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## Drug use - attitudinal dimensions within the student population

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### Abstract

Drug use has become a serious social problem that crosses continents and most countries. Surprisingly, studies on the prevalence and genesis of drug use in the academic environment are extremely rare.

The study in question represents a sequence within a broader research devoted to drug use and analysis of predictive factors of consumer behavior in the student environment. Are identified four categories of predictive factors in the ensemble which *attitudes* occupy a distinct position. The results highlight the importance of attitudes for understanding motivation for drug use and for the construction of prevention programs.

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*Keywords:* drug use, attitudes, student environment, factorial analysis, prevention programs.

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### 1. Problem statement

Drug use is a social scourge with individual and social serious consequences affecting deeply the quality of education and life. Existing research evidence the extension of the phenomenon around the world. Social policies to prevent and combat drug use have generated results that often are below expectations. University policies in relation to drug use, at least in Romania, are almost absent.

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The major premise of the research in this study is that attitudes plays the role of a significantly predictive factor of drug use, allows to find vulnerable groups and to establish prevention programs. Suspension of attitudinal factors in the explanatory models of drug use, severely affect the understanding, prevention and control of drug abuse.

Surprisingly, the analysis and assessment of the significance to attitudinal factors in relation to drug use in the student environment have been dedicated to a very limited number of investigations into Romanian space. Existing research focused mostly on consumption effect than on the analysis the predictive factors and often have used research tools not specific to student population, but built for the diagnosis of drug use in the general population. Our research has proposed to exceed some epistemological and methodological limits identified, to circumscribe the study at a ignored population level -students, to build a valid tool for the diagnosis of drug use to the students (DCDS) and to determine the position of the attitudinal factors in a system of predictors in relation to knowledge, drug use behavior (experimental and occasional) and contextual factors.

## 2. Objectives and hypothesis

The following objectives and assumptions are a selection from a broader and varied set:

**Objective 1** Exploring students' attitudes about drug use and consumers;

**Objective 2** Determination the degree of students' information and assessing regarding available prevention or assistance services;

**H1** There is a greater degree of tolerance among students regarding drug use and consumer than other population categories;

**H2** Students' urban/rural origin significantly influences the attitudes and behavior regarding drug consumption;

**H3** There are significant differences on the areas of specialization of the various faculties promoted (humanities, social-human, technical, scientific, etc.), in terms of knowledge, attitudes and consumption;

**H4** Certain places of residence (domicile during the studies period) may generate more tolerant attitudes, even favorable to drug use and consumers. It can be assumed that students living in the dorm or having interpersonal relationship with drug users are more vulnerable to drug use;

**H5** There are significant differences by gender in terms of knowledge, attitudes and drug use, for the benefit of feminine subjects.

**H6** Marital status is not associated with differences in terms of knowledge, attitudes and consumption of illicit substances.

## 3. Research methods

Etiologic model that we have developed as part of an earlier research I've turned into a research model that allows the identification of vulnerable groups and, on this basis, the adoption of measures for preventing the transformation of vulnerable groups into dependent ones.

Components of the model are presented in Figure 1.

The model indicates the variables and directions for research.

The target population is student population; universities "classical " and technical

The core variables are knowledge, attitudes, behavior, and context. The model suggests the following research trajectories: measurement, description, highlighting the trends of the 4 factors; determination of the relationship between the four elements and the seven referential variables; the study of interactions between the four elements and highlighting the primary direction of the influences.

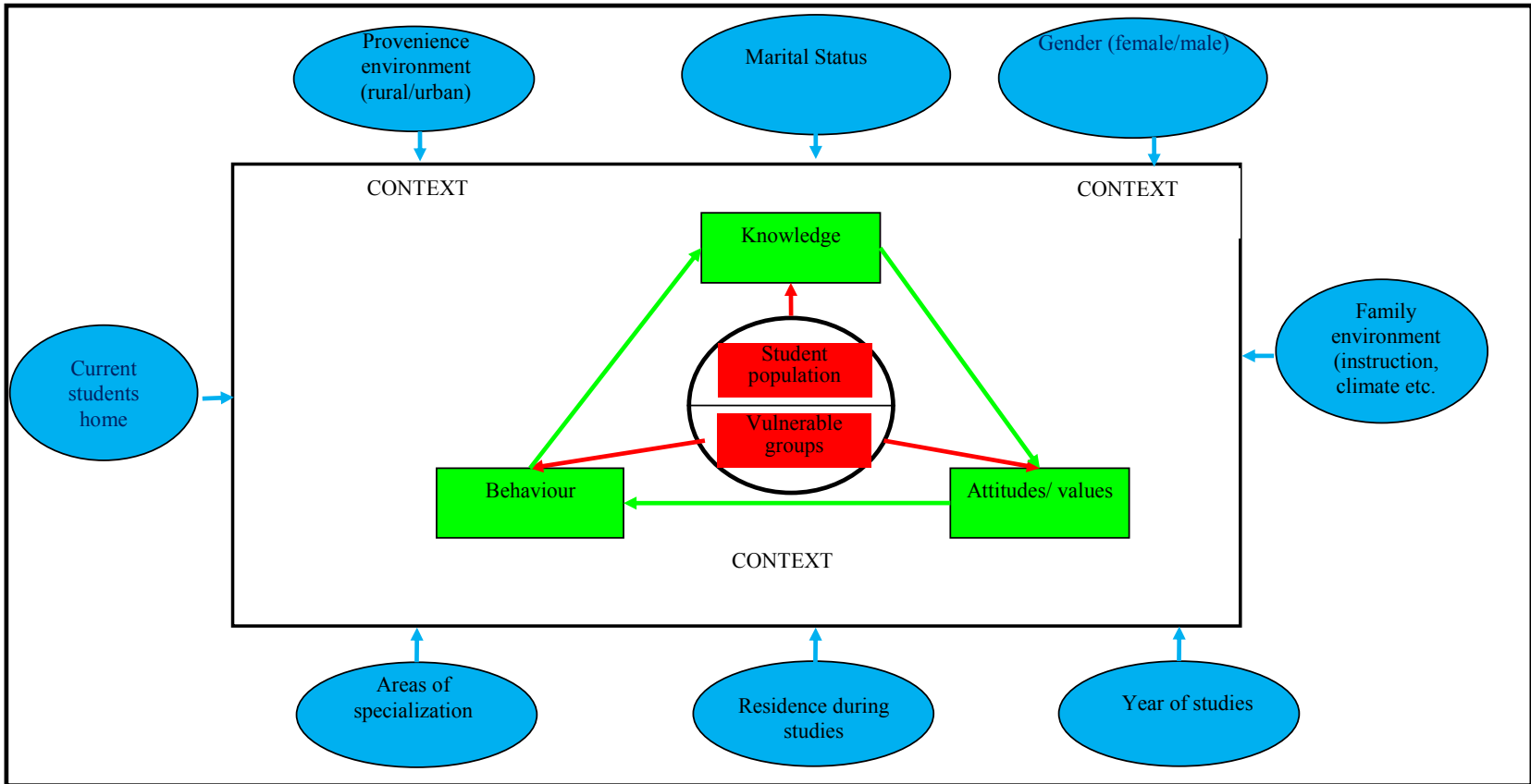
The model is compatible but not identical with the reference systems developed by other authors for the study drug (West, 2013).

The sample has representativeness for the University of Bucharest and the value for the Polytechnic University of Bucharest-exploratory and Technical construction University Bucharest.

**Table 1** The general subject of the investigation

	University of Bucharest	Polytechnic University Bucharest	Technical University of Civil Engineering of Bucharest	Total
Questionnaires applied	1300	120	110	1530
Valid questionnaires	1221	111	100	1432

Figure no. 1 Research variables model



In 1221 respondents, the vast majority are female, 81.5% and respectively, 18.1% of males, largely reflecting the gender structure of the student population. In the case of technical education, the respondents were more male-58.8% compared to 41.2% girls.

**Table 2** The distribution of respondents by fields of specialization - University of Bucharest

	Exact Sciences and Nature Sciences	Social - Political Sciences and Law	Human Sciences	Total
<b>Number of respondents</b>	296	461	454	1221
<b>The percentage from the number of total students at those faculties</b>	13,9%	11,81%	11,25%	36,96%
<b>Percentage of sample</b>	25,1%	37,7%	37,2%	100%

The evaluation report also mentions the layered samples for the year of study, environment of origin, family's level of education, current place of residence and marital status.

Research methodology falls within a predominantly quantitative paradigm. Triangulation has accompanied the approach of analysis-interpretation: questionnaire -based inquiry, focus group and interview.

DDUS questionnaire was built (the Diagnosis of Drug Use to the Students). It consists of 40 questions balance distributed in relation with the factors set out in the model of research: cognitive variables, affective- attitudinal variables, behavioral variables and contextual variables. The questionnaire also integrates a suite of independent variables relating to student groups: gender, parental education level, environment of origin (urban/rural), areas of specialization, year of study, the residence during the period of studies and marital status.

The questionnaire was pretested on a number of 235 students. It has been calculated Cronbach Coefficient Alpha for the entire questionnaire, resulting in a value of 0,837 and also the same coefficient was calculated for each representative and appropriate items, resulting in a higher than 0,700 coefficient for 13 items out of a total of 18. Such indicators are relevant and confirms consistency and the validity of the internal construction of the questionnaire.

Research tool is compatible with European and international questionnaire (EMQ and WHO) and also was validated by experts in the field of methodology of research in sociology, political science, psychology and education sciences.

Statistical control of variables and correlations between variables was done with the following procedures: Pearson Correlation Coefficient, Chi-square ( $\chi^2$ ) for frequency, analysis of variance ANOVA, Tukey Test, factor analysis, etc.

#### 4. Findings and comments

**Attitudinal-value factor** consider the determination of students' opinions, feelings, beliefs, highlights values and judgment in relation to consumption and drug users, students' attitudes towards action on the development of prevention programs.

▲ The research was concerned and systematized data concerning the legalization of drug use and attitudes towards consumers.

**Table 3** Legalizing drug use and attitudes towards consumers

	UB Students	Technical Education Students	Student Population	General Population
<b>Cannabis consumption should be legalized for medical purposes</b>	47,5%	45,9%	46,7%	15,55%
<b>It should allow people to use cannabis for recreational purpose</b>	16,9%	12,4%	14,65%	3,18%
<b>It should allow people to use heroin</b>	1,7%	1,4%	1,55%	1,6%
<b>Drug users should be accepted as any other person</b>	38,6%	35,1%	36,85%	8,6%

Data table are conclusive; they highlight the similarities and differences in attitudes: similarities mainly between groups of students belonging to different institutions and differences especially between the student population and the general population.

These results argue in favor of a hypothesis which I stated it that there is a greater degree of tolerance among students about the drug use and the consumer than other categories. It was also found that male respondents are

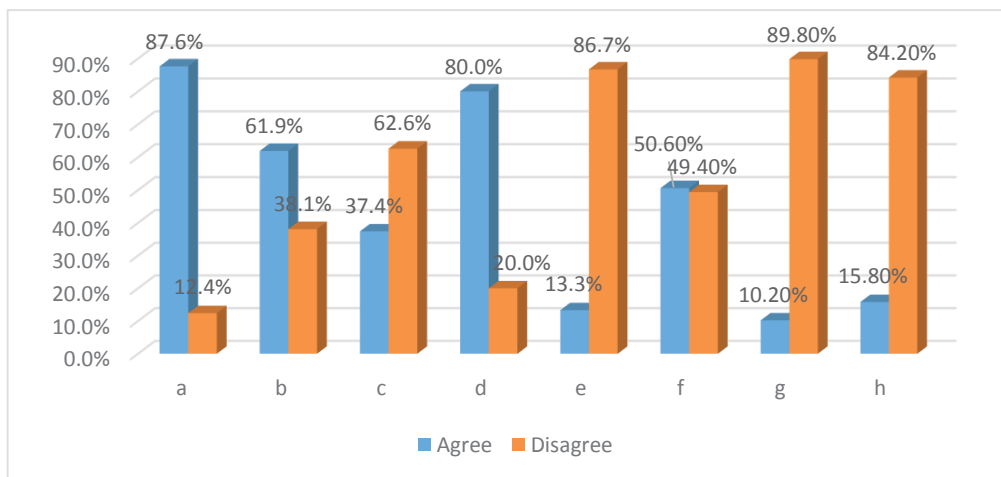
more tolerant, agreeing with the legalization of the consumption, medical and recreational purposes, and accepting the consumer as any other person, in a percentage significantly higher than female students.

▲ A set of attitudes have been explore by reference to eight statements:

- a. A young man should not consume drugs in any way
- b. Many activities are much more dangerous than drug use
- c. Smoking marijuana does not lead to psychological dependence
- d. Laws that restrict the drugs consumption and trafficking should be more restrictive
- e. Drug consumption is funny
- f. Drug consumption is one of the greatest evil that was going on in our country
- g. Drugs help people live life to the fullest
- h. The police should not aim at young people who experience drug use

Total degrees of strongly agree/agree, strongly disagree/disagree have been compressed, resulting in two major distributions: agree to disagree.

Figure no. 2 The degree of support of eight statements of attitudinal applications



The results of the eight statements were subject to a factorial analysis, while respecting the specific methodology. It has been calculated the KMO and Bartlett’s test. He obtained a significance threshold of .000. The result is conclusive for factorial analysis.

It has been calculated the total explained variance and were retained only the values greater than 1 (Initial Eigenvalues), respectively the component 1 and component 2.

Table 4 Rotated Component Matrix

	Component	
	1	2
h The drugs help people live life to the fullest	,801	
f Drug consumption it's funny	,717	
I12i The police should not aim at young people who experience drug use	,633	
I12c Smoking marijuana does not lead to psychological dependence	,574	
I12b Many activities are much more dangerous than drug use	,512	
I12g Drug consumption is one of the greatest evil that was going on in our country		,824
I12a A young man should not consume drugs in any way	-,366	,719
I12e Laws that restrict the drugs consumption and trafficking should be more restrictive		,646

Varimax with Kaiser Normalization method has been applied and were extracted two factors.

**F1** –the positive meanings of drug use (5 variables factorial saturated: many activities are much more dangerous than drug use, smoking marijuana does not lead to psychological dependence, drug use is funny, the drugs help people live life to the fullest, the police should not aim at young people who experience drug use).

**F2** – negative meanings of drug use, the need for restrictive measures (3 variables factorial saturated: a young man should not be in any way to consume drugs, laws that restrict the consumption and trafficking of drugs should be made more restrictive, drug use is one of the greatest evils that happen in our country).

Using ANOVA techniques has allowed to explore the relationship between F1 and F2 with independent variables. Main results, in synthetic form, are presented in table no. 5.

**Table 5** Independent variables in conjunction with F1 and F2

		Factor 1		Factor 2	
		Media	ANOVA S	Media	ANOVA S
Gender	Male	2,8167	.000*	2,2629	.000*
	Female	3,2514		1,8312	
		T.3,1663		T.1,9112	
Areas of the training program	Exact sciences	2,9450	.001*	2,1034	.030*
	Natural sciences	3,0407		1,9316	
	Humanities sciences	3,2226		1,8511	
	Law sciences	3,2174		1,8902	
	Social sciences	3,2071		1,9123	
		T.3,1608		T.1,9121	
Years of study	I	3,1624	.229	1,9113	.188
	II	3,1866		1,8031	
	III	3,0646		2,0184	
		T.3,1604		T.1,9123	
Parents' subjects level of education	Professional school	3,2427	.097	1,8216	.009*
	High school	3,1980		1,8560	
	Higher education	3,1122		1,9882	
		T.3,1612		T.1,9882	
Environment of origin	Rural	3,2299	.165	1,7599	.001*
	Urban	3,1464		1,9552	
		T.3,1610		T.1,9154	
Current students home	Home	3,1782	.057	1,9490	.023*
	Student residence	3,0538		1,9963	
	Rent	3,2085		1,8226	
	Other situations	3,2051		1,8783	
		T.3,1599		T. 1,919	
Marital status	Unmarried	3,1408	.051	1,9275	.197
	Couple	3,3385		1,7793	
	Other situations	3,2690		1,8333	

Inspection table shows us that:

- Gender and area of the training program make the difference of F1.
- Gender, area of the training program, the maximum level of education in the family, the environment of origin and residence make the difference at the level of F2.
- The strongest independent variables with impact on both the F1 and F2 factor are gender and area of the training program.
- Representatives of exact science, followed by those from natural sciences, take an intermediate position with respect to the characteristics of the factor 1, while colleagues from humanities and legal sciences formulates the predominant attitudes of rejection.
- Students living in the student residence obtained the lowest scores in relation to F1; this ambience seems to be more permissive for favorable attitudes to drug use.
- Students who come from families with higher education are more tolerant than other categories of students at the factor 2.
- Students living in the student residence are more reserve in adopting restrictive measures for drug users.
- ▲ Anti-drug assistance specialist services can effectively perform its functions to the extent that enjoys the confidence of the population concerned or beneficiaries. With this premise, question has been made: “If you need information/counselling in the field of drug consumption, from whom did you call? Choose one of the following: 1-

yes, 2-probably yes, 3- probably no, 4- sure no, 5- I can't pronounce." (I31). For data analysis, I selected only the answers sure yes and probably yes.

**Table 6** Confidence in drug counseling services

	Number	Percent	Total percent
<b>University counselling centers</b>			
- Surely yes	104	8,5%	31,7%
- Probably yes	283	23,2%	
<b>NAA's Anti-drug Prevention, Evaluation and Drug Counseling Centers</b>			
- Surely yes	327	26,8%	65,5%
- Probably yes	399	38,7%	
<b>Psychological counselling offices</b>			
- Surely yes	381	31,2%	66,8%
- Probably yes	435	35,6%	
<b>NGOs with activity in the field</b>			
- Surely yes	206	16,9%	48,7%
- Probably yes	388	31,8%	

It is striking to find that university's counselling centers are in last place in the order of preference. Students' confidence in these centers is not too high, the results were similar for technical education. Are preferred in a hierarchical order: psychological counselling offices, prevention, Anti-drug Prevention, Evaluation and Drug Counseling Centers of National Antidrug Agency (NAA), NGOs with anti-drug function. Clearly, it is necessary to reconsider the role and effectiveness of University counseling centers, directly dedicated to increase the quality of student's education and life.

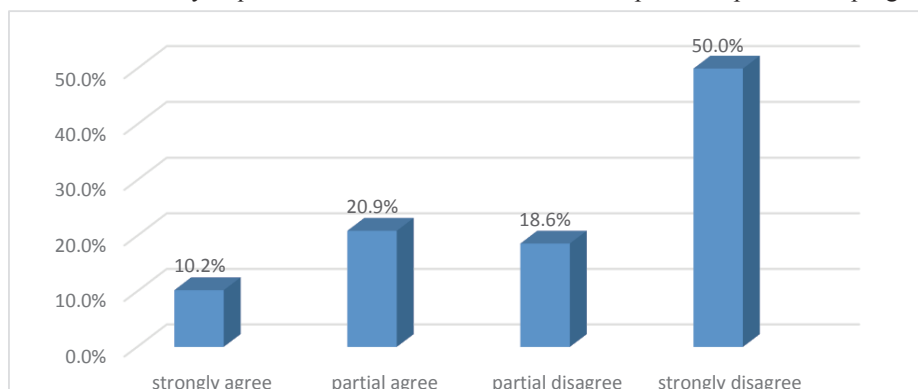
▲ The legalization of drug use is a critical issue, discussed intensively in recent years. Some countries have already agreed to legalize the use of some drugs. In this context, the Romanian student opinion is interesting.

*It would be beneficial to accept legalization of "light" drugs in Romania?* To this question has answered a number of 1217 UB students. The attitudes expressed are summarized in fig. no. 3.

Categorical rejections represent 50% at UB and 51% at technical universities in total opinions.

If we gather total agreement with partial agreement, obtains a percent of 31.1 % which is not negligible. It covers the percent of vulnerable students. If we consider the "undecided" students (partly agree and partly disagree), candidates in the vulnerable group represents 39.5%.

Finally, if we associate the "undecided" students with drug use followers, percentage stands at 49.7%. This type of extensive vulnerability requires increased attention to the development of prevention programs.



**Figure no. 3** Students' attitudes about the legalization of "light" drugs

Most students who are totally agree that "light" drugs legalization measures would be a beneficial are males, specialized in exact sciences, they come from families with higher education, from urban areas.

▲ Attitudes towards the diagnosis of drug use has also been investigated by two items: the availability to participate in anti-drug information and responsiveness for volunteering in anti-drug campaigns.

Only 21% of students say they would definitely take part in drug information hours organized by university, most of them are undecided - probably yes (49%) and probably no (21%). The results are similar for technical education.

As expected, the percentage of girls who say they would definitely take part in such activities is two times higher than that of boys-23% compared to 10.4% and the number of girls who would not participate 3 times lower than that of boys-6% compared to 20.4%.

Students from the social and humanities sciences would participate in a greater extent than those of exact sciences-25.8%, 20.8%, respectively 13.3%. Also, the participants would come mainly from rural areas families, the maximum level of education in family is the vocational school.

▲ The percentage of those who decline to participate in a program of information-21% UB, respectively 25% technical education (equal to or even greater than those with positive intentions), but especially the very large percentage of undecided (70%) would require some comment. There is a carelessness of students for drug issues or deemed to have reached an information saturation that would no longer justify arguments? Discussions in the focus-group tend to lead to the second explanation, saying "we have enough information and we no longer need additional knowledge". In terms of perceptions, the "saturation" is a self-assessment greatly simplified.

The share of around 50% of the students who declare their availability for volunteer action entitle us to a position favorable, this percentage may illustrate not only interest but also a certain spirit of responsibility towards the avalanche of drugs.

In the case of technical education students, the percentage of those available and highly available is lower - 44%, probably due to the fact that the majority of respondents were male.

The question that arises in this context is that volunteering entails firm knowledge and beliefs to support persuasive interventions. If an appropriate cognitive base is missing, volunteering becomes an aspiration without real support. Perhaps, however, the lack of concern for the information activities of university to be offset by access to other relevant sources.

## 5. Conclusions

Conclusively, we could make the following findings and considerations:

- Hypothesis 1, 2, 5 and 6 have been confirmed; hypothesis 4 have obtained mixed results, the overall trend is for denial of it; hypothesis 4 have obtained mixed results, the overall trend is for confirmation of it.
- Survey revealed three types of attitudes:
  - Rejection of drug use and users, including the legalization of drugs. This area covers, as a rule, the largest percentages, depending on the nature of the items, ranging from 45-50% and 90%.
  - Acceptance, tolerance, minimizing the negative effects of consumption. According to data base, scores vary between 13-15% and 31%.
  - Hesitation, oscillating (undecided); percent between 27-40%.
- Subjects that belong to the "tolerant and undecided" class constitute vulnerable groups; on the whole, they cover a percentage of around 35%, a proportion not negligible at population level.
- More favorable attitudes, tolerance of drug use and their effects have:
  - male students than their colleagues
  - students from natural and exact sciences than students in the social and humanities disciplines
  - students who come from families with higher education
  - students from urban areas, rather than rural ones
  - students living in student residences than those who lives in other places
- Has outlined a paradox between the manifested willingness of students to participate as volunteers in the campaigns against drugs (50%) and lack of interest in training/information activities which would run in the university (21% decline the agreement and 49% are undecided).

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