

Measuring the Level of Knowledge About Addiction to Substances Among University Students

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Abstract: The paper is described as a psychoactive substance in the literature and has been used historically in practically all civilizations as a narcotic, sedative, recreational, and medicinal substance. One of the things that negatively affects society everywhere is drug addiction. Substance abuse has become a major issue affecting psychosocial, cultural, economic, and societal aspects. Its use has physiological and psychological effects on the individual. The study adopted a quantitative research design. An online quantitative survey was conducted with a simple random technique in order to evaluate the knowledge of the university students in İstanbul about addiction disease. For the questionnaire, the addiction information scale was used. This Istanbul-based study discusses the definition of addiction. It measures university students' knowledge of the factors that lead to substance use, as well as biases against individuals who use addictive substances, behavioural patterns caused by these prejudices, and methods that should be used to raise awareness among university students as a result of the findings.

Keywords: Addiction Students; Drug Abuse; Students Awareness; Narcotic Substances; Hallucinogenic Substances; Behavior and Society; Stigmatization and Rehabilitation; Impact on Society.

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1. Introduction

Psychoactive substances have been mentioned throughout the literature as drugs that have been used historically across almost all cultures, serving as pleasurable sedatives, recreational agents, and medicinal treatments [25]. Over time, drug use has become a significant global issue, negatively impacting societies on multiple levels, including psychosocial, cultural, economic, and societal aspects [6]. The physiological and psychological effects of substance abuse on individuals are profound, leading to addiction, which is treated as a disease due to the alterations it causes in brain chemistry. Despite the availability of therapy and treatment options for addiction, societal patterns and misconceptions about drug use often prevent individuals from seeking help, leading to a broader spread of substance abuse [20]. However, recent medical research has uncovered the potential therapeutic benefits of certain psychoactive substances, particularly in the management of psychiatric disorders, when used in controlled clinical settings [1].

Narcotic substances have been used since the beginning of human history, not only for medicinal purposes but also in recreational and religious contexts [26]. The consumption of these substances has historically increased due to their pleasant effects, inspiring artistic expressions and cultural rituals in various civilizations [8]. As societies have migrated and encountered

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new environments, they have discovered and incorporated new substances into their cultures, linking drug use with social structures and cultural practices [6]. Addiction, in this context, is understood as an individual's compulsion to act and think in response to substances outside of their control, driven by physical and spiritual needs that escalate into chronic use [12].

Substance abuse is now recognized as one of the most serious and widespread social issues of our time, affecting individuals, families, and entire societies [11]. The consequences of drug addiction extend beyond the individual user, influencing the culture, economy, and social dynamics of communities [14]. People who have a substance use disorder often face a range of psychological, physical, and emotional challenges exacerbated by the social exclusion they experience [3]. This exclusion leads to the loss of social, spiritual, and economic support systems, further isolating the individual and creating a cycle of desperation and societal disruption [9].

The significance of this study lies in its aim to assess university students' attitudes toward addiction, their prejudices, and their knowledge about the causes and consequences of substance abuse. By understanding these factors, the study seeks to identify key areas where educational efforts can be focused to improve knowledge levels and reduce biases among university students. The study's objectives include analyzing the demographic details of respondents, assessing the knowledge level of university students regarding substance abuse, and determining how knowledge levels vary based on gender and the course of study.

2. Review of Literature

Substance abuse and addiction have long been recognized as significant issues with deep historical and cultural roots [7]; [18]. Throughout history, psychoactive substances have been used across various cultures, not only for their medicinal properties but also for recreational and religious purposes [2]. The literature describes these substances as having a substantial impact on society, influencing psychosocial, cultural, economic, and societal aspects on a global scale.

In primitive societies, hallucinogenic substances such as cannabis, coca leaves, and opium were commonly used in tribal rituals to achieve altered states of consciousness [8]. For example, the Aztec and Mayan civilizations used hallucinogenic mushrooms in shamanic ceremonies [5]. Similarly, the use of coca leaves by South American Indians to combat harsh natural conditions and fatigue remains a practice today [15]. These examples illustrate the long-standing relationship between human societies and psychoactive substances, which have often been integrated into cultural and religious practices.

The literature also highlights the evolving perceptions and definitions of substance abuse. In different historical periods and cultures, drugs have had various meanings and roles [13]. For instance, in Hindu texts dating back 3,000 years, cannabis was revered, while in ancient Rome and Greece, opium was widely used to treat a range of diseases and ailments [19]. The widespread use of these substances in ancient civilizations, including Egypt, Persia, and India, underscores their importance as both medicinal and divine herbs.

Addiction, as defined in the literature, is a condition where an individual becomes physically and psychologically dependent on a substance [19]. This dependence is often characterized by an increasing tolerance to the substance, leading to higher consumption levels and a stronger compulsion to use. The false sense of comfort and happiness produced by these substances creates a cycle of addiction that significantly alters the individual's perception of reality and behaviour. The literature emphasizes that addiction is not merely a personal issue but a widespread social problem that affects not only the individual but also their family, society, and the cultural and economic dynamics of their community.

Moreover, the literature discusses the impact of substance abuse on social integration and communication [24]. People with substance use disorders are often socially marginalized, leading to a loss of social, spiritual, and economic support systems. This social exclusion exacerbates the psychological and emotional challenges faced by those with addiction, further isolating them from society [10]. The negative behaviours associated with substance use, such as hostile attitudes and inconsistent actions, are recognized by society, which often leads to further stigmatization and rejection of the individual [16].

The literature also underscores the significance of understanding societal attitudes toward addiction. Prejudices and misconceptions about substance use can hinder effective treatment and rehabilitation efforts [17]. Society's failure to treat addiction as a disease, coupled with the stigma attached to drug use, often results in individuals not being directed to appropriate treatment [16]; [17]. This highlights the importance of addressing societal attitudes and increasing awareness about addiction as a disease, requiring a comprehensive approach to treatment and support.

The literature provides a comprehensive overview of the historical, cultural, and social aspects of substance abuse and addiction. It underscores the need for a deeper understanding of addiction as a multifaceted issue that affects individuals and society on various levels [21]. Addressing the stigma and misconceptions surrounding addiction is crucial for improving treatment outcomes and supporting individuals in overcoming substance dependence.

Therefore, one possible research gap in this study could be related to lacking detail about how contemporary societal dynamics among university students in Istanbul- may affect perceptions and knowledge levels of substance addiction. If the literature does indeed suggest this and we believe it would generally support such an assertion, then what the literature lacks is analysis not merely that situates drug use in its historical, cultural context [22]; [23] but also locates recent factors like new technologies or familial practices within sociologically driven analyses of their shaping social realities around addiction. The gap is especially consequential in university students, who are the next generation that will not only reinforce future social norms but also potentially influence them. Such a shift could provide insight into the effectiveness of existing educational interventions and ideas for more focused approaches to advancing understanding of drug use, misuse, and addiction.

3. Research Methodology

3.1. Research Design

This study adopts an explorative research design aimed at evaluating the knowledge, attitudes, and behaviours of university students in Istanbul regarding substance addiction. Given the scope and objectives of the research, an online quantitative survey was deemed the most appropriate method. This approach allows for the systematic collection of data from a broad and diverse student population, facilitating the analysis of trends and correlations related to substance addiction awareness and perceptions. Two key hypotheses guide the study:

- H1.0: There is no significant relationship between knowledge, consequences, and participants' course of study.
- H1.1: There is a significant relationship between knowledge, consequences, and participants' course of study.
- H2.0: There is no significant relationship between gender and awareness of substance use.
- H2.1: There is a significant relationship between gender and awareness of substance use.

3.2. Population and Sample of the Study

The target population for this study includes university students in Istanbul. The primary aim is to assess the knowledge and attitudes of these students toward substance addiction, specifically examining any prejudices or misconceptions they may hold. The study seeks to evaluate the extent of students' understanding of the physiological and psychological consequences of substance use, the symptoms associated with addiction, the factors contributing to substance dependence, and their perceptions of individuals who are addicted. According to data from the Istanbul governorship, approximately 1,000,834 students are registered in higher education institutions across the city. Based on the Raosoft sample size calculator, which accounts for a population of 1,000,834 with a 5% margin of error and a 60% response distribution estimate, a sample size of 369 participants was determined to be appropriate for this study.

3.3. Data Collection

Tools for Data Collection: Data will be collected using a well-structured online survey, which will be distributed via Google Forms. The survey is based on the "Questionnaire on Attitudes and Behaviors towards Individuals Using Addictive Substances," developed by [4] and originally tested in Manisa. This questionnaire, designed to assess attitudes and behaviours toward substance users, consists of 27 items structured in a single-factor format. Participants can score between 27 and 135 points on the scale, with higher scores indicating stronger disapproval of individuals who use addictive substances. The scale has been validated for reliability, boasting a high Cronbach Alpha coefficient of 0.841. The online survey method was selected to facilitate widespread participation while maintaining accessibility and ease of use. The survey link will be disseminated through various social media platforms and network channels to ensure it reaches the target population of university students in Istanbul.

3.4. Technique of Data Collection

Participants will complete the survey using their computers or smartphones. The survey link will be strategically shared across different social media networks, with particular emphasis on class groups and student club messaging groups to maximize reach and response rates. This approach ensures that the data collection process is inclusive, allowing for the participation of a diverse range of students.

3.5. Mode of Analysis

The collected data will be analyzed using a combination of descriptive and inferential statistical methods. Descriptive statistics, including frequency distributions, simple percentages, means, and cross-tabulations, will be employed to summarize the demographic characteristics of the respondents and their responses to the survey items. Inferential statistics, specifically

Analysis of Variance (ANOVA), will be used to test the study's hypotheses and assess the relationships between key variables, such as the participants' course of study, gender, and their knowledge and attitudes toward substance use.

SPSS version 29.0.2.0 (20) will be utilized for all statistical analyses, including normality assessments, to ensure the validity of the data. The ANOVA Post Hoc test will be applied to compare demographic groups. In contrast, the ANOVA F test will be performed to determine whether significant differences exist between the sexes regarding their knowledge and attitudes toward substance use. This comprehensive analysis approach will help identify any significant patterns or correlations, providing insights into the factors influencing students' perceptions and awareness of substance addiction.

4. Results

Within the parameters of the study, 369 persons were surveyed. The participants are between the ages of 18 and 44, and the average age is 21 (Table 1).

| | Ν | Minimum | Maximum | Mean | Std. Deviation |
|-----|-----|---------|---------|-------|----------------|
| Age | 369 | 18 | 44 | 21.15 | 2.628 |

Table 1: Age distribution of Respondents

Figure 1 displays the participants' age distribution. The majority of the students in this cohort are between the ages of 19 and 22.

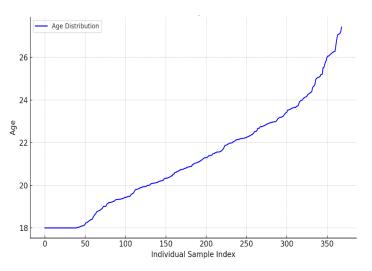


Figure 1: Histogram of Age Distribution

The age distribution of the participants is as follows: 19, 22, 21, 23, 18, 24, 25, and up to 20 years old. In the age range of 29 to 44, the smallest group of participants is still present. Twenty-year-olds make up the majority of the 80 participants (Table 2).

| Table 2: | Gender | Distribution |
|----------|--------|--------------|
|----------|--------|--------------|

| | Frequency | Percent |
|----------------------|-----------|---------|
| Female | 209 | 56.6 |
| Male | 143 | 38.8 |
| Prefer Not to Answer | 14 | 3.8 |
| Other | 3 | .8 |
| Total | 369 | 100.0 |

The study's findings revealed that of the individuals contacted, 209 persons with 56.6% were female, 143 persons with 38.8% were male, 3 participants with 0.8% identified as another gender, and 14 persons with 3.8% preferred not to answer their gender. It is seen that there are more female participants in the histogram distribution (Table 3).

| | | Frequency | Percent |
|---------|---|-----------|---------|
| Faculty | Faculty of physical education and sports | 3 | .8 |
| | Faculty of Fine Art | 24 | 6.5 |
| | Faculty of Economic and Administrative Sciences | 73 | 19.8 |
| | Faculty of Engineering and Architecture | 29 | 7.9 |
| | Faculty of Health Sciences | 105 | 28.5 |
| | Vocational School of Health Services | 32 | 8.7 |
| | Faculty of Applied Sciences | 27 | 7.3 |
| | Vocational School | 33 | 8.9 |
| | Faculty of Pharmacy | 5 | 1.4 |
| | Faculty of Science and Letters | 25 | 6.8 |
| | Faculty of Veterinary Medicine | 1 | .3 |
| | Faculty of Law | 1 | .3 |
| | Faculty of Theology | 4 | 1.1 |
| | Faculty of Educational Sciences | 7 | 1.9 |
| | Total | 369 | 100.0 |

Table 3: Education Details

The vast majority of the participants are from the faculty of health sciences, with 105 participants and a rate of 28.5%. There are 73 students from the Faculty of Economic and Administrative Sciences with a rate of %19,8. Then, Vocational Schools with 8.9 and Vocational Schools of Health Services with 8.7%, Faculty of Engineering and Architecture with 29 students and 7,9% are followed by the least participants from veterinary medicine and law faculties with 0.3%.

| Scale | Frequency Percentage | Strongly agree | Agree | Neither agree or disagree | Disagree | Strongly disagree |
|---|---|-------------------|-------|---------------------------------|----------|----------------------|
| 1. Addictive substance users are dang | 30.9 | 42.3 | 15.4 | 7.9 | 3.5 | |
| 2. I don't want to make friends with p or alcohol. | eople who are addicted to drugs | 37.9 | 34.7 | 16 | 8.1 | 3.3 |
| 3. No one believes the word of peopl | e who use addictive substances. | 32.8 | 36.6 | 20.9 | 7 | 2.7 |
| 4. Addicts should not be allowed to v | vork in any capacity. | 26.3 | 25.2 | 21.1 | 20.6 | 6.8 |
| 5. People who use addictive substance | es endanger society. | 37.4 | 44.7 | 11.7 | 4.6 | 1.6 |
| 6. Addiction to substance abuse is a c | lisease. | 50.9 | 25.5 | 13 | 6.5 | 4.1 |
| 7. Individuals who abuse addictive substances only harm themselves. | | 23 | 31.7 | 8.7 | 19.8 | 16.8 |
| 8. People who abuse addictive substa | nces are impolite. | 14.4 | 27.4 | 31.7 | 21.1 | 5.4 |
| 9. Addicts should not be allowed to r | 9. Addicts should not be allowed to move freely in society. | | | 14.6 | 16 | 4.9 |
| 10. People who abuse addictive subst decisions about their own lives. | ances are unable to make sound | 43.1 | 41.2 | 9.8 | 5.1 | 0.8 |
| 11. I can go about my daily activities to drugs. | s with someone who is addicted | 18.7 | 25.2 | 25.7 | 20.1 | 10.3 |
| 12. I am able to converse with and who use addictive substances. | form relationships with people | 14.9 | 14.6 | 30.1 | 27.1 | 13.3 |
| 13. I would be ashamed if someon substances. | e in my family used addictive | 22.5 | 26 | 22.5 | 19.2 | 9.8 |
| 14. I try to avoid people who use add | ictive substances. | 38.8 | 36.3 | 12.5 | 7.9 | 4.6 |
| 15. I can empathize with people who | use addictive substances. | 8.7 | 13 | 27.4 | 28.5 | 22.5 |
| 16. I believe that people who use a personalities. | ddictive substances have weak | 29 | 31.4 | 21.4 | 13 | 5.1 |
| 17. Addictive substance users are mo | re likely to commit crimes. | 48.5 | 31.2 | 13 | 4.1 | 3.3 |

| 18. I do not believe that people who use addictive substances will stop using the substance. | 12.2 | 23.6 | 23 | 25.7 | 15.4 |
|--|------|------|------|------|------|
| 19. The use of addictive substances does not preclude a person from fulfilling his or her family roles and responsibilities. | 23.6 | 28.2 | 17.3 | 16.5 | 14.4 |
| 20. The use of addictive substances does not preclude a person from carrying out his or her responsibilities at work. | 19.2 | 26.6 | 27.4 | 15.7 | 11.1 |
| 21. I do not believe it is appropriate to give important positions in business to people who use addictive substances. | 34.4 | 29.8 | 22.2 | 9.8 | 3.8 |
| 22. Even after treatment, people who use addictive substances should continue to work in low-wage jobs. | 8.9 | 14.9 | 26.6 | 23.6 | 26 |
| 23. People who use addictive substances suffer from psychological issues. | 36.3 | 36 | 18.7 | 6 | 3 |
| 24. I try not to interact with people who are addicted to drugs or alcohol. | 26.3 | 35.5 | 16.5 | 15.7 | 6 |
| 25. I am afraid of people who are addicted to drugs. | 26.3 | 31.4 | 15.7 | 16.5 | 10 |
| 26. People who use addictive substances do not want to be treated in order to stop using the substance. | 19.5 | 29.3 | 29 | 15.7 | 6.5 |
| 27. It is impossible for someone who is addicted to recover, no matter how much treatment they receive. | 11.4 | 13 | 19.2 | 24.9 | 31.4 |

As we can see in Table 4, According to the statement 'Addictive substance users are dangerous people' given in the question, the participants must agree, 42.3% and 30.9% strongly agree. "No one believes the word of people who use addictive substances." Students have marked that they agree with the statement, with 36.6% fully agree with 32.8%.

People who abuse addictive substances are impolite. "In the statement, the majority of the participants indicated that they Neither agree nor disagree with a rate of 31.7%, while 27.4% agreed.

The 16th statement is, "I believe that people who use addictive substances have weak personalities". Students' highest rate is %31,4 to agree, and the rate of %29 with strongly agree.

48.5% of the respondents strongly agree with the idea that "Addictive substance users are more likely to commit crimes," while 31.2%.

Of the students, 3.4% agreed with the 25th statement, "I am afraid of people who are addicted to drugs," and 26.3% strongly agreed.

It was shown that most participants answered these questions negatively overall. Research has shown that college students have unfavourable thoughts about drug users.

The response to the question "I don't want to be friends with people who are addicted to drugs or alcohol" showed that 34.7% of respondents agreed and 37.9% absolutely agreed.

Participants state that in the expression "I can continue my daily activities with someone who is addicted to drugs", 25.7% Neither agree nor disagree; close to this ratio, 25.2% agree.

Of the responses given to the 12th phase, the highest proportion is Neighter agree or disagree with 30.1%, followed by those who disagree with 27.1%.

They showed that 38.8% of the students who participated strongly agreed, and 36.3% agreed on the 14th. Participants in the 15th statement expressed disagreement in 28.5% of cases and undecidedness in 27.4% of cases.

University students tend to avoid developing intimate ties with substance-addicted persons in their social lives, as seen by the overall distribution of replies.

Upon analyzing the distribution of responses to the substance abuse-related objects on the scale, In reference to the sixth statement, the majority of participants said that they agreed with 25.5% and strongly agreed with 50.9% of them.

In the twenty-third question, it was measured that they strongly agreed with 36.3% and that they agreed with the closest 36% to this ratio. The majority of the participating university students were aware of addiction, according to an analysis of the answer rates for the two questions.

The answers given to the 27th question were marked strongly disagree, with a rate of 31.4%, while disagree was marked with 24.9. University students have an incomplete and inaccurate understanding of this subject (Table 5).

| | | | Statistic | Std. Error |
|------|--|-------------|-----------|------------|
| BMYT | Mean | | 68.5881 | .73291 |
| | 95% Confidence Interval for Mean Lower Bound | | 67.1469 | |
| | | Upper Bound | 70.0293 | |
| | 5% Trimmed Mean | 68.4678 | | |
| | Median | Median | | |
| | Variance | 198.210 | | |
| | Std. Deviation | 14.07872 | | |
| | Minimum | 27.00 | | |
| | Maximum | Maximum | | |
| | Range | 100.00 | | |

Table 5: Descriptives of BMYT (Attitudes and Behaviors Towards Individuals Using Addictive Substances) Scale

The participants' scale scores of Attitudes and Behaviors towards Individuals Using Addictive Substances range from 27 to 127 points. The mean value is 68.5. (S.D.=.73291). The results of the normality test show that, despite the variance value appearing to be large, the score is distributed normally. ($\alpha = 0.074$).

The scale has a single-factor structure with 27 items, and the lowest possible score is 27, while the highest possible score is 135 for participants. An increase in the overall score on the scale denotes growing disapproval of those who use addictive drugs. This information indicates that the data gathered indicates that college students' perceptions of those who use drugs are still below average and are more favourable.

| | | | | | 95% Confidence Interval for Mean | | | |
|---------------|-----|---------|-------------------|---------------|-------------------------------------|-------------|---------|---------|
| | Ν | Mean | Std. Deviation | Std. Error | Lower Bound | Upper Bound | Minimum | Maximum |
| Female | 209 | 67.8708 | 13.48958 | .93309 | 66.0313 | 69.7103 | 27.00 | 125.00 |
| Male | 143 | 68.5734 | 14.31511 | 1.19709 | 66.2070 | 70.9398 | 27.00 | 127.00 |
| Prefer Not to | 14 | 77.5000 | 18.57107 | 4.96333 | 66.7774 | 88.2226 | 52.00 | 125.00 |
| Answer | | | | | | | | |
| Other | 3 | 77.6667 | 4.61880 | 2.66667 | 66.1929 | 89.1404 | 75.00 | 83.00 |
| Total | 369 | 68.5881 | 14.07872 | .73291 | 67.1469 | 70.0293 | 27.00 | 127.00 |

Table 6: Scale Distribution Between Genders

There was no significant difference in the test findings, as can be shown in Table 6, which was created using the BYMT scale ANOVA post-hoc to assess if the responses provided according to the participants' gender variable revealed a significant difference.

The 95% reliability score findings fall between the lowest (66) and highest (88) point range. Both females and males preferred not to Answer participants who rated 52, the Other 89, the lowest score was determined to be 27 points, and the maximum score was determined to be 127 points for males.

4.1. Hypothesis 1

H1.0: There is no significant relationship between knowledge, consequences, and participants faculty.

H1.1: There is a significant relationship between knowledge, consequences, and their participants' faculty.

| ANOVA BMYT | | | | | | | | | |
|--------------------------------------|-----------|-----|----------|---------|-------|--|--|--|--|
| Sum of Squares df Mean Square F Sig. | | | | | | | | | |
| Between Groups | 67188.168 | 13 | 5168.321 | 318.909 | <.001 | | | | |
| Within Groups | 5753.219 | 355 | 16.206 | | | | | | |
| Total | 72941.388 | 368 | | | | | | | |

Table 7: Level of Knowledge Based on Gender and Course Study

This hypothesis examining the relationship between faculty and addiction knowledge levels was tested using ANOVA Post Hoc (Table 7). The results showed no significant relationship ($\alpha < 0.001$). This suggests that educational background does not significantly influence knowledge about addiction, indicating the need for universal educational interventions across faculties.

4.2. Hypothesis 2

H2.0 - There is no significant relationship between gender and awareness of substance use H2.1 - There is a significant relationship between gender and awareness of substance use

| ANOVA BMYT | | | | | | | | |
|--------------------------------------|-----------|-----|---------|-------|------|--|--|--|
| Sum of Squares Df Mean Square F Sig. | | | | | | | | |
| Between Groups | 1466.730 | 3 | 488.910 | 2.497 | .060 | | | |
| Within Groups | 71474.658 | 365 | 195.821 | | | | | |
| Total | 72941.388 | 368 | | | | | | |

Table 8: Relationship between BMYT and Genders

Upon using the ANOVA F-test to examine the possibility of a significant difference in scale score between the sexes (Table 8), no significant difference was found (α = 0.060). This indicates the scores of the sexes are mostly similar to one another, as are the attitudes and knowledge of addiction among the various sexes.

5. Discussion

The findings of this study provide significant insights into the perceptions, attitudes, and knowledge of university students in Istanbul regarding substance addiction. The data reveals a considerable stigma attached to individuals who use addictive substances, with a large percentage of participants expressing negative attitudes toward substance users. For instance, the fact that 42.3% of the participants agreed and 30.9% strongly agreed with the statement that "Addictive substance users are dangerous people" indicates a pervasive fear and mistrust of substance users. This stigma is further evidenced by the high percentage of participants who expressed reluctance to form friendships with substance users (37.9% strongly agreed and 34.7% agreed). Such social exclusion tendencies suggest a lack of empathy and understanding, which are crucial for fostering supportive environments that can aid in the recovery of individuals struggling with addiction.

The impact of substance abuse on society was also a major concern among the participants. A significant majority (37.4% strongly agreed and 44.7% agreed) viewed substance users as detrimental to society. This perception underscores the need for public education initiatives aimed at shifting these views towards more supportive and constructive attitudes. While 50.9% of participants strongly agreed that addiction is a disease, there appears to be a disconnect between recognizing addiction as a medical condition and fully integrating this understanding into societal attitudes toward those affected. The study also highlights mixed views on the broader impact of substance abuse. While a notable portion of participants (31.7%) agreed that substance abusers only harm themselves, 16.8% strongly disagreed, reflecting varying levels of awareness regarding the societal implications of addiction. The belief that substance abusers are impolite, supported by 27.4% of participants, also indicates a lingering negative perception of the social behaviours of people with a substance use disorder. This perception could be mitigated through awareness programs that focus on the humanization of individuals dealing with addiction, thus reducing stigma and fostering a more inclusive society.

Another critical finding was the restrictive views toward people with a substance use disorder, particularly the belief that they should not be allowed to move freely in society (43.2% strongly agreed. 41.2% agreed). Such attitudes contribute to the marginalization of substance users, making their reintegration into society post-recovery more challenging. The skepticism about the decision-making abilities of substance abusers (43.1% strongly agreed. 41.2% agreed) further highlights the lack of

faith in the ability of people with a substance use disorder to manage their lives, which could adversely affect their recovery and social reintegration opportunities.

The ambivalence was observed in participants' willingness to interact with substance users in their daily lives, with 25.7% neither agreeing nor disagreeing and 25.2% agreeing, suggesting a potential openness to interaction under certain circumstances. This ambivalence could be leveraged through targeted social programs aimed at reducing stigma and promoting more positive interactions between the general public and those recovering from addiction. Interestingly, the perceptions of addiction's severity were also influenced by moralistic views, with 48.5% strongly agreeing that people who use addictive substances have weak personalities. This perspective emphasizes personal failure over medical or psychological factors, reinforcing the need for educational efforts that highlight the complex nature of addiction. Additionally, the strong association between substance use and criminal tendencies. as indicated by 48.5% of participants, further underscores the stigma associated with addiction and the importance of separating criminal behaviour from the disease of addiction in public perceptions.

The hypothesis testing revealed that there is no significant relationship between the educational background (faculty) of participants and their knowledge about addiction, suggesting that addiction-related knowledge is uniformly distributed across different academic disciplines. This finding points to the need for universal educational interventions across all faculties to enhance addiction awareness. Similarly, the lack of significant difference between genders in substance use awareness indicates that both male and female students hold similar levels of awareness, supporting the effectiveness of gender-neutral educational strategies. This study underscores the pervasive stigma and negative attitudes towards substance users among university students in Istanbul. Despite some recognition of addiction as a disease, there remains a significant gap in understanding and empathy, which could hinder the effectiveness of support mechanisms for individuals struggling with addiction. These findings highlight the urgent need for comprehensive educational programs aimed at reducing stigma, enhancing awareness, and promoting a more supportive societal approach to addiction and recovery.

6. Conclusion

The study highlights significant stigma and negative perceptions towards individuals who use addictive substances among university students. Despite a general acknowledgement of addiction as a disease, negative attitudes remain prevalent, indicating a gap between knowledge and attitudes. Interestingly, the study found no significant differences in addiction knowledge across various faculties and genders, suggesting that these negative perceptions are deeply ingrained and widespread across the student population. These findings emphasize the urgent need for targeted educational programs that go beyond mere information dissemination. Such programs should aim to correct misconceptions about addiction, reduce stigma, and foster empathy for those affected by substance dependence. By addressing these biases, universities can create a more supportive environment that encourages individuals struggling with addiction to seek help without fear of judgment. Comprehensive awareness campaigns are essential for promoting compassion and understanding, ultimately aiding in the recovery and social reintegration of individuals dealing with substance use issues. Through concerted efforts to change attitudes, universities can play a critical role in supporting students' mental health and promoting a healthier, more inclusive campus culture.

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References

- 1. A. Garcia-Romeu, B. Kersgaard, and P. H. Addy, "Clinical applications of hallucinogens: A review," Exp. Clin. Psychopharmacol., vol. 24, no. 4, pp. 229–268, 2016.
- 2. C. S. Martin, T. Chung, and J. W. Langenbucher, Historical and Cultural Perspectives on Substance Use and Substance Use Disorders, Oxford University Press, Oxford, Chennai, pp. 29–49, 2014.

- D. C. Daley and M. D. Feit, "The many roles of social workers in the prevention and treatment of alcohol and drug addiction: A major health and social problem affecting individuals, families, and society," Soc. Work Public Health, vol. 28, no. 3–4, pp. 159–164, 2013.
- F. Aragón-Poce, E. Martínez-Fernández, C. Márquez-Espinós, A. Pérez, R. Mora, and L. M. Torres, "History of opium," Int. Congr. Ser., vol. 1242, no. 12, pp. 19–21, 2002.
- F. J. Carod-Artal, "Hallucinogenic drugs in pre-Columbian Mesoamerican cultures," Neurol. (Engl. Ed.), vol. 30, no. 1, pp. 42–49, 2015.
- 6. G. Wadley, "How psychoactive drugs shape human culture: A multi-disciplinary perspective," Brain Res. Bull., vol. 126, no. Pt 1, pp. 138–151, 2016.
- H. Nawaz, A. A. Khan, and S. Bukhari, "Use of psychoactive drugs among medical undergraduates in Abbottabad," J. Ayub Med. Coll. Abbottabad, vol. 29, no. 4, pp. 599–603, 2017.
- H. U. Sayin, "The consumption of psychoactive plants in ancient global and Anatolian cultures during religious rituals: The roots of the eruption of mythological figures and common symbols in religions and myths," Neuroquantology, vol. 12, no. 2, pp. 276–296, 2014.
- 9. J. A. Farrow, R. W. Deisher, R. Brown, J. W. Kulig, and M. D. Kipke, "Health and health needs of homeless and runaway youth," J. Adolesc. Health, vol. 13, no. 8, pp. 717–726, 1992.
- 10. L. H. Yang, L. Y. Wong, M. M. Grivel, and D. S. Hasin, "Stigma and substance use disorders: An international phenomenon," Curr. Opin. Psychiatry, vol. 30, no. 5, pp. 378–388, 2017.
- L. R. Gowing et al., "Global statistics on addictive behaviours: 2014 status report: Addiction global statistics," Addiction, vol. 110, no. 6, pp. 904–919, 2015.
- 12. M. Adrian, "A critical perspective on cross-cultural contexts for addiction and multiculturalism: their meanings and implications in the substance use field," Subst. Use misuse, vol. 37, no. 8–10, pp. 853–900, 2002.
- 13. M. Copaceanu and C. Balaceanu-Stolnici, "A theoretical transdisciplinary approach to drug use: History, anthropology, and culture," Transdiscipl. J. Eng. Sci., vol. 9, no. 1, pp. 3–11, 2018.
- 14. M. J. Ignaszewski, "The epidemiology of drug abuse," J. Clin. Pharmacol., vol. 61, no. S2, pp. S10–S17, 2021.
- M. J. Miller, J. Albarracin-Jordan, C. Moore, and J. M. Capriles, "Chemical evidence for the use of multiple psychotropic plants in a 1,000-year-old ritual bundle from South America," Proc. Natl. Acad. Sci. U. S. A., vol. 116, no. 23, pp. 11207–11212, 2019.
- 16. M. Kulesza, "Substance use related stigma: What we know and the way forward," J. Addict. Behav. Ther. Rehabil., vol. 2, no. 2, p. 782, 2013.
- M. Kulesza, M. Matsuda, J. J. Ramirez, A. J. Werntz, B. A. Teachman, and K. P. Lindgren, "Towards greater understanding of addiction stigma: Intersectionality with race/ethnicity and gender," Drug Alcohol Depend., vol. 169, no. 12, pp. 85–91, 2016.
- M. L. Prendergast, "Substance use and abuse among college students: A review of recent literature," J. Am. Coll. Health, vol. 43, no. 3, pp. 99–113, 1994.
- M.-A. Crocq, "Historical and cultural aspects of man's relationship with addictive drugs," Dialogues Clin. Neurosci., vol. 9, no. 4, pp. 355–361, 2007.
- N. D. Volkow, G. F. Koob, and A. T. McLellan, "Neurobiologic advances from the brain disease model of addiction," N. Engl. J. Med., vol. 374, no. 4, pp. 363–371, 2016.
- 21. N. H. Kalin, "Substance use disorders and addiction: Mechanisms, trends, and treatment implications," Am. J. Psychiatry, vol. 177, no. 11, pp. 1015–1018, 2020.
- 22. N. Ozerkmen, "A study of fifty drug users in Ankara, Turkey," Addict. Res. Theory, vol. 13, no. 2, pp. 171–178, 2005.
- S. Toprak, I. Cetin, E. Akgul, and G. Can, "Factors associated with illicit drug abuse among Turkish college students," J. Addict. Med., vol. 4, no. 2, pp. 93–98, 2010.
- T. R. Soron, P. M. Asraful Siddike, H. U. Ahmed, and C. A. Chowdhury, "Social and family determinants of substance abuse among the patients of two hospitals in Bangladesh," J. Addict. Res. Ther., vol. 8, no. 4, pp. 1–4, 2017.
- 25. W. C. Bowman, "Drugs ancient and modern," Scott. Med. J., vol. 24, no. 2, pp. 131–140, 1979.
- 26. W. Johnson, "Psychiatry might need some psychedelic therapy," Int. Rev. Psychiatry, vol. 30, no. 4, pp. 285–290, 2018.