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Drug use among university students

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ABSTRACT

OBJECTIVE

To verify the use of licit and illicit drugs and the reasons for their use in the academic environment of the Universities of São Paulo.

METHODS

This is an observational, analytical, cross-sectional, comparative and contemporary study. University students from the State of São Paulo were included, by convenience sampling. It was used data collection instrument via Google Forms with informed consent, prepared by the authors themselves, addressing the relationship between drug use and college students.

RESULTS

It was observed a majority of young females (67%) with a history of pre-university drug use and with encouragement from this environment to maintain or increase drug use mainly for recreational reasons.

CONCLUSION

There was the presence of protective factors such as work and living with family members.

DESCRIPTORS

Illicit Drugs, College Students.

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INTRODUCTION

Throughout history we can see the use of psychoactive drugs in countless situations with countless purposes varying according to the society and the time in question[1].

Since the last decades, the consumption and abuse of psychoactive substances has been growing and becoming a concern for society[2]. Such concerns are related to the consequences of its use and/or abuse[1-3]. These consequences generate social costs and, therefore, efforts are needed to control them[1].

Making a comparison, university students, regardless of course, have a higher consumption of drugs than the rest of the population[2,4], possibly because the university environment facilitates the initiation and/or continuation of an uncontrolled use of licit and illicit drugs[5].

Among the drugs used, we can mention alcohol, tobacco, marijuana, stimulants, cocaine, sedatives, hallucinogens and opioids, with alcohol and tobacco being the most used of all[3, 6-9].

Drug use in the university environment is a matter of relevance to the health system due to the consequences resulting from its use. Therefore, this work can show us which drugs are used, as well as their frequency, reasons for use and if there is any factor that interferes with the use of drugs of university students.

METHODS

Sample

An observational, descriptive study was carried out whose data were collected among university students from different courses of both sexes (n=309). However, students were not asked to specify whether their universities were public or private.

Procedures

Data collection was carried out between March and June of 2022 through Google Forms online. A brief explanation about the study was made, in which the research objectives were exposed, anonymity was guaranteed and it was emphasized that filling in was voluntary. A Free and Informed Consent Form was distributed to each participant who, after their consent, the questionnaire composed of 26 questions was applied. The inclusion/exclusion criteria were being a university student and accepting participation in the research.

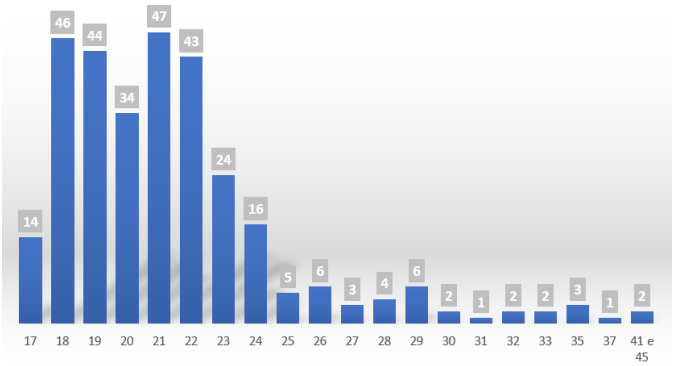
REC approval

This project was submitted to the Research Ethics Committee for evaluation and was approved under opinion number 56740722.0.0000.0081.

RESULTS AND DISCUSSION

A total of 309 responses were obtained for the questionnaire. The sample comprises 67% (n=207) females and 33% (n=102) males. The median age is 21 years old, the youngest age is 17 years old, the oldest age is 41 years old, Q1 is 19 years old and Q3 is 23 years old. In the study, four participants did not fill in the age field, discounted from this analysis, therefore, n= 305.

Graph 1. Distribution in % of university students by age, n=305 São Paulo, 2022.



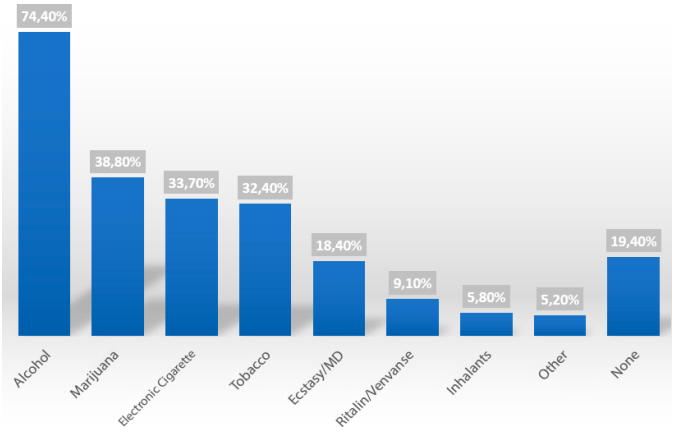
Among the participants the courses mentioned were: Medicine (n=172), Veterinary Medicine (n=35), Biomedicine (n=27), Naturology (n=15), Physical Education (n=15), Law (n=13), Engineering (n=10), Economics (n=4), Literature (n=2), Dentistry (n=2), Occupational Therapy (n=2), and the courses of Nutrition, Gastronomy, Biology, Architecture, Administration, Pedagogy, Neuroscience, Physiotherapy, Pharmacy and System Development Analysis had one participant each.

As for the period, 77 were in the 1st period, 49 in the 2nd period, 35 in the 3rd period, 11 in the 4th period, 30 in the 5th period, 22 in the 6th period, 27 in the 7th period, 22 in the 8th period, 24 in the 9th period, 9 in the 10th period, 1 in the 11th period and 2 in the 12th period.

Of the total number of participants, 199 (64.4%) did not use any medication continuously, while 110 (35.6%) did, Lisdexamphetamine, Escitalopram, Levothyroxine Sodium, Fluoxetine Hydrochloride, Testosterone Cypionate, Xenical, Alenia, Salbutamol Sulfate, Venlafaxine, Atenolol, Losartana Potassica, Ritalin, Amitriptyline, Pantoprazole and Paroxetine. Regarding physical activity, 168 (54.36%) did it more than three times a week and 139 (44.98%) did it less than three times a week or did not do it, 2 participants did not answer.

Regarding the drugs used, alcohol (74.4%), marijuana (39.8%), electronic cigarettes (33.7%), tobacco (32.2%), ecstazy/MD (18.4%), inhalants (5.8%), venvanse (5.2%), ritalin (3.9%), others (5.2%) and participants who did not use drugs corresponded to 19.4% of the total.

Graph 2. Distribution in % according to the type of drug used by college students of both genders, São Paulo, 2022.



Graph 2 shows that 74.40% (n=230) of the university students were more likely to use alcohol, followed by marijuana, electronic cigarettes and tobacco, with similar percentages of

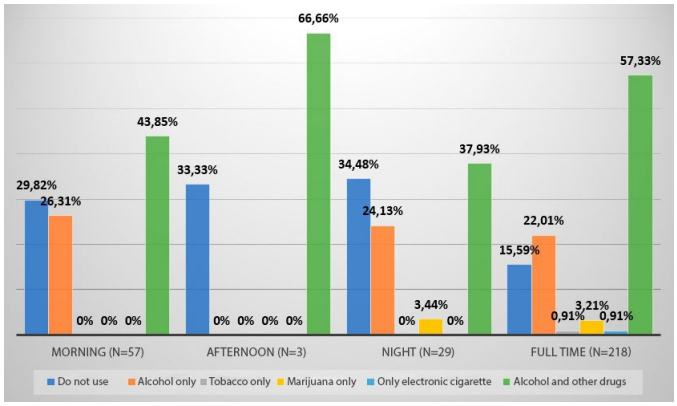
use, all above 30%. Ecstazy/MD was below 20%, while Ritalin/ Venvanse, inhalants and other drugs below 10%. However, only 19.40% did not use drugs.

MD stands for methylenedioxymethamphetamine, also known as ecstazy, is a psychotropic drug. Inhalants are volatile drugs also known as 'Loló', 'cola de sapateiro' or 'lança perfume' and/or cocaine.

The column corresponding to 'others' encompasses LSD (lysergic acid diethylamide), mushrooms, ketamine and cocaine, each of which was added by participants when asked if they used any drugs other than the options presented.

Of the 307 participants who answered the question about the period they studied 218 (70.55%) were full-time; 57 (18.44%) morning; 29 (9.38%) evening; 3 (0.97%) afternoon.

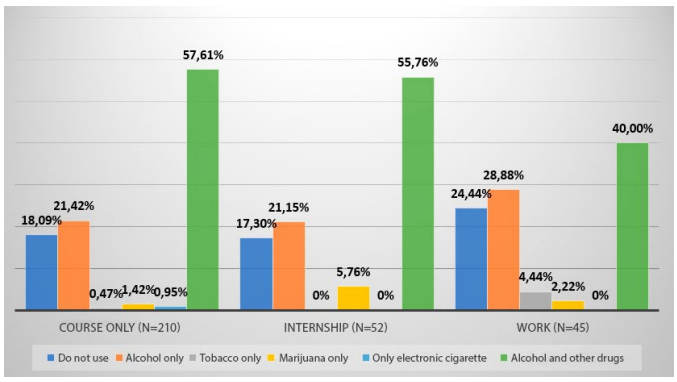
Graph 3. Distribution in % of university students according to drug use and the time they attended the course, São Paulo, 2022.



Comparing college students with the time of the course, it was observed that the highest percentages of participants who did not use drugs were found in the morning and evening periods, in these periods it was observed lower use of both isolated drugs, alcohol and other drugs, except for the exclusive use of alcohol. In the integral period there was a higher use of isolated drugs, alcohol and other drugs. When we performed the statistical analysis by the chi-square method we reached p=0.001949, being this value significant at p<0.01. Due to the restricted number of participants of the afternoon period (n=3), we did not consider this period in the comparison.

Of the same 307 participants, 45 (14.56%) worked together with the course, 52 (16.82%) did an internship together with the course, 210 (67.96%) did only the course and 2 (0.64%) did not answer this question. Among the total of 97 participants who worked or did internships, 42 started in the 1st period, 11 in the 2nd period, 11 in the 3rd period, 5 in the 4th period, 10 in the 5th period, 1 in the 6th period, 7 in the 7th period, 2 in the 8th period, 7 in the 9th period and 1 in the 10th period.

Graph 4. Distribution in % of university students according to drug use and the type of activities associated or not with attending the course, São Paulo, 2022.



In the comparison between college students with their activities associated or not with the course and drug use it was observed that participants who attend only the course used a greater variety of isolated drugs or used alcohol and other drugs (which included all drugs mentioned in Graph 2). The participants, who besides the course were in internships showed a slight decrease in the variety of drugs consumed alone and the use of alcohol and other drugs, although there was a considerable increase in the isolated use of marijuana, as well as a decrease in the percentage of participants who did not use drugs. However, among the participants that besides the course, worked, it is noted that there is an increase in the consumption of isolated drugs, but decrease in the use of alcohol and other drugs, with considerable increase of participants who did not use drugs. It was noted that the work along with the course seems to influence the following aspects: there is a higher percentage of non-users of drugs, a higher percentage of isolated users of alcohol, isolated users of tobacco and a lower percentage of users of alcohol and other drugs.

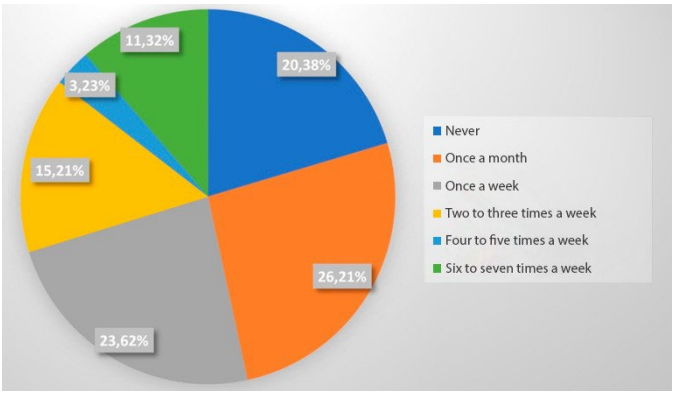
As for the group that did internship with the course, the only percentage that stands out is the increase of isolated users of marijuana. However, when we performed the statistical analysis by the chi-square method comparing the factors of using or not using drugs and working with the course or not, we reached the value of p= 0.303058, therefore, not significant for p<0.01.

Regarding housing, 160 (51.77%) lived with one or both parents, 35 (11.32%) lived with other relatives, 57 (18.44%) lived alone and 57 (18.44%) lived with friends. Housing seems to have an influence on the participants' drug use, since among the participants who lived with parents and relatives is the highest percentage of college students who do not use drugs (24.61%), there is a higher percentage of isolated drugs, especially alcohol (25.64%), tobacco (1.02%), marijuana (1.02%), electronic cigarette (0.51%) and a lower percentage of use of alcohol and other associated drugs (47.17%).

In the group of participants who lived alone or with friends we see a lower percentage of non-users (9.64%) and users of isolated drugs such as alcohol (18.42%), tobacco (0%), marijuana (0.87%), electronic cigarette (0%) and a higher percentage of participants who used alcohol and other associated drugs (71.05%). We can see that living with parents or family members seems to decrease drug use when compared with living alone or with friends. Then we can infer that living with parents or relatives is a protective factor regarding drug use for college students since when we performed a statistical analysis using the chi-square method we obtained p = 0.002072, therefore significant at p<0.01.

Regarding frequency, Graph 5 shows that 26.21% of the participants used drugs only once a month, 23.62% once a week, 15.21% two to three times a week, 3.23% four to five times a week and 11.32% six to seven times a week.

Graph 5. Distribution in % of university students according to the frequency of drug use, São Paulo, 2022.



In Graph 5, we can notice a certain inversely proportional pattern of participants who use drugs, in which the largest percentage of them used drugs in a lower frequency and as we increase the frequency, the percentage of participants' decreases. However there is a break in this pattern due to a sudden increase in the percentage of participants who use drugs at a frequency of six to seven times a week. Therefore, just over 50% of the university students were doing drug use every week.

Regarding the use of drugs before entering university, we can see that 72.16% (n=223) of the participants already made use of drugs or used at least once, while only 27.84% (n=83) did not make use of substances. We can notice that drug use already comes from before entering university in most of the participants.

Of the university students who did not use drugs before university (27.84%), 29.07% started using drugs after admission. Of the participants who started using drugs at university (29.07%), 68% had an increase in use during the course and only 32% had maintained their use since starting. This increase in use is due to both frequency and quantity.

Based on this information we can observe that the path of the university environment leads to the beginning and an increase in the use of licit and/or illicit substances by individuals who did not have the habit of consuming such substances before entering university, with no interruption in the use of these participants.

Of the total number of participants who had already used some substance before admission (72.26%), 36.77% extended their use to a new drug besides the one already used, after admission, while 63.23% kept using the same drug. We can note similarity in the percentage of college students who did not use drugs and started to use with those who already used some drug and started using a new substance when they entered the university, although, in this second group, we observed a greater number of individuals who started using new drugs, possibly indicating that the previous use of drugs seems to contribute to the addition of new drugs in the university environment.

Of the participants who started to use other drugs (36.77%), 84.14% increased the frequency and quantity of use of the substances in question, while only 15.86% maintained the proportions of use. With this we perceive that starting to use a new drug appeared to stimulate college students to increase the frequency and quantity of drugs used during the course.

Of the students who did not start using other drugs (63.23%), 39.01% increased their use, 53.19% maintained it, and 7.80% stopped using drugs during the course of the university. Showing that, although some participants did not start using a new drug, approximately half of them continued to use, while most of the other half increased their use and a small percentage stopped using drugs.

By observing the percentages, we can note that the tendency of college students is to initiate and/or increase the consumption and/or frequency of drug use during the course.

As for religion, of the 308 responses, 174 (56.5%) of the participants did not consider themselves religious while 134 (43.5%) did. When comparing the college students who considered themselves religious with those who did not, we can notice that within the religious group there are 20.89% who do not use drugs, 24.62% who only use alcohol, 47.01% who use alcohol and other drugs, tobacco users (0.74%), electronic cigarette (0.74%), alcohol and tobacco (1.49%) and alcohol and marijuana (4.47%). In the group of non-religious students we found 16.66% who do not use drugs, 22.41% who only use alcohol, 40.80% who use alcohol and other drugs, showing a lower percentage of exclusive users of alcohol and alcohol associated with other drugs, as well as fewer students who do not use drugs. As for the other drugs, tobacco users (1.14%), marijuana (4.02%), alcohol and marijuana (13.21%) and alcohol and tobacco (1.72%), showing that the non religious have a greater predilection to make associated use of drugs, besides only this group use marijuana. However, it was not possible to establish the role of religion regarding the use of drugs by college students.

The participants were asked about the reasons for using drugs, and from the answers we can see that the recreational purpose is part of 62.45% of the answers, while the other reasons are all below 20% where habit (18.12%), desire to escape (15.21%), influence of friends (13.91%) and addiction (10.53%) stand out. The other reasons were social isolation (2.91%), difficulty in college (6.14%), study (5.50%) and other unspecified (6.79%).

Showing a balanced way, 48.8% of the participants say they have no consent from parents or relatives about drug use while the remaining 51.2% have.

Among the participants only 11.3% have sought professional or non-professional help or tried on their own to stop using drugs. Of the participants who sought help 80% were able to stop using drugs. So it is clear that the percentage that seeks to stop the use of drugs is low, however, most of these can in fact stop.

Making a comparative analysis with the work of Silva, 2006[3], who approached 32,932 university students in the city of São Paulo between the years 2000 and 2001, being 67.7% female, mostly (88%) between 15 and 24 years old. In this work they concluded that the prevalent licit drugs were alcohol 84.7% and tobacco 22.8% and the prevalent illicit drugs used by 28.4% of the students were: marijuana 19.7%, inhalants 17.3% and hallucinogens 5.2%.

In the present study, in the same city between the years 2021 and 2022, 309 university students were approached, being 66.99% female whose median age was 21 years. It was inferred that the prevalent licit drugs were alcohol 74.4%, electronic cigarette 33.7% and tobacco 32.4%. The electronic cigarette enters the category of legal drug because its possession is legal although its commercialization in Brazil is not in accordance with ANVISA. As for the prevalent illicit drugs, marijuana 38.8% and ecstazy/MD 18.4% stand out.

Comparing the studies it is observed equivalence in age groups and prevalence of the female gender as well as the emphasis of alcohol and marijuana as the main drugs, licit and illicit respectively, in use by students. On the other hand, we infer the popularization of electronic cigarettes among licit drugs and ecstazy/MD among illicit drugs. This difference is due to the differences of the years of evaluation of each study.

In the other studies used as reference, the evolution of drug use during university was not observed, with the exception of Gomes, 2018[7] who inferred the increase in alcohol consumption during the medical course in Rio de Janeiro in 2017, which was in accordance with the findings of this study, although the authors addressed only alcohol, and no reasons for the use, protective or risk factors for the use of licit and/or illicit drugs were scored.

CONCLUSION

On the subject of drug use among college students we can infer that, in an age group predominantly young and female, who mostly entered the university with a previous drug use, the university environment seems to stimulate little the beginning of drug use during its course, however, it presents an important stimulus to maintain and/or increase the frequency and quantity of drug use mostly recreationally. University students seem to have as a protective effect to the use of drugs the fact of living with parents or relatives concomitantly to the course. The period of full-time study in universities seems to collaborate with drug use in a general scope.

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