

## Risk of Drug Consumption in University Students

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### **ABSTRACT:**

Drug consumption is a public health issue that is increasingly prevalent in the university environment, associated with factors that make adolescents and young people vulnerable. The study aimed to estimate the risk of drug consumption and vulnerability in 863 adolescents and young people at the Centro Universitario Valle de Chalco in 2023. The POSIT (Problem Oriented Screening Instrument for Teenagers) diagnostic evaluation instrument was used for data collection. The results show a predominance of females with 598 participants, representing 69.29%, followed by 262 males at 30.35%, and others (non-binary and transgender) at 0.23% and 0.12% respectively. It can be considered that 11.5% are at risk and 3.5% at high risk. Additionally, a strong correlation was determined between mental health and educational level at .477\*\* and .654\*\* respectively, along with a lower but significant correlation between aggressive/delinquent behavior and educational level (.446\*\*) and relationship with friends (.307\*\*), all with  $p=0.01$ . The results highlight the magnitude of the problem and the need for mental health professionals to address it for prevention.

**Keywords:** *drugs, risk, university students*

### **INTRODUCCION:**

At both the international and national levels, there is growing concern about the consumption of illegal and legal substances by the population, especially among adolescents and young people. The university population is not exempt from this risk, particularly in times when this phenomenon has gained significant relevance. The World Drug Report by the United Nations Office on Drugs and Crime estimates that, in 2020, a total of 284 million people aged 15 to 64 used drugs, representing a 26% increase compared to the previous decade, with a significant rise in the production of illicit drugs such as cocaine (UNODC, 2022)

Various psychosocial and environmental factors significantly impact this period, where isolation and social distancing have been the main characteristics, causing fear or uncertainty about the future and complications from other comorbidities that affect people's mental health. These factors can lead to symptoms of anxiety, depression, eating disorders, pathological gambling, screen addiction, etc., which increase the likelihood of substance use disorders, with higher rates of relapse and complications. Similarly,

substance use can potentially destabilize or worsen these comorbidities, affecting relationships within the family environment, with an increased risk of episodes of violence (Pascale, 2020)

The location of the Centro Universitario UAEM Valle de Chalco, as previously described, is an area with high levels of poverty and criminal activity. The complexity of the social processes occurring in the area enables the existence of risks to which adolescents and young people are exposed, in this case, the consumption of substances among university students.

Based on the above, the following objectives were proposed:

1. To describe the level of vulnerability of adolescents and young people at the Centro Universitario Valle de Chalco regarding substance use/abuse.
2. To identify the presence of aggressive/delinquent behavior in adolescents and young people at the Centro Universitario Valle de Chalco.

3. To determine the mental health status, family and friendship relationships, as well as the work interest of adolescents and young people at the Centro Universitario Valle de Chalco.

The results of this research provide a more accurate overview of the risk of drug consumption and vulnerability among adolescents and young people at the Centro Universitario Valle de Chalco in 2023. The findings represent an opportunity to guide actions aimed at promoting mental health and, consequently, preventing drug use among university students.

The investigation is framed within the Universal 2030 Sustainable Development Agenda, particularly in its Sustainable Development Goals (SDGs) number 1, related to the Eradication of Poverty, SDG number 3, Good Health, by ensuring, through risk assessment and the creation of preventive programs, a healthy life and promoting well-being for all at all ages, especially adolescents and young people, who represent the future workforce. It also aligns with SDG number 4, where the proposed actions aim to achieve quality education. At the national level, it fits within the Annual Work Plan of the National Commission against Addictions, which includes 19 strategies and 49 lines of action, aligned with eje 2 "Well-being" of the National Development Plan 2019-2024, which prioritizes health as a generator of social well-being.

Students will benefit from having a program that supports improving their emotional stability, coping with conflict and frustration, adapting to the social and family context in which they develop, and their ability to transform it. This will have a positive impact, for obvious reasons, on the educational, family, and social spheres.

The institution will benefit from having an overview of the addiction situation within the university community, which will allow it to create strategies to minimize and prevent the risks associated with such behaviors. Additionally, the integration of students into activities that promote their interest in studying will, consequently, improve their academic performance, reduce dropout rates, and increase graduation rates.

## **2. THEORETICAL FRAMEWORK:**

The World Health Organization has defined adolescence as a stage in which the individual undergoes significant transformations, not only physically but also psychologically, in terms of sexuality and social relationships. It is also a phase in which the individual builds their identity. The development of these

individuals during this stage is crucial, as it will shape their adult life (Valenzuela et al., 2013)

Adolescence (10-19 years) is a very particular formative period, and although it is assumed that most adolescents have good mental health, the various changes that occur in the body—both physical, emotional, and social—expose individuals to risks such as poverty, abuse, and violence, placing them in vulnerable conditions for the development of mental health problems (Marques-Caraveo and Pérez-Barrón, 2020).

Adolescence has been approached from different theoretical perspectives, and among the most recognized scholars on the subject is Granville Stanley Hall, an American psychologist and educator, credited with the scientific development of psychology, as well as the founding of laboratories and journals dedicated to this field. One of the highlights of his work is the establishment of the American Psychological Association. Stanley proposed that the genetic composition of the individual undergoes a developmental process similar to the historical stages of societal development. Thus, youth would represent the prehistoric stage of personality. Hall was a pioneer in the idea that adolescence is a period of human development and a preparatory stage between dependence as a child and independence as an adult.

Young people are a part of the population that raises concern in the public health field, as they are considered a "vulnerable" age group facing various health issues, such as teenage pregnancy or drug use, among others. Additionally, young people may become involved in situations of violence or antisocial behaviors, affecting both themselves and others, both in the present and in the future. The World Health Organization has stated that nearly two-thirds of premature deaths and one-third of the global burden of morbidity in adults are related to diseases or behaviors that originate in adolescence, with the main factors being tobacco, drug, and alcohol use, unprotected sexual relationships, and exposure to violence in various social environments (Restrepo, 2016).

The difficulties of adolescence multiply as young people are drawn into a risk-driven dynamic. They increase when their peer group shares these behaviors as well. Virtual networks exponentially amplify the risk dynamic because the audience they reach is unlimited. Several studies report that the disruption of integrated behavior occurs as a result of adolescents' socialization in risky environments and practices (Navarro-Pérez and Pastor-Seller, 2018).

Adolescence is a stage of great vulnerability, characterized by a process of adaptation and the

demands that arise in the family, social, and academic spheres. The latter, the academic sphere, is the environment where adolescents spend most of their time. It is precisely in this context that psychoeducational strategies can be developed to strengthen prevention mechanisms for behaviors that may affect their mental health and, consequently, their development. These strategies should be innovative and focused on creating motivating actions that encourage adolescents to actively engage in them (Langer et al., 2017).

The consumption of alcohol and other legal and illegal drugs is a problem that brings with it countless risk factors and protective factors, which, under unconscious influences, lead to abnormal behaviors in the persons. According to Rojas (2020), the risk and protective factors related to this phenomenon emerge during adolescence, which is considered a crucial moment in the acquisition of behaviors, as during this developmental stage, it is closely related to the consumption of psychoactive substances.

Both educational institutions and families play a crucial role in managing adolescents who consume alcohol or drugs. Support and guidance are essential for achieving positive outcomes. Additionally, interventions can be designed within a promotion and prevention system that includes factors associated with these substances. Based on these elements, it is possible to develop effective strategies to improve adolescents' mental health and prevent addictive behaviors (Galbe, 2012).

Adolescents face various risk behaviors that are crucial to their health and can affect their morbidity and mortality. These behaviors include drug use, teenage pregnancies, eating disorders, sexually transmitted diseases, depression, and suicidal tendencies, all of which have a negative impact on their well-being. The primary protective factor is the family, which plays an essential role in promoting healthy development through education and maintaining proper family functionality. This helps the adolescent develop into an autonomous person capable of facing daily challenges.

To achieve this, it is essential to promote healthy lifestyle habits, as patterns of behavior are established from childhood that will influence not only physical health but also psychological well-being, social relationships, and self-care in adolescents, through the learning of life skills. Parenting styles can have both positive and negative effects on adolescent behavior and, consequently, on risk behaviors. Research suggests that greater family support and control over behaviors reduce the likelihood of adolescents using substances, engaging in self-harming behaviors, or developing depression.

Furthermore, other studies indicate that when families receive guidance and training, and have access to tools and knowledge to improve their parenting skills, risk behaviors in adolescents significantly decrease (Valenzuela, 2013).

A drug is a substance of various origins that, after consumption, causes alterations in consciousness, mood, or physical or mental efficiency. Continuous use leads to different levels of dependence, and over time, a decline in mental functions. Consumption refers to the use (smoking, inhaling, injecting, swallowing, chewing, etc.). Drugs can be divided into legal and illegal categories; legal drugs include alcohol, tobacco, prescription medications, and some solvents for domestic or industrial use, while the rest are considered illegal drugs (Navia-Bueno et al., 2011).

## **2.7. Types of Drugs:**

1. Sedatives
2. Stimulants
3. Hallucinogens

There are several classifications of addictive substances based on their structure and chemical properties, as well as the effects they produce on the central nervous system (CNS). The most commonly used classification, due to its practical utility, is the NIDA (National Institute on Drug Abuse) system, which categorizes drugs according to their stimulating or depressing effects. Depressant drugs include alcohol, sedatives, narcotics, anxiolytics, cannabis, and volatile solvents. These substances act on the brain, suppressing all presynaptic neuronal structures, resulting in a decrease in the amount of neurotransmitter released by the nerve impulse, which also leads to a reduction in the function of the respective postsynaptic receptors.

Alcohol, like other depressants such as barbiturates and benzodiazepines, stimulates inhibitory transmission. The narcotic group includes opium, morphine, heroin, meperidine, codeine, diphenoxylate, fentanyl, nalbuphine, propoxyphene, and methadone. Stimulant or sympathomimetic drugs include cocaine, amphetamines, methamphetamines, hallucinogens, and minor stimulants, which include xanthines. These substances exert a blockade of inhibition or direct excitation of neurons. Their mechanisms of action are varied and can be explained by physiological effects; for example, increased neuronal depolarization, increased availability of neurotransmitters, prolonged action of neurotransmitters, weakening of the neuronal membrane, or reduced synaptic recovery time (Navia-Bueno et al., 2011).

Substance addiction, also known as dependence, occurs due to the abuse of these substances and is characterized by a compulsive use of the drug, regardless of the

consequences and harm it causes to physical and mental health. To consider this situation as a pathological condition, the DSM-V establishes that the individual must exhibit at least three of the following manifestations: risky consumption, social or personal problems related to consumption, abandonment of activities unrelated to drug use, tolerance to the drug's effects, withdrawal syndrome upon discontinuing use, consumption of large amounts over long periods, failed attempts to quit, excessive time spent on consumption, physical or psychological problems linked to consumption, abandonment of other activities in favor of the drug, and a strong desire to use it (Méndez-Díaz et al., 2017).

The social environment in which the adolescent develops is another key factor, especially in the dynamic interaction with their surroundings. This becomes even more relevant when the adolescent distances themselves from family and the school environment. Social skills, self-esteem, and other personal aspects play a fundamental role; when these are strengthened, they can act as barriers against substance use. Conversely, the lack or weakness of these skills becomes a potential risk factor, increasing the likelihood that the adolescent will engage in harmful behaviors (Sánchez-Sosa et al., 2014). Regarding healthcare, on a global level, three levels of care can be described, which differ according to the type of care provided and the health situation being addressed, as well as the orientation of the actions taken. These levels include the first level of care, the second level of care, and the third level of care (Vignolo et al., 2011).

The first level of care is characterized by being broader and closer to the general population, considered the point of first contact. It is predominantly focused on actions aimed at promoting healthy lifestyles, self-care, and, as a result, disease prevention. This level includes Primary Health Care, with prevention and promotion as its pillars, achieved through health education.

Prevention is defined as measures aimed not only at preventing the onset of disease, such as reducing risk factors, but also at stopping its progression and mitigating its consequences once it is established (Vignolo et al., 2011).

According to Álvarez (2013), health promotion is a global political and social process that encompasses not only actions aimed at directly strengthening the skills and capabilities of individuals, but also those aimed at modifying social, environmental, and economic conditions, in order to mitigate their impact on public and individual health.

Health education aims to convey knowledge that motivates and enhances both knowing and doing, as well as the development of behaviors aimed at preserving the

health of the individual, the family, and the community, in order to achieve healthy lifestyles (Díaz, 2012).

In Mexico, in May 2022, a decree was published in the *Diario Oficial de la Federación* (DOF) amending, adding, and repealing various provisions of the General Health Law concerning Mental Health and addictions. The decree states in its articles that both mental health and addictions will be priority issues in the policies of the national healthcare system, as well as the goal of restoring and providing biopsychosocial well-being to people with mental disorders, focusing primarily on primary health care and care in general hospitals (DOF, 2022).

Addiction is both a multifactorial and multidimensional problem that impacts all aspects of an individual's life. Furthermore, it can be stated that individuals with substance dependence are difficult to treat clinically due to the complexity of their situation. Various studies have shown a relationship between personality disorders and substance use, revealing a high psychopathological comorbidity. In other words, many people with addictions also suffer from psychological disorders, which complicates treatment and requires integrated therapeutic approaches that address both conditions simultaneously (Santos-de Pascual, Saura-Garre & López-Soler, 2020).

On the other hand, studies such as the one by Tena-SucK et al. (2018) refer to the relationship between substance use and biopsychosocial problems such as injuries and accidents, as well as situations of disability, suicidal ideation and behavior, and risky sexual practices. For this reason, it is considered a public health issue that harms the fundamental unit of society, the family.

It is worth noting that within the risk factors for substance use in adolescents and young people are individual factors, which may have a genetic or neurobiological component, as well as familial and environmental factors (Tena-SucK et al., 2018).

### **3.METHOD:**

This is a non-experimental design with a quantitative, descriptive approach, including a correlational, prospective, cross-sectional, or transactional component.

**Participants.** The population consisted of 3,084 adolescents and young people from the UAEM Valle de Chalco of the Universidad Autónoma del Estado de México. The sampling method was non-probabilistic, based on quotas, considering each of the degree programs. The sample was estimated with a 95% confidence level, with an estimation error margin of .05, using a conservative approach of 50% ( $p=q=1/2$ ), resulting in a sample of 863 adolescents and young people.

**Instrument.** The POSIT (Problem Oriented Screening Instrument for Teenagers) was used. It is a diagnostic

assessment tool developed and validated in the USA by the National Institute on Drug Abuse (NIDA) and the National Institutes of Health (1991), as part of the Adolescent Assessment/Referral System (AARS) (Rahdert, 1991).

Its original version consists of 139 items that cover 10 areas of analysis: substance use/abuse, physical health, mental health, family relationships, and relationships with friends, educational level, vocational interest, social skills, entertainment and recreation, and aggressive/delinquent behavior.

For this study, the version validated by the Universidad Nacional Autónoma de México (UNAM) and the "Juan Ramón de la Fuente Muñiz" National Institute of Psychiatry, for the Mexican youth population (both males and females, aged 13 to 19), regardless of their background, occupation, or education level, was used (Mariño et al., 1998).

The Mexican version consists of 81 items grouped into seven areas of daily life:

1. Substance use/abuse
2. Mental health
3. Family relationships
4. Relationships with friends
5. Educational level
6. Employment interest
7. Aggressive/delinquent behavior

Key psychometric characteristics include its nominal dichotomous measurement level (Yes/No) and its transformation to a scalar level when scores by area are integrated. Its average reliability is  $\alpha = .905$ , which represents the consistency of the information obtained and the statistical grouping of items by categories.

Regarding validity, the POSIT measures what it intends to measure and has sufficient rigor in terms of content, construct, prediction, and sensitivity/specificity.

The hypothesis underlying the POSIT states that if positive responses ("yes") are selected, it indicates risk; if the negative response ("no") is selected, there is no risk, except for the negative statements (12, 13, 18, 20, 22, 26, 32, 39, 52, 69, 70, and 71), which will be coded in reverse.

Summations and averages will need to be calculated for each area, according to the cutoff points:

- **Substance use/abuse.** 17 items in total (2, 17, 21, 25, 33, 38, 41, 46, 47, 48, 54, 56, 57, 58, 62, 65, 68). All are RF (Risk Factors).
- **Mental health.** 16 items in total (5, 6, 8, 10, 15, 23, 28, 40, 43, 55, 60, 63, 66, 75, 76, 80). The cutoff point is 5 / RF: 5.
- **Family relationships.** 10 items in total (4, 14, 20, 22, 32, 39, 45, 52, 70, 71). The cutoff point is 3 / RF: 3.
- **Relationships with friends.** 7 items in total (3, 13, 19, 29, 67, 73, 77). All are RF.

\*The "red flags" (RF), which serve as alert indicators in the corresponding area.

Data collection procedure: The support of the ICT department was obtained for the creation of the questionnaire in forms.office, from which a link was generated. This link was provided to the coordinators of each degree program, who then distributed it to a proportionate number of students per program, selected beforehand from a list provided by the school registry office.

The selection and authorization process for the research adhered to the guidelines of the Research Directorate of the Universidad Autónoma del Estado de México. The project was submitted to a call for proposals from the University for Unfunded Projects, aimed at strengthening Academic Bodies. After a double-blind evaluation, it was selected.

It was previously presented to the Ethics and Research Committee for approval, obtaining a favorable opinion. The responses were then gathered into a data bank in Excel for processing and statistical analysis.

**Analysis strategies.** Descriptive statistics were used for the analysis of the sociodemographic variables, and for the questionnaire items, measures of central tendency were applied, in addition to the Pearson correlation coefficient to define the correlation range (None, Weak, High, and Perfect).

#### **4. ANALYSIS AND DISCUSSION OF RESULTS:**

From the analysis of the population, a sample of 863 students was obtained, with the reliability of the instrument for the study sample being 0.914.

The findings of this study reveal several critical insights into the risk of drug use among university students at the Valle de Chalco University Center. The distribution of participants across various educational programs and shifts, as well as the correlations between mental health, educational level, aggressive/delinquent behavior, and substance use, provide a comprehensive understanding of the factors contributing to this public health issue.

The distribution of cases by educational program indicates that the majority of participants, 54.46% (470 participants), are enrolled in the Bachelor's in Nursing program. This is followed by Computer Engineering with 12.39% (107 participants), Industrial Design with 9.61% (83 participants), Accounting with 8.34% (72 participants), and Computer Science with 4.63% (40 participants). The predominance of nursing students could be attributed to the high enrollment in this program, which is consistent with previous studies showing that fields related to healthcare often have larger student populations (García & González, 2019). This distribution also suggests that nursing students may be at higher risk due to the demanding nature of their

studies and the stressful environment of healthcare education (Jones et al., 2018).

The study shows a significant majority of students attending classes in the morning shift, with 71.14% (614 participants), compared to the evening shift with 28.86% (249 participants). This predominance could reflect the general scheduling preferences of students or institutional policies that favor morning classes. However, it is important to consider how the time of day may impact stress levels and, consequently, substance use behaviors. Studies have shown that students in evening programs may experience different stress factors, such as balancing work and study, which can influence their risk of substance use (Smith et al., 2020). Regarding the gender distribution, the study reveals a predominance of female participants, representing 69.29% (598 participants), followed by male participants at 30.35% (262 participants), and a small percentage identifying as non-binary and transgender (0.23% and 0.12%, respectively). This gender disparity aligns with national trends in higher education enrollment, where female students often outnumber male students, particularly in certain disciplines such as nursing (UNESCO, 2021). It is also crucial to consider gender-specific factors that may influence substance use, as research indicates that men and women may have different motivations and patterns of substance use (Cooper et al., 2016).

The study highlights several significant correlations:

**Mental Health and Educational Level:** A strong correlation was found between mental health and educational level (.477\*\* and .654\*\*), suggesting that a higher educational level is associated with better mental health outcomes. This finding is consistent with the literature, which indicates that education can serve as a protective factor against mental health problems by providing individuals with better coping mechanisms and resources (Eisenberg et al., 2009).

**Aggressive/Delinquent Behavior:** There is also a significant correlation between aggressive/delinquent behavior and educational level (.446\*\*) and relationships with friends (.307\*\*). This suggests that students with lower educational levels and poor social relationships are more likely to exhibit aggressive or delinquent behaviors. These findings align with previous research highlighting the role of social support and academic success in mitigating risk behaviors (Henriksen et al., 2019).

**Substance Use and Family Relationships:** The correlation between substance use/abuse and family relationships (.324) underscores the importance of family support in preventing substance use. Strong family bonds and communication are critical in reducing the likelihood of substance abuse among adolescents and young adults (Vakalahi, 2001).

The risk assessment of the study shows that 11.5% of the participants are at risk, and 3.5% are at high risk of substance use. The hypothesis test revealed that the data are independent, with a statistically significant asymptotic level of 0.0001 ( $p=0.5$ ), leading to the rejection of the null hypothesis. This statistically significant finding reinforces the need for specific interventions to address the risk factors identified in this population.

**Implications for Mental Health Professionals:** The results highlight the magnitude of the problem and the urgent need for mental health professionals to address it through prevention and intervention strategies. Developing comprehensive programs that include mental health support, educational counseling, and family involvement is essential to mitigate the risk of substance use among university students. Furthermore, creating awareness campaigns and education about the risks of substance abuse and the importance of mental health can help foster a supportive environment for students.

The POSIT instrument has been a reliable method for collecting these results, once its reliability reaches an excellent level of .813, as an estimator of internal consistency and reliability in the processes of construction, adaptation, and validation of instruments (Cascaes da Silva, 2015).

The research shows an average age of 22 years. Among the theoretical approaches, we can cite Granville Stanley Hall, an American psychologist credited with the scientific development of psychology. He proposed that adolescence is a period of "storm and stress," placing it between the ages of 12 and 22-25 years (Santillán & González, 2016).

The World Health Organization has defined adolescence as a stage in which the individual undergoes significant transformations not only physically but also psychologically, in terms of sexuality and social relationships. It is also a phase where individuals build their identity, making the development during this stage crucial, as it will shape their adult life. This study highlights the relationship between friendships and aggressive/delinquent behavior. In the study conducted by Berrocal et al. (2018) on the social determinants of psychoactive substance use among university students, the living conditions of these young people were clearly observed, as well as their constant exposure to friends and close family members who used illegal psychoactive substances, along with their vulnerability due to their age. However, a strong bond was found between the students and their parents, considering them as significant social supports (Berrocal et al., 2018).

Another important finding is the relationship between drug use/abuse and family relationships, as shown in this study. Several investigations point to the fact that greater family support and behavior control are associated with

a lower likelihood of substance use, self-harming behaviors, and even the development of depression. Additionally, other studies show that when families are guided and trained, and receive support, knowledge, and tools to acquire basic parenting skills, there are fewer risk behaviors in adolescents (Valenzuela, 2013).

The relationship between mental health and factors such as educational level and aggressive/delinquent behavior, as shown in this study, confirms what other research has found. These studies indicate that adolescents and young adults are prone to biopsychosocial problems, influenced by the complex interaction of multiple situations from a biopsychosocial perspective, such as biological immaturity, which leads to impulsive and reckless behaviors, as well as poor judgment. These factors can be individual, including genetic and neurobiological developmental factors, as well as family and environmental factors, given a favorable environment for obtaining and consuming substances (Tena-Suck et al., 2018).

The study confirms that mental health is crucial and determinant in the level of vulnerability and risk of drug use among adolescents and young adults. Various studies reference the tendency for an increase in this phenomenon among individuals with personality disorders, primarily those belonging to Group B (Sánchez-Sosa et al., 2014).

Finally, all of this leads us to agree with other researchers who state that adolescence is a process with many variables in terms of growth and development, not only biological but also psychological and social, in different individuals. One of these variables is the age at which young people begin and end their adolescence. The process differs in its various aspects (biological, emotional, intellectual, and social) and does not occur as a continuous event. It shows us its differences and peculiarities, stemming from factors such as the individual's sex and ethnicity, and the environment in which it occurs (urban or rural, socioeconomic and educational level, type of culture, etc.) (Gaete, 2015).

### **CONCLUSIONS.**

The instrument overall achieved excellent reliability (.914).

The study demonstrated a global percentage of 26.1% of adolescents and young adults at the UAEM Valle de Chalco University Center at risk and vulnerable to drug use.

The vulnerability of adolescents and young adults of drug use was found to be 49.2% among adolescents and young adults.

The mental health status of adolescents and young adults is involved in a very high level of risk, with nearly half of them (44.3%).

Family and friendship relationship are factors showing that 31.1% of the respondents are at risk of drug use.

Regarding job interest and its relationship with risk, it can be stated that it is present in half of the adolescents and young adults studied (50.3%).

The sociodemographic variables that most influence the susceptibility of adolescents and young adults at the Centro Universitario UAEM Valle de Chalco were aggressive behavior, with a higher prevalence among males and those who work. On the other hand, mental health in women was found to be a risk factor, as well as those who graduated from Technological Education and Technological Baccalaureate programs. A relationship was also found between global risk and the law program. Addictions are a social issue that affects everyone, regardless of their economic, social or academic status. This phenomenon includes economic, political, and historical conditions, as well as the physical and mental health of the individual. Therefore, it is a complex problem that requires input from various fields such as history, anthropology, psychology, sociology, as well as disciplines like politics, law, medicine, pharmacology, etc. to address the issue. Some aspects commonly associated with substance use include the constant search for happiness, even if it is temporary and superficial, defining one's identity based more on what they have than on who they are, and the need for high level achievements.

It is not truly known what a person's reaction is to the use of psychoactive substance, but it is understood that reactions vary from person to person. Addiction is not something that is consciously sought. It is rare to find someone whose life and career plans include losing everything: family, friends, school, work, self-esteem, even themselves. It is also important to understand that when you begin to follow a diet, you will have a joyful experience focused on setting aside fear and anxiety. With repeat use and the body's natural tolerance increasing, the individual becomes trapped in a cycle of more fear, anxiety, and increased consumption.

Therefore, in the university setting, as educators, we must take on as a social responsibility the timely detection and efficient attention to adolescent and young people who present this type of situations or are at risk of experiencing it.

**ETHICS APPROVAL AND CONSENT TO PARTICIPATE:** Valle de Chalco, State of Mexico, December 9, 2024

**GROUP INFORMED CONSENT LETTER:**  
**Research Title:** Risk of drug consumption in university students  
**Registration Number:** Does not have registration  
**Name of the Principal Investigator:** Rafael Antonio Estévez Ramos

**Name of the person representing the students who will participate in the Research:** Liliana Antonia Guadarrama Pérez

Through this document, which is part of the process for obtaining informed consent, I would like to invite you to participate in the research titled: Risk of drug use in university students. Before you decide, you need to know why this research is being done and what your participation will entail. Please take the time you need to read the following information carefully and ask anything you do not understand about this investigation.

**Place where it will take place:**

This research will be carried out at the facilities of the Autonomous University of the State of Mexico, specifically at the UAEM Valle de Chalco University Center, located at Ave Hermenegildo Galeana No. 3 Colonia María Isabel, Valle de Chalco Solidaridad municipality in the State of Mexico .

**Research objective:**

This research aims to: Assess the risk of drug use in adolescents and young people at the UAEM Valle de Chalco University Center.

**Importance of Research:**

Drug consumption in the young population is a serious long-term health problem, due to its harmful consequences, it has generated a focus of attention especially on the most vulnerable population, who happen to be young people and adolescents. Therefore, estimating the degree of risk of drug consumption in the students of the UAEM Valle de Chalco University Center means knowing how vulnerable our university population is and how much risk is that we are unaware of and that can greatly affect academic performance and daily life of the student community.

**Considerations for which you were invited:**

You have been invited to take part in this research, because you meet the characteristics listed below (inclusion criteria):

**About your voluntary participation:**

Your participation is voluntary, anonymous and confidential; You don't have to necessarily participate. There will be no negative impact if you decide not to participate in the research, you may abandon the process whenever you decide if you so consider, the results may be shown at the time you request it.

**Instructions for your participation:**

Your participation will consist of the following:

Express your opinion or degree of agreement with the items proposed in the instrument, expressed on a Likert scale.

**Duration of your participation:**

The duration will depend on the time it takes to achieve the degree of agreement in the design of the instrument, it may be more than one round if required, the maximum time you have to return the answered instrument is 7 calendar days from receiving file in Word, which can respond electronically and return it in pdf format.

**Benefits of being part of this research:**

Contribute to the generation of knowledge of the discipline, to the improvement of the teaching-learning process and to holistic and professional care aimed at the person, family and community with an ethical and human sense.

**Possible risks of being part of this research:**

None  
Compensation for my participation  
It does not have a commercial nature.  
Cost for me to participate in this Research  
You are informed that the expenses related to this research that arise from the moment you voluntarily agree to participate in it, will not be paid by you. In the event that there are additional expenses caused by the development of this research, they will be covered by the budget of the same or the researcher.  
Upon completion of the investigation  
The results, anonymously, may be published in scientific research journals or may be presented at conferences.

If you have any questions, concerns or problems related to the Research, you can contact:

Dr. in C.S. Rafael Antonio Estévez Ramos Telephone and WhatsApp: 55 41 90 30 43 Clarifications:

This research has been reviewed and approved by the Research Committee and Research Ethics Committee, to protect your interests.

Your decision to participate in this Research is completely voluntary.

During the course of the Investigation, you may request updated information about it from the responsible investigator.

The information obtained in this research, used to identify each participant, will be maintained with strict confidentiality, in accordance with current regulations.

You are guaranteed that you will receive a response to any questions, doubts or clarifications about the



procedures, risks, benefits or other matters related to this research.

a) If you consider that there are no doubts or questions about your participation, you may, if you wish, sign the Informed Consent Letter.

### SIGNATURE OF CONSENT

I, Liliana Antonia Guadarrama Pérez, state that we were informed of the purpose, procedures and time of participation and in full use of my powers, and as a representative of the group to participate, it is our will to participate in this research entitled Risk of drug consumption in university students .



I do not omit to state that I have been informed clearly, precisely and broadly, regarding the procedures involved in this investigation.

Liliana Antonia Guadarrama Pérez

**NOMBRE Y FIRMA DEL PARTICIPANTE**

**NOMBRE Y FIRMA DEL INVESTIGADOR PRINCIPAL**

Note: The personal data contained in this Letter of Informed Consent will be protected in accordance with the provisions of the Federal Law on Transparency and Access to Public Information, General Law on Transparency and Access to Public Information and General Law on Protection of Personal Data in Possession of Obligated Subjects and other regulations applicable to the matter.

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**Author's Contributions:** MCPG applications of instrument. IBM tabulation and data processing. RAER drafting and structuring of abstract, introduction, theoretical framework, method, analysis and discussion and conclusions.

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