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Understanding Substance Use Attitudes in Albanian Emerging Adults: A Study of Demographics and Clinical Relevance

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Abstract: Emerging adulthood is an important stage of development characterized by an increase of the tendency to experiment, including drugs. Cognitive attitudes on substance use serve as an early risk assessment to inform and draft potential awareness and prevention programs and mental health interventions. This research work explored general attitudes among Albanian emerging adults 18-26 years old, while also exploring social and demographic differences related to age, gender, employment status and education level.
A total of 345 participants completed the Attitudes to Drug Use Questionnaire, consisting of 12 item Likert scale. Results showed that gender and age difference are significant demographic differences. In addition, employment status reports more favorable attitudes towards drugs in comparison to those who are unemployed. Notably, findings show that the education level does not have a significant relationship with attitudes towards drugs.
From a clinical perspective, cognitive attitudes may be considered as markers for assessing the vulnerability and risk of the young adults' behavioral engagement in drugs. Therefore, this study highlights the need of integrating psychological assessment of attitudes into university counselling sessions, informing and training academic staff on these risks and identifying red flags for further clinical intervention and building more psycho-education into the support systems, including family settings, social communities, and university or corporates considering employability of the respondents. Addressing and managing risks should further be supported from trained professionals in mental health, psychologists and therapists, human resource offices and corporate employees. Risk management and prevention of normalization may serve as the early intervention mechanism to reduce experimentation or substance use behaviors.
Keywords: attitudes, substance use, psychological assessment, therapy, demographics, clinical relevance, emerging adults, Albania.

1. Introduction

In the Albanian context there is a limited psychological research and data regarding this topic, with the most recent report being from 2017 by the European Monitoring Centre for Drugs and Drug Addiction, funded by the European Commission, in partnership with the Institute of Public Health in Albania (European Monitoring Centre for Drugs and Drug Addiction & Institute of Public Health (Albania), 2017). This fact makes it even more interesting for the researchers to explore and further investigate on the different demographics and their relationship to substance use. This is the reason why researchers aim to examine general attitudes, age group differences, gender and employment differences and level of education differences.
Research questions are as the following:

1. What are the attitudes of the Albanian youth toward substance use in relation to age?
2. How do attitudes differ by gender?
3. How does employability affect attitudes toward substance use?
4. How do educational levels influence attitudes towards drugs?

Hypothesis

1. Attitudes are expected to exhibit significant favorable differences in males.
2. Employment status is likely to have a positive tendency towards substance use.
3. Levels of education will serve as a significant factor influencing attitudes.

2. Literature review

To understand the context of the study, it is essential to explore to existing theories related to the concepts that will be utilized. Primarily, we will examine attitudes and beliefs, each supported by theories that will be integrated into the research. According to the Theory of Planned Behavior, attitudes towards certain behaviors are predictors of intentions, which in turn, combined with subjective norms predict the variance of actual behavior (Ajzen, 1991). Following this line of reasoning, certain attitudes towards substance use, such as permissiveness, influence one's intentions, which could potentially increase the likelihood of the behavior, i.e., substance usage. Thus, when considering attitudes as a determinant of intent, and a potential predictor of behavior, it becomes imperative to investigate these attitudes, in order to build preventative measures towards substance use behaviors in the clinical context.

Furthermore, when considering certain behaviors and their influencing attitudes, one must consider the external factors, such as the aforementioned subjective norms, which, among other factors, are a product of socialization. In this context, the Social Learning Theory sates that learning occurs through observation and modelling, which is influenced by attention, motivation and attitudes (Bandura, 1977). When it comes to substance use, perceived normalization through socialization influences attitudes towards the behavior, and in turn, the behavior itself. In this context, when taking into account different demographics and their relationship with socialization, different groups could be at a more potential risk if said group exhibits permissive attitudes through modeling. Considering that young adults are generally more inclined to experimenting with substances, through social learning, their peers could be influenced towards the same experimentation (Stevens, 2021). Likewise, males are generally more likely to use illicit drugs than females, thus being more susceptible to adapting the behavior through socialization (Rahimian Boogar, 2014). These demographic differences could serve as a pillar in building clinical intervention aimed at more vulnerable groups, in regards to prevention, risk mitigation, as well as treatment.

Additionally, when discussing attitudes and their influence on behaviors, it is necessary to take into consideration the Cognitive Behavioral Theory, which is built on the direct relationship between cognitions and behaviors, where the former influences the latter (Beck, 1979). Through this theory permissive attitudes towards substance use, such as risk-minimization or other cognitions about the received pleasure or control, can be considered as cognitive distortions, which later on influence behavior. In this framework, it is important to consider the previously held cognitive schemas and distortions that precede the maladaptive behavior. Through the consideration of these attitudes as cognitive vulnerability markers for certain behaviors, i.e., positive and permissive attitudes for drug experimentation behaviors, intervention can be designed in intervening with the maladaptive schemas and their influence on behavior.

2.1. Developmental framework

In studying substance use through different demographics, it is apparent that certain groups are more vulnerable than others. Young adults have the highest rates of alcohol or substance consumption, making them one of the most a-risk groups for developing related disorders (Bukstein, 2017). Research reports in 2020 says that approximately two in five college students had accomplished the criteria for DSM-5 Substance Use Disorder at least once in the past (Arterberry, 2020). These findings support the Emerging Adulthood Theory, which proposes a new conception of the transitional years between adolescence and adulthood, namely the ages 18-25 (Arnett, 2000). This proposed stage of development has evolved from the notion that this age group is more likely than others to generally experiment (substance use included), stemming from the identity exploration that comes with the age, as well as the new-found freedom of reduced parental control, especially for those moving for college (Skidmore, 2016) (Viohl, 2019).

Furthermore, when investigating this age group and their heightened tendency towards experimentation and risk-taking, a neurological model has also been proposed. According to Steinberg and his dual systems model, there is a neurological change that happens within the brain during puberty that accounts for such changes in behavior. According to this model, the systems of reward-seeking and impulsivity develop alongside each other, but in different timetables, where risk-taking develops in a curvilinear pattern, with its peak in adolescence and declining after, while impulsivity steadily declines starting from the age of 10 (Steinberg, 2010). Although general impulsivity is on the decline since childhood, the changes that occur in the brain's dopaminergic system during this age fuel risk-taking behaviors as a form of reward-seeking, especially when socially motivated by the presence of peers (Steinberg, 2008).

2.2. Gender differences

Gender, much like age, is a significant factor in substance use patterns. Notably, there exists a pronounced disparity in substance consumption between genders, with men being more likely to engage in the use of nearly all types of illicit drugs. Consequently, they also face a higher likelihood of emergency department visits and overdose fatalities (Center for Behavioral Health Statistics and Quality, 2018). Both genders, the peak rates of any given substance were noticed in their 20s, with males having a higher prevalence (Vasilenko, 2017). Research conducted with college students reports that being male has a crucial positive role in predicting substance abuse (Rahimian Boogar, 2014). Notably, in many cultural contexts, masculinity is related with risk-taking behaviors, including substance use, making it more permissive and socially accepted. Referring to traditional gender roles and their part in substance consumption men who associated with conventional gender roles attitudes correlated with higher alcohol consumption, while women who associated with unconventional gender roles did not report these trends (Lye, 1998).

2.3. Employment and autonomy

Another factor related to substance use this research investigated is that of employment, when considering that most students hold some form of part-time or full-time job later in their graduate studies. As such, it is a demographic to be considered on whether it is an influencing factor on substance use. Research shows that among emerging adults, earned income was associated to substance use, as it provides easier economic access control. This trend becomes even more prevalent when combined with other social factors such as perceived peer norms (Kar, 2018). In this particular life stage, emerging adults find themselves in a stage characterized by financial independence and less parental supervision, as well as peer influence, a mix that contributes towards risky behaviors such as substance use. Furthermore, workplace culture has also been found to be an influencing factor to substance use, especially alcohol usage (Ames, 1999).

2.4. Cultural context

Culture has a significant impact on most areas of life, and substance use and its related attitudes and behaviors are no different. Presently, the only research done in Albania regarding the matter is the aforementioned 2017 report by the European Monitoring Centre for Drugs and Drug Addiction (European Monitoring Centre for Drugs and Drug Addiction & Institute of Public Health (Albania), 2017). In this context, it is important to look at the general geographical area that is connected by similarity between cultures, in order to make comparisons and generalizations to the Albanian population. A study investigating substance use in Europe by region found a general decrease in alcohol and tobacco use from 1999 to 2025, while trends of cannabis use are on the rise across south Europe and the Balkans (Kraus, 2018). Another study done in Bosnia and Herzegovina found that among adolescents 37% smoke cigarettes and 28.4% drink alcohol, while 5.7% consume drugs (Bjelica, 2016). These findings might provide a frame in which to contextualize trends from this research and future ones conducted in Albania.

2.5. Clinical prevention

Gender, culture, age and employment status are important factors related to attitudes toward substance use. They can be considered as both risk factors and opportunities for treatment planning in clinical interventions. Therefore, understanding these factors in principle, allows for potential interventions in clinical settings, where involving relationships and implications for treatment. The clinical interventions should be tailor based on specific demographic factors such as culture, history of personal and interpersonal relationships and vulnerability. The suggested approach refers to Cognitive Behavioral Therapy which has been named as one of the most effective evidence-based treatment methods in managing substance use and other components related to it including: craving, withdrawal and relapse.

3. Research Methodology - Materials and Methods

“This study employed a quantitative cross-sectional survey design with statistical analysis. Research was conducted in Albania, and respondents were provided with an online questionnaire distributed through social media channels, WhatsApp, Instagram, LinkedIn, etc. Research fully meets the ethical requirements. The Ethical research consent was first received from the Ethical Committee in the University of New York Tirana. Soon after this, data collection began by ensuring to respondents the right of information, their confidentiality and the need to withdraw anytime from completing the questionnaire. The questionnaire contains two sections: demographic data on age, gender, employment status and education level, and the measurement of Attitudes to Drug Use Items.

The questionnaire was first developed as a measuring tool aimed at measuring the effectiveness of the DARE (Drug Abuse Resistance Education) program implemented with students at risk for drug use (Harmon, 1993). The questionnaire measured how the attitudes towards drug use changed from the group that participated in the program to the group that did not. After its development it has been used in a number of other studies; respectively in USA (Daniewicz, 2014) and Ireland (Howell, 2021). This questionnaire was chosen on the premise that it measures the general attitudes towards substances of a target population without focusing on one particular substance or group of substances. Other studies in which the questionnaire has been used also served as incentive for this choice. The research conducted in Ireland involved participants with an age group of 18 to 30, which produced significant results. Furthermore, this research was aimed at looking into gender differences in attitudes within the group, which also produced significant results. Similarly, the research conducted in USA involved the age group 18 to 26, assessing their general attitudes towards substance use. Referring to the questionnaire as well as its uses in other previous research which fits with the objectives of the current research, it was considered suitable for use.

General attitudes toward drug use are measured using a 12-item questionnaire, that follows the 5-point Likert Scale. In this questionnaire, seven items are scored from 1-5, while five items are scored in reverse order. Likert scale ranges from one to 5, where a score of 5 refers to a completely favourable attitude toward drugs, whereas a score of 1 reflects a completely unfavourable attitude. Participants who do not answer all 12 questions, will be excluded from the analysis.

In total 345 responses were received. The age group 18-20 years old is represented in 31%. The age group 21-23 has the highest level of representation in 39.7%. The age group of 24-26 is represented in 29.3% of the sample.

Gender responses indicate that 29.9% are male; females represent the majority of the sample in 69.3%, and 0.9% prefer to disclose gender. Referring to the education level, 16.5% have only finished high school, 64.3% have a bachelor's degree, and 19.1% have a master's degree.
41.2% of respondents are working full-time, 18.6% work part-time, and 40.3% are unemployed.

Table 1: Distribution of age

		Frequency	Percent
Valid	18-20	107	31.0
	21-23	137	39.7
	24-26	101	29.3
	Total	345	100.0

The table presents the age distribution of respondents' attitudes toward drugs. Data suggests that attitudes towards drugs change with age, 18–23-year-old respondents represent the largest group. This might say that attitudes change across age categories as they report different levels of maturation.

Table 2: Distribution of gender

		Frequency	Percent
Valid	Male	103	29.9
	Female	239	69.3
	Prefer not to say	3	.9
	Total	345	100.0

The sample is predominantly female up to 69.3%, while males represent 29.9% and less than 1% choose not to disclose gender.

Table 3. Distribution of levels of education

		Frequency	Percent
Valid	High School	57	16.5
	Bachelor	222	64.3
	Master	66	19.1
	Total	345	100.0

Most respondents hold a Bachelor's degree (64.3%).

Employment is almost evenly split between full-time workers (41.2%) and unemployed individuals (40.3%). Such balance strengthens the reliability of comparisons across employment groups.

Table 4. Distribution of employment status

		Frequency	Percent
Valid	Working Full Time	142	41.2
	Working Part Time	64	18.6
	Unemployed	139	40.3
	Total	345	100.0

The present study employed the 12-item Questionnaire on Attitudes toward Substance Use as the primary measurement tool. A comprehensive list of the questions included in the instrument can be found in Appendix A. To evaluate the internal consistency of the scale, Cronbach Alpha coefficient was calculated, yielding a value of $\alpha = 0.826$. This result indicates a commendable level of reliability for the instrument utilized in the research.

4. Results

4.1. The relationship between attitudes and age

The relationship between age and attitudes towards drugs represents an important topic in this research. By examining the mean ranks of participants attitudes, referring to our example, we aim to study the tendencies among these age groups, which may seem close to each other, but the exposure to life is different.

Table 5. Ranks of attitudes and age

	1. Age	N	Mean Rank
Attitudes_drug_use_cat	18-20	107	150.27
	21-23	137	169.49
	24-26	101	201.84
	Total	345	

"Higher mean rank = more favorable attitude toward substance use"

Table 5.1.Test Statistics[a,b]

	Attitudes_drug_use_cat
Kruskal-Wallis H	23.161
df	2
Asymp. Sig.	.000

a. Kruskal Wallis Test
b. Grouping Variable: 1. Age

Data reports the relationship between age and attitudes toward drugs. As the age increases, the mean ranks for attitudes also rise. The oldest group (24-26 years old) has the highest mean rank, reporting a positive attitude toward drug use. The very small p-value (<.001) indicates highly significant differences between age groups. Age is a strong predictor of attitudes in this dataset. In a clinical perspective, it suggests that attitudes do not positively change due to maturation and more learnt life experiences: on the contrary, respondents report that when they mature, they have a positive attitude toward drugs.

4.2. The relationship between attitudes and gender

The relationship between attitudes and gender aims to help researchers and the readers valuable insights into their norms and perceptions and potentially uncover any trends of differences and turn them into psycho-educational programs.

Table 6. Ranks of attitudes and gender

	2. Gender	N	Mean Rank
Attitudes_drug_use_cat	Male	103	190.48
	Female	239	163.32
	Total	342	

"Higher mean rank = more favorable attitude toward substance use"

Table 6.1.Test Statistics[a,b]

	Attitudes_drug_use_cat
Kruskal-Wallis H	8.886
df	1
Asymp. Sig.	.003

a. Kruskal Wallis Test
b. Grouping Variable: 2. Gender

Males show higher mean ranks (190.48),
Kruskal Wallis test was used to compare attitudes toward drug use between genders. Results showed that males (190.48), have a strong favorability towards drugs in comparison to women (mean rank-163.32). The test was significant, p = .003 < .05, gender differences are statistically significant.

4.3. The relationship between attitudes and employment

This section presents results of the analysis examining the association between the attitudes towards drugs and employment status. Findings highlight how employment status impacts the participants perceptions and attitudes towards drugs. By analyzing the mean ranks we may understand the employment effect on behavioral reactions and engagement.

Table 7. Ranks attitudes toward drugs and employment

	4. Employment	N	Mean Rank
Attitudes_drug_use_cat	Working Full Time	142	188.58
	Working Part Time	64	175.73
	Unemployed	139	155.83
	Total	345	

"Higher mean rank = more favorable attitude toward substance use"

Table 7.1. Test Statistics[a,b]

	Attitudes_drug_use_cat
Kruskal-Wallis H	12.473
df	2
Asymp. Sig.	.002

a. Kruskal Wallis Test
b. Grouping Variable: 4. Employment

Mean ranks indicate that full-time employees have the highest rank (188.58), suggesting more favorable attitudes compared to unemployed respondents (155.83). Higher rank = more favorable orientation.
Since p = .002 < .05, we reject the null hypothesis. There are statistically significant differences in attitudes across employment groups.
We used Kriskal-Wallis test to compare median ranks among groups to see if there are statistically significant differences. Results in this study show the full-time employees report more favorable attitudes towards drug use. This suggests from a demographic perspective that employment status affects drugs usage. Therefore, in a clinical perspective this would mark the need for interventions in relation to substance use and consider employability issues in respect to treatment and support systems.

4.4. The relationship between attitudes and levels of education

Table 8. Ranks attitudes and levels of education

	3. Highest Education	N	Mean Rank
Attitudes_drug_use_cat	High School	57	163.75
	Bacheleor	222	177.85
	Master	66	164.68
	Total	345	

"Higher mean rank = more favorable attitude toward substance use"

Table 8.1. Test Statistics[a,b]

	Attitudes_drug_use_cat
Kruskal-Wallis H	2.407
df	2
Asymp. Sig.	.300

a. Kruskal Wallis Test
b. Grouping Variable: 3. Highest Education

The analysis assesses toward drug use across different education groups, comparing high school, bachelor's and master's degree holders. The mean ranks for attitudes are quite close reporting minimal differences across education groups (High School: 163.75, Bachelor:177.85, Master: 164.68). The test reports no significance, leading to a failure to reject the null hypothesis. In a clinician point of view, since education does not shape attitudes toward drugs, we may need to consider other interventions and support systems.

5. Conclusion

In conclusion, exploring the attitudes of emerging young adults in Albania towards drugs provides insights into the influence of the demographic factors affecting their perceptions on drugs use. Research findings reported significant relationship between gender and attitudes: males reported more favorable perceptions, and considering that cognitions influence behaviors, this suggests that they present more risky behaviors for experimenting on drugs. There is a significant relationship between the employment status and attitudes particularly as full-time employees tend to have more favorable attitudes regarding substance use. This highlights the need for tailored educational and intervention programs, considering even the fact that there is not any significance between levels of education and attitudes toward drug use. Psycho-educational programs need to be tailored in order to address potential risks. Training of the academic staff regarding youth attitudes and areas of risk need to be seriously considered in our country. Mental health providers such as psychologists and therapists need to be trained on areas of psycho-education and clinical intervention on substance use. By addressing these attitudes early and collectively, the support system should reach family members, corporate employees, administrative and support staff of schools and universities aiming to support healthier decisions among Albanian youths.

Appendix A

Attitudes to drug use (Harmon, 1993).

1. Using illegal drugs can be a pleasant activity (R)
    1. Strongly agree
    2. Agree
    3. Neutral
    4. Disagree
    5. Strongly disagree
2. A young person should never try drugs
    1. Strongly agree
    2. Agree
    3. Neutral
    4. Disagree
    5. Strongly disagree
3. There are few things more dangerous than experimenting with drugs
    1. Strongly agree
    2. Agree
    3. Neutral
    4. Disagree
    5. Strongly disagree
4. Using drugs is fun (R)
    1. Strongly agree
    2. Agree
    3. Neutral
    4. Disagree
    5. Strongly disagree
5. Many things are much riskier than trying drugs (R)
    1. Strongly agree
    2. Agree
    3. Neutral
    4. Disagree
    5. Strongly disagree
6. Everyone who tries drugs eventually regret it
    1. Strongly agree
    2. Agree
    3. Neutral
    4. Disagree
    5. Strongly disagree
7. The laws about illegal drugs should be made stronger
    1. Strongly agree
    2. Agree

3. Neutral
4. Disagree
5. Strongly disagre

8. Drug use is one of the biggest evils in the country
    1. Strongly agree
    2. Agree
    3. Neutral
    4. Disagree
    5. Strongly disagree
9. Drugs help people to experience life in full (R)
    1. Strongly agree
    2. Agree
    3. Neutral
    4. Disagree
    5. Strongly disagree
10. Schools should teach about the real hazards of taking drugs
    1. Strongly agree
    2. Agree
    3. Neutral
    4. Disagree
    5. Strongly disagree
11. The police should not be annoying young people who are trying drugs (R)
    1. Strongly agree
    2. Agree
    3. Neutral
    4. Disagree
    5. Strongly disagree
12. To experiment with drugs is to give away control of your life
    1. Strongly agree
    2. Agree
    3. Neutral
    4. Disagree
    5. Strongly disagree

Computing of scores: Items 2, 3, 6, 7, 8, 10, 12 should be scored '1' for 'strongly agree' to '5' for 'strongly disagree'. Remaining items 1, 4, 5, 9, 11 should be scored in the opposite way ('5' for 'strongly agree' to '1' for 'strongly disagree'). To obtain the attitude score for each individual, items should be added and then divided by the number of questions in the questionnaire (12). A score of 5 will indicate a totally favorable attitude towards drug use while a score of 1 will indicate a totally unfavorable attitude towards drug use. Any participant who does not answer all 12 questions should be excluded from analysis as total scores are accumulated by dividing the score by 12.

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