

Mapping Addictive Behaviors and Preventive Activities Among Students From Masaryk University: Preliminary Results

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Abstract

The life of university students is often viewed as a time of experimenting with different kinds of behaviors that may be risky. However, university students are usually not considered a high-risk group for problems related to substance use disorder. With this assumption, the support for students struggling with addiction may be insufficient. We are therefore conducting exploratory research to map the extent of this risky behavior as well as the students' experiences with preventive activities at Masaryk University (MU) in the Czech Republic. The ongoing study is conducted through a quantitative survey. We draw from questionnaires from previous similar studies at Masaryk University together with standardized ESPAD questionnaire. These materials were adjusted to fit the university environment and current trends in addictive behavior. With the usage of snowball sampling, students from all ten faculties of MU were invited to participate. The final sample consists of 1,214 students, mostly from the Faculty of Education. Regular use (a few times a month and more often) was stated most frequently for alcohol (52.1%). Regarding other drugs, the regular use occurred also in nicotine (28.3%), THC (3.8%), kratom (2.1%) and other drugs (each < 1%). Conversely, the experience with prevention at university was stated only by 5.6% of students. These preliminary results indicate that the need for preventive activities may largely exceed the prevention that is offered to students. The final results could therefore serve as the next step for creating a more effective support system.

Keywords: questionnaire, risky behavior, university students, addiction, prevention, substance use, attitudes, research

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Introduction

University students are in a lot of countries commonly known for their higher intake of addictive substances. This period of life is often accompanied by a newly acquired sense of freedom, the need for finding new relationships, or the need to explore one's identity – all of which could be a potential factor for using psychoactive substances (Smith et al., 2014). Besides that, even the environment of university could serve as a significant factor to invoke the student's substance use.

University settings could influence the student's substance use not only in the formal environment but also in the informal setting, which could be rarely avoided as well. For example, meeting the criteria of the school to successfully go through one's studies is a risk factor for development of psychological disorders due to the stress students are experiencing (Haruna et al., 2025). Moreover, the students usually inevitably need to cooperate with their classmates who, in case of their own substance use, could be an influence for addictive behaviors of others (Barnett et al., 2022). In a lot of countries, the student's high intake of psychoactive substances then becomes viewed as a regular experience – the students therefore do not need to feel the riskiness of their behavior nor the possibility of them becoming addicted to the substance (Caldeira et al., 2009). All of those factors could lead to the development of students' substance use disorder (SUD).

SUD is a disease defined in the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 2013). In this document, SUD is described in 11 criteria as a state of one's substance use that has signs of physical or psychological addiction (e.g. experiencing craving, the inability to stop using the substance or withdrawal symptoms) and signs of difficulties in the social life of a person due to their substance use (e.g. the inability to fulfill their responsibilities in work or in family).

Students who are endangered with SUD are then prone to further negative outcomes. For example, regular substance use can be connected to other psychological problems (Mengistie & Berhanu, 2025). SUD may, however, lead to problems related to studies as well. Troubles may appear when fulfilling the criteria of the school (Meda et al., 2017) or can even be the reason one would not be successful in the studies completion (Allen et al., 2019).

Even though the negative outcomes of SUD could stop the student from completing their studies, preventive programs are rarely promoted by universities themselves. Preventive programs for university students do exist; however, universities usually do not systematically cover the whole population of students (Bonsu et al., 2024).

In summary, university students are endangered with SUD within the period of life as well as the university environment. Nevertheless, preventive activities are usually available for them with difficulties. Therefore, we argue that preventive activities should be a regular part of university settings. With this purpose, we conduct exploratory research at Masaryk University (MU) to map students' substance use and their experience with preventive activities conducted by the university. Results could serve as a starting point for creating systematic preventive activities to support students at risk of SUD and to effectively implement harm reduction strategies into the curriculum.

Methods

Our aim is to map the extent of substance use of full-time students of MU and to explore their experience with preventive activities organized by the university. This research follows the formerly conducted research at MU by Kachlík (2011) and draws from its methods. We adjusted the previous questionnaires to fit current trends in addictive behaviors among young people and also implemented and adjusted methodologies from the ESPAD study (ESPAD Group, 2021). We added items exploring students use of kratom, semisynthetic cannabinoids or new psychoactive substances, since their intake among young people in the Czech Republic is rising lately. Besides the data about substance use and preventive activities, the questionnaire includes other parts that are focused on demographic data, other potentially addictive behaviors (e.g. hazard games or social media use), attitudes of students towards risky behaviors or health outcomes of these behaviors.

The pilot study was conducted to check the appropriateness and saturation of the questionnaire with 10 participants. They expressed their dissatisfaction with some of the formulations of the items and after including their reflection into the document, the final questionnaire was completed.

Methods of this research were approved by the Ethics Committee of MU. The questionnaire was prepared in an online form with no function to check the identity of the participants. In the introductory letter, the students were informed about the project's objectives and that their participation is anonymous and voluntary.

The data collection was conducted at the turn of the year 2024/2025 through snowball sampling and 1214 students of MU completed the questionnaire. Propagation of the research was aimed at all 10 faculties of MU.

The research is still going on; therefore, the statistical analysis of data has not been conducted yet. However, this paper brings preliminary results in a descriptive manner.

Results

The total number of completed questionnaires was 1214. Out of this number, the majority of the sample are women with 77.9%. Men make up 18.9% of the sample. The remaining 3.1% were participants of other genders or the ones who did not want to specify their gender.

Table 1
Distribution of Participants by Gender (n = 1214)

Gender	% of Total
Women	77.9
Men	18.9
Other/did not specify	3.1

Out of the total number of participants, 80.1% of them were from the Faculty of Education. Other faculties make up 0.2–5.6% of the sample.

Table 2*Distribution of Participants by Faculties of MU (n = 1214)*

Faculty of MU	% of Total
Faculty of Education	80.1
Faculty of Law	5.6
Faculty of Arts	3.1
Faculty of Sports Studies	2.8
Faculty of Medicine	2.8
Faculty of Social Studies	2.1
Faculty of Science	1.4
Faculty of Informatics	1.2
Faculty of Economics and Administration	0.7
Faculty of Pharmacy	0.2

We defined regular use of substances as a few times a month or more often. Alcohol was used regularly by 52.1% of participants, nicotine by 28.3%, THC by 3.8% and kratom by 2.1%. Other substances were each regularly used by less than 1% of participants.

Table 3*Distribution of Students by Regular Use of Substances (n = 1214)*

Regularly* Used Substances	% of Total
Alcohol	52.1
Nicotine	28.3
THC	3.8
Kratom	2.1
Semisynthetic cannabinoids	0.7
Hypnotics**	0.5
Ketamine	0.3
Sedatives**	0.3
Analgesics**	0.3
Stimulants**	0.3
Cocaine	0.2
Hallucinogens	0.2
MDMA	0.2
New psychoactive substances	0.2
Methamphetamine	0.1
Opioids	0.1

Note. *regular use = several times a month or more often; **prescription drugs without doctor's recommendation

The majority (94.4%) of students reported no experience of any preventive activity organized by MU.

Table 4*Students' Experience With Prevention at MU (n = 1214)*

Experience with Prevention	% of Total
Yes	5.6
No	94.4

Students reported their experiences with different types of prevention. Of the total number of participants, 4.9% reported the experience with prevention during lectures and 1.7% reported it at some educational events. Other types of prevention were all reported by less than 1% of participants.

Table 5*Students' Experience With Specific Type of Prevention at MU (n = 1214)*

Type of Prevention	% of Total
During lectures	4.9
Educational events	1.7
Other events	0.3
Dormitory events	0.2
Other opportunities	0.1

Discussion and Conclusion

Leading drugs for regular use among participants are alcohol, nicotine, THC and kratom (substances regularly used by 2.1–52.1% students). Other types of drugs were each regularly used by less than 1% of students. The experience with preventive activities was, on the other hand, reported only by 5.6% of students. This creates a significant gap between students, who may need addictology support and the support that is actually available. Due to the factors connected with university settings, that may encourage students to relieve their unpleasant emotions or stress with addictive substances, we argue that preventive activities should be a regular part of the curriculum.

Of the total of 1214 students, more than half report using alcohol regularly. This result, when compared to the previous research from 2009 by Kachlík (2011), shows a decrease in alcohol use from 90.9% of students to 52.1%. Even though the students' alcohol consumption seems significantly lower, the portion of students who actively use this addictive substance is still enormous. The risks of regular alcohol use are well studied and show us not only the devastating outcomes for the users' bodies but also its riskiness for a development of the substance use disorder – for alcohol and for other types of drugs too (Barry et al., 2016).

Regular kratom use was then reported by 2.1% of participants, which is less distinct than in the case of previous substances. However, kratom became known in the Czech Republic only in the last few years (Dvořáková & Chomynová, 2024). Due to its high potential for SUD initiation, even this portion of students is noteworthy. For the first time, kratom is studied by ESPAD 2024 research among 16-year-old students. Results from the Czech part of the study show even more alarming numbers saying that during the last 30 days, 10% of those participants used kratom (Chomynová & Dvořáková, 2025).

The results of the current study should be read and used with caution, since we encountered some limitations when preparing the data collection and when controlling the data set. Even

though the questionnaire was propagated in all 10 faculties of MU, most of the participants were from the Faculty of Education. This is also given by the method of data collection, which was snowball sampling. The results should therefore not be generalized onto the population of university students nor the whole population of students of MU. Nevertheless, we believe that those results bring interesting data about students' experiences which can serve as a starting point for organizing systematic preventive activities.

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Declaration of Generative AI and AI-Assisted Technologies in the Writing Process

We declare that the content of this article was written solely by the authors, without the use of AI technologies.

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