0	102	100.0

*Alcoholic beverages (tab. 5a-5c)*

More or less regular drinking of alcohol sometime in life was reported by 46 % of respondents; 40 % only on special occasions (family celebration, New Year’s); the rest are abstainers. Affirmative answers to lifelong consumption showed significant differences between genders; ( $p < 0.05$  or better,  $\chi^2$ ). In the general population there are 2-3 % abstainers; in this sample there were more than 10 %. For 40 % of the sample the

first taste of alcohol came at 15-18 years of age (31 % of men, 50 % of women;  $p < 0.01$ ,  $\chi^2$ ), one fifth between 10-14 years, 9 % even before the age of 10. Only 17 % of respondents had their first experience with alcohol “legally”, after they reached the age of 18. Around half of those surveyed consume alcohol more or less regularly (of those who used alcohol today: the difference between genders is insignificant; within the last week men were predominant;  $p < 0.05$ ,  $\chi^2$ ; during the last month: difference insignificant); roughly a quarter within the last six months (women more;  $p < 0.05$ ,  $\chi^2$ ).

Table 5a: Drank alcohol sometime in life

Group	All		Men		Women	
	abs.	%	abs.	%	abs.	%
Answer						
No	27	11.8	18	14.3	9	8.8
Yes, exceptionally	90	39.5	36	28.6***	54	52.9***
Yes	105	46.1	66	52.3*	39	38.3*
No response	6	2.6	6	4.8*	0	0.0*
Total	228	100.0	126	100.0	102	100.0

Table 5b: Age of first-time drinking of alcoholic beverage

Group	All		Men		Women	
	abs.	%	abs.	%	abs.	%
Answer						
Less than 10 years old	21	9.2	12	9.5	9	8.8
10-14 years	45	19.7	27	21.5	18	17.6
15-18 years	90	39.5	39	31.0**	51	50.0**
Over 18 years	39	17.1	24	19.0	15	14.8
Never drank + no response	33	14.5	24	19.0*	9	8.8*
Total	228	100.0	126	100.0	102	100.0

Table 5c: Last time an alcoholic beverage was consumed

Group	All		Men		Women	
	abs.	%	abs.	%	abs.	%
Answer						
Today	6	2.6	3	2.4	3	2.9
Within last week	63	27.6	42	33.4*	21	20.6*
Within last month	42	18.4	27	21.4	15	14.7
Within last six months	54	23.8	18	14.3***	36	35.4***
Over six months ago	18	7.9	9	7.1	9	8.8
Never drank + no response	45	19.7	27	21.4	18	17.6
Total	228	100.0	126	100.0	102	100.0

### Coffee (tab. 6)

Half of the sample group regularly drinks coffee, 14 % only occasionally; one third have never drunk it (significant gender difference in abstinence, men predominate;  $p < 0.05$ ,  $\chi^2$ ). The first experience drinking coffee most often take place at 15-18 years of age (29 %); one fifth of the sample first tried it at between 10-14 years of age, 16 % after the age of 18. There were some individuals who first drank coffee before age 10. One fifth of respondents last drank coffee on the day of the survey or the week before it.

Table 6: Drank coffee sometime in life

Group	All		Men		Women	
	abs.	%	abs.	%	abs.	%
Answer						
No	78	34.2	51	40.5*	27	26.5*
[Yes, occasionally]	33	14.5	18	14.3	15	14.7
Yes	114	50.0	54	42.8	60	58.8
No response	3	1.3	3	2.4	0	0.0
Total	228	100.0	126	100.0	102	100.0

*Cocaine and crack*

These drugs had been tried by only a few respondents (6), representing less than 3 % of the sample; they were exclusively men (significant difference between genders;  $p < 0.05$ , Fisher exact). Identical numbers had used the drugs within the last six months or 30 days before the survey. First experiments fall into the very early age before 10; this might be explained by the previous lege artis use of cocaine as a local anesthesia in otolaryngology and ophthalmology. 6 respondents had used these substances 4 or more times during their lives.

*Cannabis products - marijuana, hashish (tab. 7a, 7b)*

Nearly 16 percent of the entire sample had tried these during their lives; men predominated significantly (24 % of men vs. 6 % of women;  $p < 0.001$ ,  $\chi^2$ ). During the last 6 months 12 % of the sample had consumed cannabis products (17 % of men, 6 % of women;  $p < 0.05$ ,  $\chi^2$ ) with significant predominance of men. A similar situation was found with cannabis consumption within the last month (9 % of entire sample; 14 % men, 3 % women;  $p < 0.01$ ,  $\chi^2$ ). First experiments with marijuana fell most frequently into the 15-18 age group, but they were also reported under the age of 10 (there were consistent significant differences between men and women except with the below age 10 group). A single experiment with cannabis was reported by 1 % of the sample, 4 % reported 4-10 times use, 9 % more than 10 times (with significant difference in this category between genders, with men predominating;  $p < 0.01$ ,  $\chi^2$ ).

Table 7a: Age of first use of cannabis products

Group	All		Men		Women	
	abs.	%	abs.	%	abs.	%
Answer						
Less than 10 years old	3	1.3	3	2.4	0	0.0
10-14 years	6	2.6	6	4.8**	0	0.0**
15-18 years	18	7.9	15	11.8*	3	2.9*
Over 18 years old	6	2.6	0	0.0**	6	5.9**
Never used it + no response	195	85.6	102	81.0*	93	91.2*
Total	228	100.0	126	100.0	102	100.0

Table 7b: Frequency of use of cannabis products during lifetime

Group	All		Men		Women	
	abs.	%	abs.	%	abs.	%
1 - 3 x	3	1.3	0	0.0	3	2.9
4 - 10 x	9	3.9	6	4.8	3	2.9
More than 10 x	21	9.2	18	14.2**	3	2.9**
Never used + no response	195	85.6	102	81.0*	93	91.3*
Total	228	100.0	126	100.0	102	100.0

*Hallucinogens (LSD, trips, psilocybins, mescaline)*

Roughly 5 % of the sample reported having used drugs with hallucinogenic effects some time in their lives, men more than women (7 % vs. 3 %). 3 % of the sample have used them within the last six months; these were practically only men, same with use within the past 30 days. With both indicators, statistically significant differences are observed between the genders ( $p < 0.05$ , Fisher exact). Some first contacts with hallucinogens were reported under the age of 10 and in the 10-14 age brackets. Use of hallucinogens 10 times and more was admitted by 3 % of the sample (5 % of men, 0 % of women;  $p < 0.05$ , Fisher exact), 1 % each reported 1-3 experiments, or having consumed them 4-10 times.

*Stimulants such as amphetamines and ephedrine (pervitin, Ice)*

Of the sample, 3 % have had experience with these types of drugs during their lifetimes. During the last 6 months and last 30 days 1 % of the sample (exclusively men) have used them. First experiments with amphetamines and ephedrine derivatives occurred with some respondents at a very early age – below 10. The overall number of times they have consumed the drug is over 10. None of the indicators showed significant differences between the genders.

*Deliberate inhalation of volatile substances (toluene, xylene, benzine, trichloroethylene)*

Experience inhaling volatile organic solvents was reported by about 1 % of the sample. During the last 6 months and 30 days they were used by 1 % of the whole sample (exclusively men). First experiments with volatile substances among those surveyed took place at ages under 10; the total number of incidences of use during their lifetimes exceeded 10. No significant differences were found between the genders for any of the indicators.

*Opiates (heroin, codeine, morphine, opium)*

Experience with opiates was found among 3 % of the sample. 1 % of the entire sample, all of them men, had consumed opiates within the past 6 months and past 30 days. Respondents reported their first experience with opiates at ages under 10. The entire number of uses of the drugs did not exceed 10. A statistically significant difference between the genders was found with the lifetime prevalence of opiate use (men 5 %, women 0 %;  $p < 0.05$ , Fisher exact).



### *Sedatives and tranquilizers used non lege artis*

These include preparations from various medicinal groups (sedatives, hypnotics, analgesics, tranquilizers...) which are used without the knowledge and recommendation of a doctor or pharmacist, usually for the conscious purpose of improving one's mental state. These substances were used at least once by a third of the sample group, most frequently by women. During the last six months a fourth of the sample reported consumption, during the last few days one fifth, in both cases predominantly women. Depressant drugs were first used at ages below 10 (8 % of sample), 7 % reported first consumption at the ages of 10-14 and 15-18, and 1 % after age 18. Some 5 % of respondents only experimented with these drugs; 4-10 times 8 %, and 7 % more than 10 times. These higher rates of use of depressant drugs compared to the general population is probably due to the specific circumstances of the segment of physically handicapped persons, and an effort to relieve pain even beyond the recommendations of the therapists.

A number of highly significant statistical differences were found between the genders, with lifelong prevalence of use (19 % of men, 56 % of women;  $p < 0,001$ ,  $\chi^2$ ), with consumption within the last 6 months (12 % of men, 38 % of women;  $p < 0,001$ ,  $\chi^2$ ), and 30 days (7 % of men, 32 % of women:  $p < 0,001$ ,  $\chi^2$ ), in first use below 10 years (2 % of men, 15 % of women;  $p < 0,001$ ,  $\chi^2$ ) and 15-18 years (2 % of men, 12 % women;  $p < 0,01$ ,  $\chi^2$ ), and in frequency of use 1-3 times (0 % of men, 12 % of women:  $p < 0,001$ ,  $\chi^2$ ).

### *Dance drugs (typically Ecstasy)*

Experience with this group of drugs was admitted by 4 % of the sample, all men (7 % of men, 0 % of women;  $p < 0.01$ , Fisher exact). Within the last six months these substances were used by 3 % of the sample. First experiments fall into the below-10 and 10-14 age groups. Dance drugs were used by 1 % of the sample 4-10 times; about twice as many had used them more than ten times. Significant differences were observed between the genders in the categories of total number of uses, consumption within the last six months (5 % of men, 0 % of women;  $p < 0.05$ ,  $\chi^2$ ), within the last month and with number of times used over 10 (with similar ratios to the previous).

### *Gambling and slot machines*

This activity carries the elements of gambling games and betting. In the first case the focus is on finding more time to gamble and continuing in the game; in the second case it is an effort to win money. One fifth of the sample has tried a slot machine at least once in their lives. 1 % of the sample had played on the date of the survey, during the last week 4 %, during the last month and last six months 3 %. The most frequent (12 %) first experience with gambling machines was at ages 15-18. Only 3 % of those surveyed played for the first time "legally", at ages over 18. Most experiences remained isolated (1-3 times with a tenth of respondents). Significant differences between the genders were found in the category "played within the last month" and "first experience playing at over 18 years of age" (with both 5 % of men, 0 % of women,  $p < 0,05$ , Fisher exact).

### *Time spent daily watching television, videos, DVD*

This manner of spending free time was reported by 95 % of those surveyed. Most common is 1 to 3 hours a day (46 % of sample); next is "less than an hour" (20 %),

“more than six hours” (16 %), and “from 3 to 6 hours (13 %). No significant differences were found between the genders on this topic.

#### *Time spent daily playing computer games*

With 60 % of the sample a certain amount of time is devoted daily to playing computer games; a third never play. One fourth of the sample group spends between 1 and 3 hours a day (31 % of men, 15 % of women;  $p < 0,01$ ,  $x^2$ ), 16 % play less than an hour a day, and 10 % from 3 to 6 and 6 or more hours a day.

#### *Time spent daily with on-line entertainment on the computer (surfing the web, e-mail, chat, blog)*

Out of the entire sample, 13 % of respondents do not engage in this form of entertainment; a fourth less than one hour a day, a third from 1 to 3 hours a day, 16 % from 3 to 6 hours a day, and 9 % spend more than 6 hours a day on computer activities. No significant differences were found between the genders.

#### *Time spent daily using mobile telephones*

A tenth of those surveyed do not use a mobile telephone; one third spend 10-30 minutes a day using them, one fifth less than 10 minutes and one fifth more than one hour; 16 % spend from 30 to 60 minutes a day. No significant differences were found between the genders.

#### *Who motivated respondent to use drugs*

In the case of first experiments with substance abuse and behavior (aside from medicines prescribed lege artis, alcohol, tobacco, and caffeine), one fifth were introduced to it by friends, one tenth by parents, and 7 % by another person; followed by the answers “sibling” and “dealer” (3 % each), “acquaintances” and “partner” (1 % each). Significant differences were found between the genders with the answer “parents” (5 % of men, 21 % of women;  $p < 0.01$ ,  $x^2$ ), “dealer” (5 % men, 0 % women;  $p < 0.05$ , Fisher exact) and “someone else” (10 % of men, 3 % of women;  $p < 0.05$ ,  $x^2$ ).

#### *Encounters with drug dealers*

Of the sample, 16 % had met a drug dealer at some time; 78 % never had, 6 % gave no answer. No significant differences were found between the genders.

#### *Reasons given by respondents leading to use of drugs (outside of medicines prescribed lege artis, alcohol, tobacco, and caffeine).*

Most frequent reasons given were to cope with health problems (13 %); 12 % curiosity, 7 % to induce pleasant feelings (10 % of men, 3 % of women;  $p < 0.05$ ,  $x^2$ ), same with 7 % “for other reasons” (philosophical, spiritual, sexual), in 5 % to ease psychological stress). Less often (from 1 to 4 %) they mentioned fitting in with the group, suppression of unpleasant sensations (hunger, fatigue, cold) and improving performance.

#### *Availability of selected drugs*

This category was surprising for the relatively high incidence (40-50 %) of persons who were unable to express their opinion.

In the case of cocaine and crack, a third of the sample group regarded them as practically inaccessible, one tenth relatively accessible, and 4 % easily accessible. No significant differences between the genders were found.

Cannabis drugs are easily accessible for 16 % of the sample, for 13 % relatively accessible, for a quarter of respondents practically inaccessible. No significant differences were found between the genders.

Drugs with hallucinogenic effect were practically inaccessible for a third of those surveyed, for 8 % they are relatively accessible, for 8 % easily accessible. With the answer “practically inaccessible” a significant difference between the genders was observed (29 % of men, 41 % of women;  $p < 0.05$ ,  $\chi^2$ ).

Stimulants such as amphetamines and ephedrine were regarded by 37 % of the sample as practically inaccessible, 8 % as relatively accessible, 3 % easily accessible. The answer “easily accessible” showed a significant gender difference (5 % of men, 0 % of women;  $p < 0.05$ , Fisher exact).

Volatile substances are regarded by one quarter as practically inaccessible, by at tenth as relatively accessible or easily accessible. The answer “accessible” showed a significant gender difference (14 % of men, 6 % of women;  $p < 0.05$ ,  $\chi^2$ ).

Opiates are practically inaccessible to 40 % of the sample group, for 7 % relatively accessible, for 4 % easily accessible. No significant differences were found between the genders.

In the case of depressant drugs, their accessibility is much greater: 22 % find them easily accessible, one fifth relatively easily accessible, and practically inaccessible for 16 % of the sample group. With the answer “easily accessible” (14 % of men, 32 % of women;  $p < 0.01$ ,  $\chi^2$ ) and “accessible” (14 % of men, 26 % of women;  $p < 0.05$ ,  $\chi^2$ ) a significant gender difference was observed.

Dance (discotheque, designer) drugs are practically inaccessible for a third of those surveyed, for 5 % relatively accessible and easily accessible for 12 % of people in the sample. No significant differences were found between the genders on this question.

#### *Attitudes of respondents towards some high-risk activities*

No answers to the attitude-related questions were given by one fifth of the respondents.

Regular smoking of 20 or more cigarettes a day was not approved of by 58 % of those surveyed; 8 % approved, and 15 % could not decide. No significant differences were found between the genders, even though women tended to be more disapproving in general of regular consumption of tobacco.

Regular smoking of marijuana was strongly disapproved of by 62 % of the sample (here there was a significant gender difference: 10 % of men, 3 % of women;  $p < 0.05$ ,  $\chi^2$ ), 7 % approved, 13 % were unable to judge the risk.

Experimentation with so-called “hard” (unacceptably high-risk) drugs is strongly disapproved of by 67 %; none approved of it, 12 % were unable to decide. No significant differences were found between the genders.

Experimentation with so-called “soft” (light, with acceptable risk) drugs is strongly disapproved of by 60 % of the sample, 1 % approve, and 17 % are unable to judge the risk. No significant gender differences were found. 45 % of respondents disapproved

of trying marijuana; 14 % approve, and 21 % are unable to decide on the risk. No significant gender differences were found.

### *Opinions on drug legalization*

38 % of the sample group was against the legalization of any kind of drug; 45 % would agree with legalizing some substances (esp. the cannabis drugs) provided they are intended for medical use and prescribed *lege artis*. Other types of opinion appeared sporadically; in particular, 4 % were for the legalization of “soft” drugs and 3 % for legalization of all types of drugs. The last opinion showed a significant difference between the genders (0 % men, 6 % women;  $p < 0.01$ , Fisher exact).

### *Main ways of spending free time*

Respondents spend the most amount of their free time in the company of friends (68 %), watching television, videos, DVD, or listening to radio (66 %), reading, listening to music (55 %), with family (47 %), nature walks (40 %), and sports activities (37 %).

Less preferred are the company of a partner, further self-study beyond regular studies, artistic activities (20 % for each of these last three); relatively less frequent is [taking advantage of the opportunity to make some extra money (14 %) and animal husbandry or gardening (10 %).

Significant differences between the genders were found in the choice “with family” (60 % of men, 32 % of women;  $p < 0,001$ ,  $\chi^2$ ), “making extra money” (21 % of men, 6 % of women;  $p < 0,01$ ,  $\chi^2$ ), “artistic activities” (10 % of men, 30 % of women;  $p < 0,001$ ,  $\chi^2$ ), “in the company of friends” (62 % of men, 76 % of women  $p < 0,05$ ,  $\chi^2$ ) and “nature walks” (31 % of men, 50 % of women;  $p < 0,01$ ,  $\chi^2$ ).

## **Discussion**

Presentation of selected Czech and Slovak studies, undertaken on sample of persons without disabilities, as comparative material

*Study by Polanecký et al. (2000, 2001) “Mládež a drogy 2000” [Youth and Drugs 2000], sample of more than 1300 elementary and secondary school students*

The sample showed 40 % regular smokers; 8 % daily smokers, 3 % of respondents had never tried alcohol; 48 % of the sample had experimented with illegal drugs (cannabis, depressants without prescription, ecstasy, pervitin, toluene). Differences between girls and boys were not statistically significant. Half of all seventeen-year-olds had had at least one drug experience. 30 % of elementary school students had already tried drugs; 5 % were regular users. Out of a hypothetical class with 30 students, 6 have taken drugs, 3 smoked only marijuana or hashish, and 3 have already used “hard drugs”. Most common among illegal drugs was the smoking of cannabis (55 % of respondents), followed by sniffing (10%).

First experiments with illegal drugs most often took place at age 14 in the cases of cannabis and solvents, 15 with sedatives, 16 with ecstasy, pervitin, crack, LSD, and other hallucinogens and steroids. Heroin and cocaine were first tried by youth most often at ages 15-17.

25 % of young people own a mobile telephone, over 30 % a computer. Almost 90 % have played PC games at some point, 25 % every week, 15 % daily. Around 14 % had experience with gambling, 1 % played slot machines daily. 25 % of the sample had surfed the Internet.

*ESPAD 1999 (Csémy, Sovinová, Sadilek, 2000), sample of 16-year-olds*

Health-threatening forms of drinking alcoholic beverages were very common among boys, and is becoming more common among girls (18-24 % of boys and 8-10 % of girls 16 years of age). Compared to 1995 data, by 1999 there had been a clear and very sharp increase in experience with drugs containing opiates, and with stimulants and hallucinogens. In 1995-1999 the incidence of repeated (more often than 5 times) substance abuse increased by 2.5 – 3 times. There was also a sharp increase in the number of young people who are in greater danger of direct and indirect health risks associated with substance abuse (overdose, infection).

Substance abuse was generally more common among boys, which was especially true in the case of marijuana, reported most often by respondents. The situation differs when comparing experience with other substances, where the gender differences were practically insignificant.

Experience with drugs and the dangerous consequences of substance abuse are indirectly correlated with level of education. Prague remained by far the area with an extraordinarily high incidence of drug use among young people. Other at-risk regions were northern and western Bohemia and south Moravia. In the period 1995-1999 the availability of drugs grew in every region.

Smoking tobacco and drinking beer are high-risk behaviors appearing most often in the age group up to 13. In the case of illegal drugs, during the period between 1995 and 1999 the number increased of people reporting their first experience with drug use by the age of 13.

Compared to 1995, by 1999 the number of young people who had no experience with drugs declined (from 74.1 % to 61.5 %); the proportion of respondents who had their first experience with marijuana had grown (from 18.7 % to 31.3 %). This finding correlated with the theory that young people usually arrive at hard drugs via marijuana, preceded by tobacco or alcohol.

There is a link between experience with drugs (even one time) with the incidence of other forms of addictive or problematic behavior. Persons with previous drug experience (usually with marijuana only) are also more likely to be heavy (daily) smokers, more frequently show problems with consumption of alcohol, and tend to have more frequent behavioral disorders than persons without drug experience.

On an international basis the comparison is unfavorable: we exceed the other European nations in consumption of tobacco and alcohol. If we take the findings of the ESPAD as the lower boundary of estimates of experience with drugs for the age group 15-19, it can be concluded that at least 250,000 young people in the CR have experience with some kind of drug, 128,000 young people had repeated experience (more than 5 incidents of use), 26,000 people repeated experience with drugs other than marijuana or hashish, of which some 15,000 had repeatedly used opiates or stimulants (most often heroin or pervitin).

Risky forms of behavior in relation to addictive substances among Czech youth were more widespread than the average in Europe among their contemporaries, apparently due to the extraordinarily lenient to tolerant attitude of the adult population towards the use of alcohol and tobacco. An important role was played by dysfunctional families and family relationships, influence of peers, and biological and psychological characteristics of the individual.

*ESPAD 2003 (Csémy, Lejčková, Sadilek, Sovinová, 2006), sample of 16-year-olds*

Almost all of the surveyed students in the Czech Republic had drunk at least one alcoholic drink within the last year (95 %), which is higher than the average value for all the surveyed countries (83 %). Likewise the percentage of students who had gotten drunk within the last year was higher than the European average (68 % versus 53 %). More students smoked cigarettes sometime in their lives (80 % vs. 66 %), but the percentage of students who had smoked within the past 30 days (43 %) approached the average percentage of smokers in all the countries involved in the ESPAD project (35 %). Twice as many students in the Czech Republic had experience with marijuana or hashish (44 %) than the average in all countries (21 %). Likewise the use of all other illegal drugs besides marijuana was higher in the CR (12 % compared to 6 %). Inhaling solvents was roughly on the same level in the Czech Republic (9 %) as the average of the other studied countries (10 %). The percentage in the CR of those surveyed using sedatives or other psychoactive medicines without a doctor's recommendation (11 %) was greater than the average of all countries (6 %). Drinking alcohol in combination with medicine was more common in the Czech Republic (12 %) than the average of all countries involved in the project (7 %).

*ESPAD 2007 (Csémy, Chromynová, Sadilek, 2007), sample of 16-year-olds*

Compared to the preceding period, there was a stabilization of the situation in the area of young people's experience with illegal drugs – compared with 2003 there was a drop in experience with all drugs being studied except with cannabis substances. With cannabis the situation was comparable with 2003; at that time the steady growth in substance abuse observed since the mid-1990's came to a halt. At the same time there was a drop in subjective perceptions of the accessibility of illegal drugs (except for cannabis substances) and a growth in subjective perceptions of risk as a consequence of substance abuse.

Among the illegal drugs, respondents in 2007 had the most frequent experience with cannabis substances (45.1 %). Further down the scale were experience with sedatives (9.1 %), hallucinogenic mushrooms (7.4 %), and sniffing solvents (7.0 %). Experience with LSD (5.0 %), ecstasy (4.6 %), and amphetamines (3.5 %) was less common; experience with drugs like heroine or cocaine was minimal among the sixteen-year-old population (2.0 % and 1.1 %).

Use of illegal drugs within the last 12 months among the 16-year-old respondents differed little from the lifelong patterns of use. During the last 30 days 18.5 % of sixteen-year-olds had used marijuana, volatile substances almost 2 %, other drug use hovered around 1 %. In the CR about 300,000 people at ages 15-19 had had at least one experience with illegal drugs, during the last month around 120,000 people.

Research in 2007 re-confirmed the gender differences in drug use – boys reported a higher incidence of experience with illegal drugs than girls did. There are significant differences when comparing regions within the CR. The greatest proportion of sixteen-year-old students with drug experience is found in the Ústí nad Labem and Karlovy Vary regions, followed by the Liberec and Olomouc regions. Regional differences were also evident in the types of drugs being used and their accessibility.

25 % of sixteen-year-olds smoke daily, of which 8 % are heavy smokers (more than 11 cigarettes a day). The proportion of daily smokers fell somewhat between 2003 and 2007, mainly among boys; while a slight increase was reported among girls.

As for use of alcoholic beverages, the situation has not changed significantly since the 1990s, which in view of the relatively high alcohol consumption among young people in the CR is alarming information. Over 20 % of students have overconsumed alcohol (defined as 5 or more glasses on a single occasion) more than 3 times in the last month.

Compared to 2003 there has been a decline in the perceived accessibility of cigarettes and alcohol, but also a subjective decline in the perceived risks of smoking and frequent alcohol use.

#### *Research carried out on sample of university students*

*Kachlík and Šimůnek (1995, 1998)* studied drug consumption and attitudes towards drugs on the part of students at Masaryk University, beginning in 1993. In the period 1993-1997 they carried out an anonymous questionnaire survey on a sample of 456 students (177 men and 279 women) of the 5<sup>th</sup> year class at the MU Medical Faculty in Brno.

It was shown that so-called “hard drugs” (opiates, cocaine, pervitin) had penetrated into the selected group. The incidence of students who had tried hard drugs themselves was relatively low, around 2 %; though almost 4 % of men admitted to having experience with cocaine in 1993-1994. The abuse of medicines mainly took the form of depressants used by women to cope with psychological and physical problems.

Much worse was the situation with consumption of cannabis products. Marijuana became the most widely-used drug in the sample; more than 30 % of men reported having some experience with it, and nearly 20 % of women. Some 6 % of men and 1 % of women smoked it regularly. After cannabis the most widely-used group of drugs among university students was hallucinogens, mostly naturally-occurring mushrooms (psilocybins). Around 30 % of men and 15 % of women regularly smoked tobacco; 20 % of men and 50 % of women were non-smokers; the rest were occasional smokers and ex-smokers.

Students took a very tolerant stance towards trying marijuana (accepted by two thirds, only 15 % strongly disapproved). The numbers of disapproving grew in the cases of occasional (20 %) and regular consumption (60%). A third of those surveyed took no clear position; the attitudes of women were generally more critical. The medical students were much more critical of regular smoking of 20 cigarettes a day. Half of men and 65 % of women strongly disapproved of possible legalization of so-called “soft” drugs; the significance of the gender difference on this issue has increased over time.

More than three quarters of the sample were introduced to drugs by their friends or chance acquaintances; 45 % of respondents took drugs out of curiosity. Other reasons mentioned were for pleasure, relief from psychological stress, coping with health pro-

blems (mostly among women), for an increased sense of companionship and acceptance by peers. Almost half of men and a third of women said they had had a desire at some time to try drugs.

Besides anti-smoking campaigns, as part of an internship at the Institute of Preventive Medicine medical students were also called upon to participate in activities on primary prevention of abuse of non-tobacco drugs. The subject of dependency prevention was also raised in the classroom and study materials of future educators. Cooperation with the MU Counseling Centre was strengthened, giving student the opportunity to deal with their dependency problems directly on the university campus.

*Csémy et al. (2004)* studied a sample of 904 Prague university students (Charles University, University of Economics, Czech Technical University, Czech University of Life Sciences, and University of Chemical Technology) using an anonymous, structured questionnaire focused on drug abuse and attitudes towards drugs. It also contained a set of questions focusing on a number of selected psychological characteristics.

High-risk or socially undesirable forms of addictive substance abuse were reported among a third of the sample. Over-consumption of alcohol was reported by one fifth of men and 8 % of women. The proportion of daily cigarette smokers was practically the same for both sexes (14 % of men, 13 % of women); use of particular drugs (marijuana, pervitin, heroin, LSD, ecstasy) more than 5 times within the past year was admitted by 24 % of men and 12 % of women. Persons engaging in high-risk behavior with in connection with addictive substances exhibited increased tendencies towards depression, deterioration of mental health, and difficulty in identifying with generally-accepted social norms. Students over-using alcohol or consuming other drugs took more accepting attitudes towards the use of addictive substances. No significant link was found between quality of family environment and high-risk use of drugs.

*Pavúk and Koščo (1997)* published the results of a questionnaire on smokers' habits and the prevalence of smokers among students of the Faculty of Education in Prešov in 1982-1995. More than 1900 respondents were surveyed.

In 1982 on average 31.2 % of students were smokers, 43.4 % of men and 26.5 % of women. Among first-year students 20.3 % were smokers (16.6 % of women, 34.7 % of men), among final-year students 36.7 % (30.9 % of women and 51.6 % of men). Data from later stage of research in 1991 showed prevalence of smokers among first-year students at 26.2 % (25.8 % of women, 27.2 % of men), among final-year students 44.3 % (39.6 % of women, 52.0 % of men). Also available was information on the prevalence of smoking among first-year students in 1995 (24.5 % overall, 23.3 % of women, 29.4 % of men).

1991 saw a growth in the number of smokers in a student sample of first and final year students, especially among the new first-years students, and women in general. In 1995 there was a decline in smoking among first year students compared to 1991, though still an increase compared to 1982 (both changes below the level of statistical significance, however). In 1991-1995 to trend towards increasing prevalence of smoking among women was observed, and the number of men smoking declined compared to 1982-1991.

Long-term research was also carried out among 3<sup>rd</sup>-5<sup>th</sup> year students at the Faculty of Medicine, Komenský University in Bratislava (*Novotný, Kolibáš, 1997; Kolibáš, Novotný, 1998*). At the end of the 1990s the research tracked students' experience with



and knowledge of alcohol and other psycho-active substances. The most frequently-used substances among the respondents were coffee (drunk regularly by more than 40 %) and alcohol (20 % regular consumers). Regular smoking of tobacco was reported by around 10 % of those surveyed. Regular use of benzodiazepines was very rare; however, it was more often repeated. Regular and repeated consumption of alcohol and nicotine was 3-4 times more frequent among men; drinking coffee and using benzodiazepines occurred more often among women. Of the illegal drugs, the most frequently reported among the sample is marijuana (1.8 % regular consumers, repeated use another 5.5 %). There are isolated occurrences of psychostimulants, ecstasy, and hallucinogens. 2.3 % of students report using psychostimulants at least once, LSD around 1.4 %, and ecstasy around 0.5 %. None reported any experience with opiates. In evaluating knowledge about drugs, the best-understood were cannabis products, followed by heroin, hallucinogens, and volatile substances. The least-understood were the so-called “designer drugs”.

Another study (*Kolibáš et al., 2003*) used an anonymous questionnaire to survey a group of 381 students of the 3<sup>rd</sup>-5<sup>th</sup> year at the Faculty of Medicine, Komenský University in Bratislava, and at other faculties of Komenský University (education, natural science, law, and arts) and students of the Republic of Slovakia Police Academy. University students in Bratislava most often drank coffee (48 % of sample), consumed tobacco (14 % regular smokers) and alcoholic beverages (12 % drank regularly). Regular drinking of alcohol and smoking tobacco occurred most often among men; women more frequently drank coffee and used medicines with habit-forming components (nearly 4 %, esp. analgesics). Of illegal substances, the most frequently used were cannabis products (27 % of men and women had at least one experience; less than 1 % took it regularly). Persons who had experience with marijuana were more often regular consumers of tobacco and alcohol as well; the majority of them had tried other drugs as well, and had friends that used addictive substances. To a lesser degree they reported having experience with LSD, and in isolated cases volatile substances and opiates.

*Novotný and Kolibáš (2004)* presented the results of their anonymous survey in 2002, acquired from 230 students (157 women, 73 men) of the 3<sup>rd</sup> and 5<sup>th</sup>-year classes at the Faculty of Medicine, Komenský University in Bratislava. 11 % of the sample group smoked regularly (7 % of women, 21 % of men); 11 % regularly drank alcohol (8 % of women, 16 % of men), and another 68 % drank occasionally, but repeatedly. Coffee was drunk regularly by 46 % (half of men, a third of women). Of the illegal substances, the most frequently abused were cannabis drugs (15 % had a single experience, 12 % repeated, and there were isolated incidences of regular cannabis use). A single or repeated use of cannabis was reported by 22 % of women and 42 % of men (a statistically significant difference). Almost 3 % had tried LSD once; repeat users were few, and a similar situation was reported for ecstasy.

Comparing 2002 with 1997 we find that by 2002 there was a significant increase in the number of tobacco users; however the number of regular and occasional consumers of alcohol did not change significantly. There was a significant increase in the rates of drug experience with cannabis (single or repeated use); the proportion of regular consumers fell slightly.

The work of *Kovářová and Dóci (2004)* investigated the relationship between smoking and physical activity by students at the Faculty of Medicine, Pavel Jozef Šafárik

University (UPJŠ) in Košice. The answers given by survey subjects were part of CINDI cardiovascular monitoring, including a questionnaire on smoking and physical activity. The sample group consisted of 1104 5<sup>th</sup>-year medical students (426 men and 678 women) surveyed in the period 1996-2001. Of the entire sample, 17.5 % smoked; of these three quarters were regular smokers and about one fifth occasional. The prevalence of smoking was higher among men, and men smoked for a longer time than women. The average daily consumption of cigarettes was 11 for men, 7 for women. Students often began to smoke regularly after entering university. Subjectively men rated their own physical condition higher than women did; the most frequent type of physical activity was brisk walking (given by over 60 % of respondents); one fourth of those surveyed took part in recreational activities more than once a week; around 2 % were active in sports. No general link was shown between smoking and physical activity by university students; however, a significant correlation was found between daily cigarette consumption and physical activity. Students who smoke multiple cigarettes daily have a tendency to be less physically active. From the standpoint of cardiovascular prevention and dependency prevention, it would be very beneficial to strengthen the role of physical education in the curriculum and implementation of various methods in the anti- smoking campaign.

#### *The drug scene at MU (Kachlík, Havelková, 2005, 2007)*

More than three quarters of those surveyed had used tobacco sometime in their lives, usually for the first time between the ages of 10-18; one tenth of those surveyed smoked for the first time “legally”, 5 % tried tobacco before age 10, and nearly 40 % had smoked within the last 7 days before the survey was given.

Virtually 99 persons out of 100 had drunk alcohol at some time in their lives, women more or less occasionally, men regularly; first contacts with alcohol tended to occur between ages 10-18; 3 % of the sample drank for the first time “legally”, one tenth had tried alcohol before age 10, and nearly three quarters had consumed alcohol within the previous 7 days before the survey. Coffee was tried by 8 out of 10 surveyed; its regular users include a higher proportion of women; most had their first coffee experience between ages 15-18. One half the respondents had drunk coffee within the last 7 days before the survey.

Some 3 % of the sample group had come into contact with cocaine, men more than women; within the last month it had been used by 0.2 %. First experiments with cocaine most often took place in early adulthood; nearly 70 % had not taken it more than 3 times. 0.3 % of those surveyed had at least one experience in their lives with crack; only a fraction of a percent had used it within the last month (3 persons, 0.03 %); the usual maximum number of uses was similar to that of cocaine.

Of those surveyed 60 % had tried marijuana at least once in their lives, men more often. 16 % of the entire sample group had consumed it during the last month, men predominating significantly; the greatest number used marijuana for the first time at 15-18 years of age; 45 % of those surveyed had used marijuana more than 10 times, again mostly men; experiments (1-3 times) were reported by a third of the sample. A quarter of respondents had used hashish or hashish oil at least once in their lives, again mostly men; 4 % of the sample had consumed it within the last month. First use was most often at ages 15-18; in the majority of cases 1-3 experiments.

Hallucinogens were used at least once in their lives by 7 % of the sample, more often by men. During the previous month 0.5 % of all surveyed reported consuming hallucinogens; again predominantly men. First contact with hallucinogens most often fell into the 15-18 age group and the period of early adulthood; 60 % used the drug only experimentally (1-3 times), one third more often (4-10 times). Hallucinogenic mushrooms (psilocybins) had been tried by almost twice as many people as had tried hallucinogens in general, men more often. They had been used within the last 30 days by 0.8 % of the sample (more often men); the age of first use of hallucinogenic mushrooms was similar to that of the first use of hallucinogens in general; in 60 % of the cases hallucinogenic mushrooms had been used 1-3 times, in a quarter of cases 4-10 times.

Less than 5 % of those surveyed had had at least one experience in their lives with so-called "hard" drugs; most were men. First contact came most often in the 15-18 age group and early adulthood. Half these cases represented 1-3 experiments.

Depressant medicines without a doctor's prescription or professional recommendation had been used at least once by 8 % of respondents (more women); during the month before the survey by 0.9 % of the sample group (again mostly women). Around one half of the users of depressants first deliberately took these drugs during early adulthood, 40 % between 15-18 years of age. Roughly 40 % had used them experimentally or 4-10 times, one fifth more than 10 times.

Dance drugs were used at least once in their lives by 9 % of those surveyed, within the past 30 days by 0.7 % of the sample (most often men). First experiments were most often at 15-18 years of age and early adulthood; in two thirds of the cases these experiments were isolated.

More than a third of those surveyed had played a slot machine at least once in their lives (mostly men); 6 % admitted to playing during the month before the survey was given (again mostly men). Players mostly encountered the machines for the first time at ages 15-18 and in early adulthood; two-thirds admitted 1-3 contacts, a fifth 4-10., and a tenth more than 10.

The most frequent motivation reported by the respondents for using drugs were their friends, followed by influence of a partner, or random acquaintances. In the case of meetings with drug dealers, these were in ten percent of cases a university student from outside MU, 4 % a student from MU, 2 % a student of MU from the same faculty as the respondent. One or two encounters with fake or diluted drugs was reported by a tenth of the subjects; more frequent experience was reported by 3 %. The predominant reasons frequently cited for using drugs were peer pressure, curiosity, pleasure, relaxation of psychological stress, and spirituality.

They described marijuana as very easy to obtain, dance drugs and hallucinogens as fairly easy to obtain. The friends of the respondents most often used marijuana, followed by dance drugs, hallucinogens, and stimulants (pervitin etc.). Attitudes towards daily consumption of tobacco vary according to gender (9 % of men and 4.5 % of women approve; similar opinions apply to regular use of marijuana (16 % of men and 6 % of women approve). Experimental use of "hard" drugs is approved of by 8 % of men and 3 % of women; experimental use of soft drugs by 31 % of men and 19 % of women. In the case of marijuana 66 % of men and 56 % of women approve of experimental use; these attitudes are extremely tolerant.

Legalization of all drugs is strongly opposed by 13 % of the sample; permission to use selected substances *lege artis* would be supported by 53 % of those surveyed (women more), legalization of so-called “soft” drugs (esp. cannabis) would be supported by a quarter of respondents, of all drugs by less than 2 % of the sample group (in both cases more by men).

## Conclusion

Many life experiences were contained in the sample studied with a variety of addictive substances and activities characteristic of addictive behavior. In view of the specific character of the sample of respondents, the majority of these people heed the advice of their parents, teachers, and therapists and are more resistant to further major experimentation and substance abuse than the majority non-handicapped population. The lower rates of tobacco and marijuana consumption were surprising (in the general population 50-60 % of adolescents and young adults have experimented with these, in the sample only 16 %), as was the higher rates of abstinence from alcohol (10 %).

There was experimentation with opiates, cocaine, amphetamines, and ephedrine stimulants, hallucinogens, volatile substances, and dance drugs. Some tried these substances at a very early age, even used repeatedly (more than 10 times). But these were isolated cases, not the rule.

Medicines with depressant effect were non *lege artis* used more often in the sample than in the general population, even in the last six months and the last month before the survey. There was a statistically significant gender difference in this category, with women more prevalent.

Using automatic gambling machines usually remained on the level of one to three experiments; a fifth of the sample group never tried them. Respondents most often spent 1-3 hours per day watching television, videos, and DVDs; same with playing computer games. Up to an hour a day was spent with on-line activities, and mobile telephones 10-30 minutes.

Respondents were most often motivated to use addictive substances by friends; it is alarming that parents were reported in second place. 16 % of those surveyed had met a drug dealer at some point. Among the main reasons why drugs were tried were coping with health problems, curiosity (the dominant reason among the majority population), and inducement of pleasure. The most easily accessible substances include depressants, cannabis, hallucinogens, volatile substances, and dance drugs.

Activities with high risk factors are clearly disapproved of by 60-70 % of the sample, except for experimentation with marijuana (only 45 %); surprising was the number of person who expressed no opinion, or were unable to estimate the degree of risk. Some 40 % of respondents opposed legalization of any currently illegal drugs. 45 % would not oppose the legalization of substances that may have a medical use, but are only prescribed *lege artis*.

Respondents spend their personal free time most often with friends, following the public media, listening to music, in the company of family, and in outdoor activities or sports.

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## SONDA DO SEGMENTU OSOB S TĚLESNÝM POSTIŽENÍM ZAMĚŘENÁ NA ZÁVISLOSTNÍ CHOVÁNÍ

**Abstrakt:** Pomocí anonymního dotazníku bylo osloveno 228 klientů s motorickým postižením z ústavu sociální péče. Ve zkoumaném vzorku byly nalezeny četné ce-

loživotní zkušenosti s řadou návykových substancí i s aktivitami charakteru návykového chování. Dle výsledků pilotáže Tyto osoby většinou respektují rady rodičů, pedagogů a terapeutů a masivnímu zkoušení a dalšímu užívání drog odolávají více než majoritní část populace bez zdravotních handicapů. Srovnání výsledků pilotáže bylo provedeno na základě vybraných českých a slovenských studií, realizovaných na vzorcích osob bez zdravotního postižení. K překvapivým zjištěním patří například nižší výskyt konzumentů tabáku a marihuany.

**Klíčová slova:** dotazník, návyková látka, motorické postižení, postoje, ústav sociální péče, užívání, závislost