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Factors associated with drug and alcohol use among university students

ABSTRACT

OBJECTIVE: Recent studies show an alarming rate of alcohol and drug use among university students. The objective of this study was to assess the level of association between lifestyle and socioeconomic status and the prevalence of alcohol, tobacco, medicine, and "illicit drug" use in the last 12 months among university students.

METHODS: The sample included 926 undergraduate students in the Biology Department of a university in São Paulo who completed an anonymous, self-applied questionnaire in 2000 and 2001. Anova and Chi-square tests were applied to verify the correlation between substance use and variables.

RESULTS: Among students who reported having a religion, alcohol consumption was 83.1%, tobacco use 20.7%, and "illicit drugs" 24.6% during this period. Among students who reported not having a religion, reported alcohol use was higher in the last 12 months: alcohol (89.3%), tobacco (27.7%) and "illicit drugs" (37.7%). Monthly family income was related to alcohol and "illicit drug" use ($p<0.001$ for both). The students who used tobacco and "illicit drugs" reported more free time during the week than students who didn't smoke during the period of time analyzed ($p=0.033$ and $p=0.008$, respectively).

CONCLUSIONS: Psychoactive drug use was common among students, indicating a need for policies to be implemented with the goal of reducing consumption. Students with higher family income and without religion should be considered to be at higher risk for alcohol and drug use among this group.

KEYWORDS: Alcoholism. Street drugs. Smoking. Students. Substance-related disorders. Tobacco use disorder. Social class. Life style.

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INTRODUCTION

The global prevalence of psychoactive substance use is increasing.[23] Drug abuse and dependence threaten political, economic, and social values, in addition to contributing to increases in medical costs and hospitalization, traffic accidents, urban violence, and premature deaths.[6]

Studies show that involvement with illicit drugs occurs primarily among adolescents and young people.[10] In Brazil, 35 million people are less than 30 years old, problems related to psychoactive substance abuse are worrisome.[9] The studies discussed below were conducted with specific populations, including university students.

In their 1997 study, Andrade et al[2] (1997) report prevalence of "illicit drug" use of 38.1% during a lifetime, 26.3% in the last 12 months, and 18.9% in the last 30 days among university students in the biological sciences. They also note that alcohol and tobacco are the most commonly consumed substances and higher "illicit drug" use among male students and even higher among those who do not live with their family. The highest prevalence rates in the last 12 months was 82.3% for alcohol, 29.6% for tobacco, and 30.6% for "illicit drugs".

In a similar study using the same questionnaire, Barría et al[3] (2000) evaluated the behavior of undergraduate students in the biology department in relation to alcohol and drug use. They observed that tobacco and "drug" users dedicated themselves more to sociocultural activities and spent less time in academic activities in comparison to non-users.

Students in the biological sciences deserve special attention in relation to alcohol and other drug use as in the future, they are the ones who will be bring basic notions of health to the community.[14] Therefore, it is important to comprehend this population's pattern of use and knowledge and attitude with regard to drugs.

The objective of the present study was to analyze the socioeconomic background and lifestyle of Biology students in relation to alcohol, tobacco, "illicit drugs", and "medicines with abuse potential". We attempted to identify specific groups which are most exposed to the problem and offer suggestions for future preventative actions with this population.

METHODS

The study used the research database from the study "Alcohol and Drugs: Second study about attitudes and use among public university students in the city of São Paulo", carried out in 2000 and 2001.[19] In this study, the 32,932 students enrolled in undergraduate courses in a university in São Paulo were divided between the areas humanities, hard sciences, and biology. A random drawing was conducted and equal, representative samples were defined from the diverse areas of undergraduate studies.

A sample of this population was studied, including a total of 5,944 students who were associated with the biological sciences. This area included Physical Education, Nursing, Pharmaceutical Sciences, Medicine, Veterinary Medicine, Zoology, Dentistry, Public Health, Biology, and Psychology.

A casual, simple sample was defined and stratified proportionally, considering the following strata: department, year of school, time of study (night or day), and sex. We calculated that 1,104 questionnaires had to be applied to ensure that the sample size error between a particular proportion obtained through the sample and their population value did not exceed 0.05.

The students responded to an anonymous, self-administered questionnaire, suggested by the World Health Organization, that includes questions regarding students' attitudes regarding experimental and regular use of psychoactive substances, quality of life, hobbies, and sociodemographic data.[17]

Students responded to the questionnaire after filling out a consent form and receiving information about the research and instructions for its completion. A total of 1,104 questionnaires were applied. Among those, 926 (83.8%) were considered valid, meaning that they responded negatively to a question with factious drug names. If a respondent answered the question affirmatively, all questions on the questionnaire were annulled.

Data obtained was analyzed using SPSS 10.0. ANOVA was used to test the equableness of the estimated proportions and differences were identified using Tuckey's and the Chi-square test. Using this preliminary analysis as a base, the sociodemographic and lifestyle data of the students was then compared to alcohol, tobacco, and "illicit drug" use and "medicine with abuse potential" in the last 12 months.

Marihuana, hallucinogenics, cocaine, crack, ecstasy, and inhalants were considered "illicit drugs". Amphetamines, anticholinergics, tranquilizers, ansiolitics or antispasmodics, opiates, sedatives or barbiturates, and anabolics were considered "medicines with abuse potential."

The sociodemographic variables included: university level in 2000, time of study (day/night), sex, age (in years), marital status, children, living situation (who lived with), religious status (to have or not; to practice or not; type of religion), paid activity in the last six months, monthly family income, parent's marital status.

For the lifestyle study, the following variables were analyzed: number of hours of free time per workday and weekday, activities practiced during free time, satisfaction with frequency of free time, activities practiced when skipping school, and places frequented within the university.

RESULTS

The students presented the following profile: studied during the morning, afternoon or both (78.7%), female (60.7%), between 15-24 years old (88%), single (95.2%), without children (97.4%), lived with parents or family members (79.8%), family income above 20 minimum wages (59.5%), had a religion (71.0%), yet did not practice (59.1%).

Alcohol was the most commonly used substance in the last 12 months among the respondents (84.7%) followed by tobacco (22.8%).

At the time of the study, 28.4% of the students used "illicit drugs," among which the most commonly used were marijuana (19.7%), inhalants (17.3%), and hallucinogenic (5.2%). "Medicine with abuse potential" was used by 10.5% of students, of which amphetamines (6.8%) were the most commonly used, followed by tranquilizers (3.2%) and opiates (0.6%) (Table 1).

Table 1 - Use of substances among university students in the biological sciences. São Paulo, Brazil, 2000-2001. (N=926)

Substance	Use (last 12 months)
Alcohol	84.7 %
Tobacco	22.8%
"Illicit drugs"	28.4%
Marijuana	19.7%
Hallucinogenic	5.2%
Cocaine	1.9%
Crack	0.1%
Inhalants	17.3%
Ecstasy	1.3%
Medicines with abuse potential	10.5%
Amphetamines	6.8%
Anticholinergics	0.2%
Tranquilizers	3.2%
Opiates	0.6%
Sedatives	0.2%
Anabolics	0.5%

Sex was not related with alcohol, tobacco, and "medicines with abuse potential" use, yet it was related to use of "illicit drugs" during the time analyzed ($p<0.001$). Male student "illicit drug" use was 36.8% in the last 12 months compared to 23.0% among female students (Tables 2 and 3).

Year in college was related to the use of "medicines with abuse potential" ($p<0.001$). The highest use was among students further along in their coursework and

Table 2 - Socioeconomic profile of students in the biological sciences in relation to alcohol and tobacco use. São Paulo, Brazil, 2000-2001. (N=926)

		Alcohol use			Tobacco use		
Variable	Category	No %	Yes %	p	No %	Yes %	p
Sex	Male	14.6	85.4		75.7	24.3	
	Female	15.5	84.5		78.0	22.0	
	Total	15.1	84.9	0.400	77.1	22.9	0.237
Age (years)	15-19	15.8	84.2		87.0	13.0	
	20-24	14.1	85.9		75.7	24.3	
	25-29	20.7	79.3		74.7	25.3	
	30 or more	21.7	78.3		90.9	9.1	
	Total	15.7	84.9	0.328	77.2	22.8	0.029*
Has religion	Yes	16.9	83.1		79.3	20.7	
	No	10.7	89.3		72.0	27.7	
	Total	15.1	84.9	0.010*	77.3	22.7	0.015*
Type of religion	Catholic	14.3	85.7		80.3	19.7	
	Spiritist	18.3	81.7		75.3	24.7	
	Protestant	37.7	62.3		82.0	18.0	
	Others	17.9	82.1		80.6	19.4	
	Total	17.4	82.6	<0.001*	79.8	20.2	0.691
Practicing religion	Yes	22.0	78.0		84.0	16.0	
	No	11.1	88.9		73.0	27.0	
	Total	15.5	84.5	<0.001*	77.5	22.5	<0.001*
Monthly family income**	Up to 10	24.8	75.2		85.1	14.5	
	11-20	18.6	81.4		76.2	23.8	
	21-30	12.4	87.6		77.7	22.3	
	31-40	12.3	87.7		74.2	25.8	
	More than 40	7.8	92.2		72.0	28.0	
	Total	14.9	85.1	<0.001*	76.9	23.1	0.064

*Significant difference ($p<0.05$)
**Based on minimum wages, one is the equivalent of approximately US$120
Note: The other variables studied (year of school in 2000, time of study, age, marital status, children, who they live with, exercise of a paid activity in the last six months, and parent's living situation) did not present any significant difference.

lower among those who were beginning, although use was relatively high among first year students. There was no relation between alcohol, tobacco, and "illicit drug" use and the student's year of study in 2000 (Tables 2 and 3).

Married students or those who lived with a partner represented increased use of "medicines with abuse potential" than those who were single (p=0.016). Marital status was not related to the other substance use (Tables 2 and 3).

Having a religion influenced alcohol, tobacco, and "illicit drug" use (p=0.010; p=0.015; p<0.001, respectively), as did practicing a religion (p<0.001; p<0.001; p<0.001, respectively). The presence and practice of religion was not related to the consumption of "medicines with abuse potential" (Tables 2 and 3).

The type of religion practiced was related to alcohol use (p<0.001), but not with tobacco, "illicit drug," and "medicine with abuse potential" use. While 85.7% of Catholics used alcohol during the period studied, only 62.3% of the Protestants reported alcohol use (Table 2).

It was observed that monthly family income was related to alcohol and "illicit drug" use (p<0.001 for both). The students with family income above 40 monthly minimum wages reported higher alcohol use (92.2%) and "illicit drug" use (39.2%). In comparison, students whose family income was less than 10 minimum monthly wages reported less alcohol (75.2%) and "illicit drug" use (16.7%). Tobacco and "medicine with abuse potential" consumption was not associated with monthly family income (Tables 2 and 3).

The students who reported tobacco and "illicit drug" use reported more free time during the weekdays than those who did not smoke (p=0.033 and p=0.008 respectively) (Tables 4 and 5).

It was noted the relationship between "illicit drug" use and number of free hours per weekend day (p=0.018). Higher satisfaction with free time was reported among students who used "illicit drugs" (p=0.004) (Table 5). The difference in satisfaction in terms of the number of free hours was not seen between users and non-users of alcohol, tobacco, and "medicines with abuse potential" (Table 4).

Table 3 - Socioeconomic profile of biological sciences students in relation to "illicit drugs" and medicines with abuse potential. São Paulo, Brazil, 2000-2001. (N=926)

Variable	Category	"Illicit drugs" No %	"Illicit drugs" Yes %	p	Medicine No %	Medicine Yes %	p
Year in school in 2000	1st	74.5	25.5		88.0	12.0	
	2nd	73.6	26.4		93.3	6.7	
	3rd	66.9	33.1		94.2	5.8	
	4th	67.2	32.8		84.7	15.3	
	5th	78.7	21.3		83.8	16.2	
	6th	60.0	40.0		71.4	28.6	
	Total	71.6	28.4	0.173	89.5	10.5	<0.001*
Sex	Male	53.2	36.8		90.1	9.9	
	Female	77.0	23.0		89.1	10.9	
	Total	71.6	28.4	<0.001*	89.5	10.5	0.360
Marital status	Single	71.1	29.9		90.1	9.9	
	Married/ live together	84.2	15.8		75.7	24.3	
	Separated	66.7	33.3		100.0	0.0	
	Widowed	0.0	0.0		0.0	0.0	
	Total	71.6	28.4	0.210	89.5	10.5	0.016*
Has religion	Yes	75.4	24.6		89.4	10.6	
	No	62.3	37.7		90.0	10.0	
	Total	71.7	28.3	<0.001*	89.6	10.4	0.464
Type of religion	Catholic	75.1	24.9		88.4	11.6	
	Spiritist	72.8	27.2		94.4	5.6	
	Protestant	82.0	18.0		83.3	16.7	
	Others	78.8	21.2		92.5	7.5	
	Total	75.8	24.2	0.541	89.2	10.8	0.129
Practicing religion	Yes	81.1	18.9		88.9	11.1	
	No	66.9	33.1		88.6	11.4	
	Total	72.7	27.3	<0.001*	88.7	11.3	0.509
Monthly family income**	Up to 10	83.3	16.7		93.2	6.8	
	11-20	78.0	22.0		90.0	10.0	
	21-30	70.4	29.6		89.7	10.3	
	31-40	66.4	33.6		87.3	12.7	
	More than 40	60.8	39.2		88.5	11.5	
	Total	71.7	28.3	<0.001*	89.8	10.2	0.570

*Significant difference (p<0.05)
**Based on minimum wages, one is the equivalent of approximately US$120
(Illicit drugs: marijuana, hallucinogenic, cocaine, crack, ecstasy, organic solvents; Medicines with abuse potential: amphetamines, anticholinergics, anabolics, tranquilizers, ansiolitics, opiates, sedatives, and barbiturates).
Note: The other variables studied (year of school in 2000, time of study, age, marital status, children, who they live with, exercise of a paid activity in the last six months, and parent's living situation) did not present any significant difference.

Table 4 - Lifestyle of biological sciences students in relation to alcohol and tobacco use. São Paulo, Brazil, 2000-2001. (N=926)

Variable	Category	Alcohol use No %	Alcohol use Yes %	p	Tobacco use No %	Tobacco use Yes %	p
Free time/ weekday	Up to 2 hours	35.3	37.2		38.5	31.2	
	More than 2 hours	64.7	62.8		61.5	68.8	
	Total	100.0	100.0	0.366	100.0	100.0	0.033*
Free time/ weekend day	All the time	33.8	39.0		36.4	43.9	
	A few hours	63.3	59.4		61.6	54.6	
	Less than 1 hour	2.9	1.7		2.0	1.5	
	Total	100.0	100.0	0.365	100.0	100.0	0.142
Activities during free time	Sports practicing	10.4	14.6		15.6	8.1	
	Away from home	52.2	58.3		55.1	64.6	
	At home	28.7	19.1		21.4	18.0	
	Others	8.7	8.0		7.9	9.3	
	Total	100.0	100.0	0.101	100.0	100.0	0.044*
Satisfied with amount of free time	Yes	30.9	36.0		34.4	39.5	
	No	69.1	64.0		65.6	60.5	
	Total	100.0	100.0	0.144	100.0	100.0	0.102
Activities when missing school	Doesn't miss/ only if sick	44.8	28.8		34.9	17.8	
	Study/ work	26.1	24.7		26.0	22.2	
	Sleep/ rest	20.9	24.3		21.8	30.3	
	Other	8.2	22.3		17.3	29.7	
	Total	100.0	100.0	<0.001*	100.0	100.0	<0.001*
Places frequented	Academic center	15.3	19.7		16.7	28.1	
	Sports assoc.	12.9	21.5		20.0	20.8	
	Libraries	35.5	20.6		26.4	11.2	
	Diners	25.8	29.9		28.2	32.0	
	Others	10.5	8.4		8.7	7.9	
	Total	100.0	100.0	0.003*	100.0	100.0	<0.001*

*Significant difference (p<0.05)

A difference was also noted between activities practiced during free time and smoking tobacco and using some type of "illicit drug" or not (p=0.044 and p=0.025 respectively). Students who smoked practiced fewer sports (8.1%) than those who did not smoke (15.6%), while those students who smoked reported more activities outside of home (64.1%) than those who didn't smoke (55.1%) (Table 4). The students who used "illicit drugs" practiced more sports than those who didn't use such substances (12.1%) and the students who used "illicit drugs" reported fewer activities at home (15.2%) than those students who did not use these substances (22.8%) (Tables 4 and 5).

Missing or not missing class was related to alcohol, tobacco, and "illicit drug" use (p<0.001 for the three categories). The percentage of students who did not miss class or only missed class if they were sick was 44.8% among non-alcohol users, 34.9% among non-tobacco users, and 36.5% among non-"illicit drug" users (Tables 4 and 5).

Alcohol, tobacco, and "illicit drug" use or non-use was associated with the places the university frequented (p=0.030; p<0.001; p<0.001, respectively). There was an increased frequency of library visits among students who did not use alcohol (35.5%), tobacco (26.4%) and "illicit drugs" (27.5%) in relation to the students who reported alcohol (20.6%), tobacco (11.2%), and "drug" (10.2%) use (Tables 4 and 5).

Use of the following psychoactive substances was higher among students who reported frequenting the academic centers: 19.7% alcohol users, 28.1% among tobacco users and 29.8% among "illicit drug" users in comparison to those students who did not use them (15.3%, 16.7%, 15.3% respectively) (Tables 4 and 5).

It was noted that 21.5% of alcohol users, 20.8% of students who used tobacco and 22.3% of "illicit drug" users frequented sports associations, in comparison to 12.9%, 20.0%, and 19.4%, respectively of the non-users (Table 4 and 5).

DISCUSSION

Other studies[1,12,15] have presented similar results regarding increased use of "medicine with abuse potential" during the last years of university. Mesquita et al[14] (1996), Andrade et al[1] (1997), and Kerr-Correa el al[11] (1999) observed higher use of tranquilizers among students in their sixth year of medical school as compared those in the first years of their program. Kerr-Correa et al[11] hypothesize that the increased use of "medicines with abuse potential", especially tranquilizers, in the later years of college may be due to the stress encountered at the end of their programs, the intensity of their residencies, and the proximity of their boards. Additionally, it is easy for the medical students to obtain prescriptions for the medicines at the hospital.

Based on the results of this study, it appears that religion is protective of drug use among the students

Table 5 - Lifestyle of students in the biological sciences in relation to use of "illicit drugs" and medicines with abuse potential. São Paulo, Brazil, 2000-2001. (N=926)

Variable	Category	"Illicit drugs" No %	"Illicit drugs" Yes %	p	Medicines No %	Medicines Yes %	p
Free time/weekday	Up to 2 hours	39.2	30.9		37.4	35.2	
	More than 2 hours	60.2	69.1		62.6	64.8	
	Total	100.0	100.0	0.008*	100.0	100.0	0.383
Free time/weekend day	All the time	35.1	45.4		37.0	44.0	
	A few hours	63.0	53.0		61.3	51.6	
	Less than one hour	1.9	1.6		1.7	4.4	
	Total	100.0	100.0	0.018*	100.0	100.0	0.065
Activities during free time	Sports practicing	12.1	18.8		14.1	13.0	
	Away from home	56.4	59.2		56.9	60.9	
	At home	22.8	15.2		21.2	14.5	
	Others	8.7	6.8		2.9	11.6	
	Total	100.0	100.0	0.025*	100.0	100.0	0.454
Satisfaction with amount of free time	Yes	32.6	42.6		35.2	34.8	
	No	67.4	57.4		64.8	65.2	
	Total	100.0	100.0	0.004*	100.0	100.0	0.525
Activity when missing class	Doesn't miss class/ only if sick	36.5	16.0		31.7	29.6	
	Study/ work	31.7	22.8		29.5	30.9	
	Sleep/ rest	21.3	31.5		23.6	21.0	
	Others	10.5	29.7		15.2	18.5	
	Total	100.0	100.0	<0.001*	100.0	100.0	0.827
Places frequented	Academic centers	15.3	29.8		19.2	20.8	
	Sports assoc.	19.4	22.3		20.8	18.2	
	Library	27.5	10.2		23.1	18.2	
	Diner	29.4	28.8		28.5	32.5	
	Others	8.4	8.8		8.4	10.4	
	Total	100.0	100.0	<0.001*	100.0	100.0	0.781

*Significant difference (p<0.05)

included in this study. It is possible that students who practice a religion belong to a group with shared values and norms. Belonging to a religion where drug use is clearly and explicitly condemned, such as Protestantism, is associated with lower use of substances such as alcohol.

The presence of religion as a protective factor of psychoactive substance use has been found in other studies. Religion influenced cocaine and ecstasy use among high school students in Campinas (Southeastern Brazil),[8] and alcohol and other substance use in a study conducted by Wallace et al (2003).[24] Tavares et al[22] (2004) found an association between drug use (except alcohol and tobacco) and a lack of practicing a religion in the city of Pelotas (Southern Brazil).

Chen et al[7] (2004) in a study with students in seven countries in Latin America found that high levels of religious devotion were inversely related with early experiences of tobacco and marijuana use (first possibility of experimenting use), but not for alcohol. Yet, among students who had the opportunity to experiment tobacco and marijuana, the level of religious devotion did not influence adolescents use these substances.

The type of religion was also related to alcohol use in the last 12 months. Borini et al[5] (1994) verified lower alcohol use (including discrete, moderate, and excessive) among Protestants (50%) in relation to Spirits (75%), Catholics (75%), and atheists (94.5%). Excessive drinkers were not found among Spirits and the Protestants. Miller et al[15] (2000) also observed that there was an association between belonging to more conservative religious groups (such as Protestants) and use and less dependence on alcohol and other drugs among American adolescents.

Among the students studied, alcohol and "illicit drug" use in the last 12 months was associated with reporting higher family income. Carlini-Cortin et al[6] (2000) also observed that students in private schools in São Paulo reported significantly higher use of cigarettes, alcohol, inhalants, and marijuana in a recent time period than students of the same age in public schools. Baus et al[4] (2002) observed that among the students of first and second grades, those from high socioeconomic class showed a risk two-times greater for alcohol use than those from lower class. In addition, they hypothesized that in this case, economic and cultural determinants may be related to the pervasiveness of "beer parties" and the price of alcohol beverages. The influence of socioeconomic class was also noted in the increased use of illegal drugs in the middle class as compared to the lower class.

Soldera et al[18] observed that the use of hard drugs (including alcohol and tobacco) was higher among high school students in the A and B socioeconomic classes, as well as those whose childhood religious education was not very intense.

Alcohol, tobacco, and "illicit drug" users in the last 12 months missed proportionately more class than those students who did not use these substances during this time period. A similar result was found by Barría et al[3] (2000) for tobacco and "drug" use, pointing to how student's academic activities may be negatively affected by use of such substances. Such negative effects vary from not passing (Tavares et al,[21] 2001) to less dedication to studies outside of the classroom, which could be observed in less frequent visits to the library (Rob et al,[16] 1990).

Less frequent visits to the library among students who used alcohol, tobacco, and "illicit drugs" was also observed in the present study. Similar results were found by Barría et al[3] (2000) and Borini et al[5] (1994) regarding tobacco and "drug" use. This relationship may indicate, in the same way that missing less class indicates, increased dedication to academic activities among non-users of such substances.

Students who used alcohol, tobacco, and "illicit drugs" frequented the academic centers and sports associations more than those who did not use these substances. Nonetheless, Barría et al[3] (2000) found that non-tobacco users frequented sports centers more than tobacco users; in fact, they also found that students who used drugs (including "medicines with abuse potential") frequented the sports associations more than students who did not.

In their study with Swiss adolescents, Stronski et al[20] (2000) found different results than those found in the present study. Among Swiss students, participation in a regular sports activity protected against illicit drug use, except marijuana. On the other hand, Lichtenfeld et al[12] (1994) found a higher percentage of problems related to alcohol use among fraternity members in an study with American university students, as well has a higher use of ecstasy.[25]

Barría et al[3] (2000) also observed that "illicit drug" users had more time available during the weekends, possibly due to less dedication to academic studies. In addition, they also found a higher level of dissatisfaction among non-drug users in terms of the frequency with which they participated in pleasurable activities. This is probably because these university students are more dedicated to their studies and had less free time than the "drug" users.

Madu et al[13] (2003) found a correlation between an increase in tobacco and "drug" use and students reporting feeling more tired, stressed, depressed, or at parties. Alcohol use was also higher during the weekend, free time, and when students were at parties. This finding is consistent with the results of the current study, showing that users of these substances spend more time away from home, and therefore, are more exposed to use.

The results obtained are useful for developing strategies for drug prevention among this population. Some measures that could be adopted are: training with tips on how to deal with stress, early detection of drug use, provision of scientific information, programs for professors/tutors (who would be trained and instructed on how to detect such problems), and an increase in the time dedicated to disciplines that discuss alcohol and drug use.

By identifying the most vulnerable groups, such as the students who do not have or practice a religion or who have higher family incomes, awareness raising and prevention policies directed at these populations will be more successful than an intervention which treats all the students the same.

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