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Addictive Behaviours and Mental Health Outcomes: A Quantitative Comparative Study

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Abstract: The objective of the study was to examine the relationship between addictive behaviours, i.e., drug addiction and gaming addiction, and mental health outcomes, namely depression, anxiety, and stress. It also aimed to compare individuals with drug addiction and gaming addiction with respect to these outcomes. The study employed a cross-sectional design with purposive sampling, including Pakistani university students aged 18 to 30 who had been either gaming or using drugs for at least one year. Three instruments were used: the *Drug Abuse Screening Test-10 (DAST-10)*, the *Gaming Addiction Scale for Adolescents (GASA; 21 items)*, and the *Depression Anxiety Stress Scale (DASS-21)*. The inclusion criteria required a cutoff score: individuals had to score at least 84 out of 105 on the *Gaming Addiction Scale for Adolescents* or 6 out of 10 on the *Drug Abuse Screening Test* to qualify as addicted to gaming or drugs. Findings revealed that drug addiction had a significant relationship with depression, anxiety, and stress, while gaming addiction was significantly related to depression and anxiety but not stress. Mean comparisons showed that individuals with drug addiction scored significantly higher on depression and anxiety, and higher but not significantly on stress, than their counterparts with gaming addiction. This study contributes to the existing literature by highlighting the differential impact of drug and gaming addiction on mental health among Pakistani university students. The implications point toward the need for mental health awareness programs in universities, encouraging help-seeking behaviour, and reducing stigma toward individuals with addictions. Additionally, government and institutional support through counselling services and preventive strategies is essential to address these behavioural health challenges effectively.

Key Words: Drug Addiction, Gaming Addiction, Depression, Anxiety, Stress

Introduction

Addictive behaviors mean uncontrolled involvement in activities or substance use that are harmful to physical and psychological health and result in detrimental social outcomes, ruining daily proper functioning (Alimoradi et al., 2024; Bashir et al., 2024; Campanella et al., 2024; Shahid et al., 2024; Thombs & Osborn, 2019). They may comprise substance misuse such as alcohol, drugs, or nicotine, the combined use of multiple substances, or behavioural addictions including, but not limited to, gambling, gaming, internet use, sexual activity, exercise, and food (Fertu et al., 2025; Potenza, 2013; Sarollahi et al., 2025).

Recent and previous studies have depicted that two well-known addictive behaviors, i.e., substance addiction and gaming addiction, result in mental health outcomes such as depression, anxiety, and stress. Depression can be described

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as a low mood most of the day, nearly every day, with negative thoughts, worthlessness, hopelessness, reduced pleasure in daily activities, diminished interest in life, and even suicidal thoughts and attempts. Anxiety can be defined as a state of fear, tension, and uneasiness. It might result in sweating, restlessness, tension, rapid heartbeat, shallow breathing, or even freezing. Stress can be defined as a feeling of emotional or physical tension. It can come from any event or thought that makes one feel frustrated, angry, or nervous. Stress is the body's reaction to a challenge or demand (Chen et al., 2025; Dasare et al., 2025; Henriques et al., 2025).

A previous study compared depression, anxiety, stress, and quality of life in 100 opiate addicts from a quit addiction clinic in Rasht and 100 controls. Using the *Depression, Anxiety and Stress Scale-21* (*DASS-21*) and *Short Form-36 Health Survey* (*SF-36*), addicts reported greater stress, anxiety, and depression (Fooladi et al., 2014). An analytical study examined 110 drug-dependent individuals in Rasht, assessing depression, anxiety, and stress using the *DASS*. Results indicated significant psychological distress among participants. Findings highlight the need for addiction treatment and cognitive-behavioral therapy clinics to address these comorbidities for improved outcomes (Khakbaz et al., 2014). An earlier case-control study examined the effects of substance abuse on depression, anxiety, and stress. Using the *DASS-21* and demographic questionnaires, findings showed substance abusers had significantly higher psychological distress than non-users. Results emphasise early identification of psychological symptoms to design preventive and therapeutic interventions for reducing addiction-related problems (Farnia et al., 2021).

A previous study examined comorbidity between addictions and mental health problems among 4,002 Jewish adults in Israel using network analysis. Results revealed clustering of depression, anxiety, and stress, along with separate clusters of substance use, gambling, and technology-based behaviors. Distinct associations linked stress and anxiety with problematic smartphone use, and depression with gaming, internet, sedatives, and cannabis use. These findings highlight unique pathways of comorbidity, supporting targeted interventions for technology-based and substance-related addictions (Shmulewitz et al., 2024). Another study explored gaming addiction in relation to stress, anxiety, and depression. Using a cross-sectional design, data were collected through an online survey from 552 adults (mean age 24.9 years), with 52.3% from Australia. Measures included the *Computer Addiction-Engagement Scale* and the *DASS-21*, highlighting significant associations between gaming addiction and poorer mental health outcomes (Loton et al., 2016).

A systematic review examined gaming addiction, stress, anxiety, and depression during the COVID-19 pandemic. Following PRISMA guidelines, 24 studies were analyzed using PsycINFO, Web of Science, and Medline databases. Research showed that gaming reduced stress, anxiety, and depression in adolescents and young adults, but at-risk individuals, especially male youths, experienced detrimental effects linked to gaming disorder (Pallavicini et al., 2022). Another study examined the relationship between video gaming, depression, anxiety, and stress. Using a cross-sectional design and purposive sampling, data were collected from 171 students aged 15 and above at three universities and two colleges. Results showed excessive gaming was linked with negative mental health outcomes, while moderate play did not significantly harm psychological well-being (Sabri et al., 2020).

According to Engel (2003), the Biopsychosocial model is an integrative framework highlighting biological, psychological, and social factors that are associated with addictive behaviors and mental health outcomes, i.e., depression, anxiety, and stress. Biologically, alterations in neurotransmitters such as serotonin and dopamine often co-occur with tendencies toward addiction and depression, anxiety, and stress.

Dopamine is a neurotransmitter in the brain that regulates reward, mood, and motivation; its alteration affects mood significantly. Neuroimaging studies in the United States and China depicted that alteration of dopamine results in depression (Speranza et al., 2025). Studies have also depicted that alterations in serotonin are linked to both drug addiction behavior and mental health problems, i.e., depression, stress, and anxiety (Amiry et al., 2023; Correia et al., 2021; Pourhamzeh et al., 2022; Fluyau et al., 2022). According to the psychological factor of the Biopsychosocial model, maladaptive coping strategies, such as using drugs to manage academic stress, are linked to both drug addiction and mental health outcomes. The psychological factor of the model is consistent with previous and contemporary studies on university-enrolled students (Newbury-Birch et al., 2021; Razali et al., 2025; Torales et al., 2025). Socially, factors

like family environment, study pressure, peer influence, societal stressors, financial difficulties, and stigmatization are correlated with drug addiction and mental health problems. The social factor of the Biopsychosocial model is also supported by contemporary and previous studies among students across the globe (Katende, 2023; Nawaz et al., 2024; Schwenk et al., 2010; Soh et al., 2012).

According to the Interaction of Person-Affect-Cognition-Execution model (Brand et al., 2019), the model explains the interaction of four components: Personal factors (individual predispositions), Affective responses (emotions and mood), Cognitive processes (thoughts and biases), and Execution of behaviors (actions and executive control). In the case of individuals with gaming addiction, the personal factor could be an impulsive personality or sensation seeking. Affective responses may include escape from stressful work, i.e., academic activity, to gaming; however, the nature of the game also correlates with stress, anxiety, and depression symptoms, which further heighten these responses. Cognitive processes for gamers would include overemphasizing the rewards in the game and neglecting the negative consequences of gaming, thus indulging in the execution component of the game uncontrollably and developing addiction. Therefore, based on this theory, gaming addiction is significantly and positively associated with mental health outcomes, i.e., depression, anxiety, and stress. This relationship occurs because individuals with gaming addiction experience intense stress, emotional dysregulation, and competitive anxiety while clearing difficult levels, which is associated with depression, anxiety, and stress. Repeated exposure to games alters dopamine and serotonin in the brain, and peer pressure in the game also contributes to both addiction and such mental health outcomes. A contemporary study conducted on young adults, particularly students, supported this finding, revealing that problematic use of the online Ludo game has a positive and significant relationship with negative emotions, i.e., depression, anxiety, stress, and tension (Shahid et al., 2024).

Studies across the globe have shown that individuals with drug addiction experience higher levels of depression, anxiety, and stress than individuals with gaming addiction based on significance levels (Berg et al., 2013; Hassanbeigi et al., 2013; Scorzelli & Chaudhry, 2009; Shahid et al., 2024). However, these comparisons are not based on direct comparison within the same study, which is the gap that needs to be addressed.

There is substantial literature on drug addiction, gaming addiction, and their associations with mental health outcomes (i.e., depression, anxiety, and stress). However, studies directly comparing drug addiction and gaming addiction in relation to these outcomes are very limited, particularly among Pakistani university students. Therefore, this study aims to fill this gap by comparing individuals with drug addiction and gaming addiction on depression, anxiety, and stress, as well as by evaluating the relationships between these addictive behaviors and mental health outcomes to provide meaningful implications.

Hypotheses

H1: Drug addiction is likely to be positively and significantly associated with mental health outcomes, i.e., depression, anxiety, and stress, among Pakistani university students.

H2: Gaming addiction is likely to be positively and significantly associated with mental health outcomes, i.e., depression, anxiety, and stress, among Pakistani university students.

H3: There are likely to be significant mean differences between individuals with drug addiction and those with gaming addiction with respect to mental health outcomes, i.e., depression, anxiety, and stress, among Pakistani university students.

Method

Research Design and Sampling

The study utilized a cross-sectional correlational design and purposive sampling to recruit university students between the ages of 18 and 35. Participants included both men and women who had either been abusing drugs for at least one year or had engaged in gaming for a minimum of one year.

Instruments

Three instruments were utilized: *the Drug Abuse Screening Test (DAST-10)*, *the Gaming Addiction Scale for Adolescents (GASA),* and *the Depression Anxiety Stress Scale (DASS-21).*

Drug Abuse Screening Test (DAST-10)

The *Drug Abuse Screening Test (DAST)* was originally developed by Harvey A. Skinner (1982) as a 20-item instrument. Later, a shorter version comprising 10 items (*DAST-10*) was developed. The response format is dichotomous, with Yes = 1 and No = 0, except for item 3, where "No" is scored as 1. The internal consistency of the *DAST-10* has been reported to range between 0.81 and 0.84 (Johnson et al., 2025; Skinner, 1982; Skinner et al., 2024). In the present study, a cutoff score of 6 or higher was used as the screening and inclusion criterion for drug addiction.

Gaming Addiction Scale for Adolescents (GASA)

The *Gaming Addiction Scale for Adolescents (GASA)* consists of 21 items rated on a five-point Likert scale ranging from 1 (never) to 5 (very often). Higher scores indicate greater gaming addiction. The scale has demonstrated high internal consistency, with a Cronbach's alpha reliability coefficient of 0.84 (Lemmens et al., 2009). In this study, a score of 84 out of 105 was considered the cutoff and inclusion criterion for gaming addiction.

Depression Anxiety Stress Scale (DASS-21)

The *Depression Anxiety Stress Scale (DASS-21),* a shorter 21-item version of the original *DASS*, was employed to assess mental health outcomes. It uses a four-point Likert scale ranging from 0 (did not apply to me at all) to 3 (applied to me very much or most of the time). The *DASS-21* demonstrates strong internal consistency, with Cronbach's alpha values of 0.88 for depression, 0.82 for anxiety, and 0.90 for stress (Lovibond & Lovibond, 1995). This scale was used to measure depression, anxiety, and stress among individuals with addictive behaviors (i.e., drug or gaming addiction).

Ethical Standards and Procedure

The study adhered to the ethical standards of APA 7. Permission was taken from the institution before the commencement of the research. Additionally, authors of the instruments were contacted for permission to use the scales. Private and public university students from different cities of Pakistan, i.e., Islamabad, Karachi, Swat, and Lahore, were approached with a consent form, demographic questionnaire, and the study instruments. The consent form clearly stated that participation was voluntary, participants were not coerced, and they could withdraw at any stage. Confidentiality was ensured by not disclosing participant names. After signing the consent form, participants completed the demographic questionnaire, which included items on eligibility (drug use or gaming for at least one year), gender, sociodemographic details, and educational level (bachelor's, master's, or PhD).

Based on the demographic responses, participants were given either the *DAST-10* or the *GASA*, along with the *DASS-21*. The questionnaires were completed in approximately 20 minutes, after which participants were thanked for their contribution. Screening was applied according to the inclusion and exclusion criteria: participants scoring below 6 on the *DAST-10* or below 84 on the *GASA* were excluded. The rationale behind selecting the cutoff score of 6 is due to the level of severity of drug abuse, as scores between 6 and 8 are considered a substantial level of drug abuse (Villalobos-Gallegos et al., 2015). The rationale for using 84 as the cutoff score for individuals with gaming addiction is that higher levels of addiction depict greater severity and intensity toward the game. A score of 3 in general is considered an addictive score per item on average (Lemmens et al., 2009). However, the study intended to select intense online gamers, not just marginal addicts; thus, a per-item average of 4 was considered as the cutoff criterion. When 4 is multiplied by 21, it equals 84. Only individuals meeting the set cutoff criteria were included in the final sample. The data collection process was manually carried out between January 2025 and April 2025.

Data Analysis

Once collected, data were entered into IBM SPSS (Version 26) for analysis purposes. Based on the exclusion criteria, the data for non-addict individuals were removed. Out of 158, only 119 online game players met the criteria for gaming

addiction, and out of 192 drug-taking individuals, only 125 met the inclusion criteria for drug addiction. Thus, 244 participants met the inclusion criteria. The analysis included correlational analysis to measure the relationship of gaming addiction and drug addiction with mental health outcomes (i.e., depression, anxiety, and stress), and independent sample t-tests to measure the mental health outcomes (i.e., depression, anxiety, and stress) among individuals with drug addiction and gaming addiction.

Results

Table 1

Characteristics of Participants with Drug Addiction (N=125)

Characteristics	F	%	M	SD
Age			22.60	3.41
Gender				
Men	81	65		
Women	44	35		
Educational Level				
Bachelor	86	69		
Master	39	31		
Socioeconomic Status				
Lower Class	75	60		
Middle Class	35	28		
Upper Class	15	12		

Note. *f*=Frequency, *%*= Percentage, *M*= Mean, *SD*= Standard Deviation.

The table shows the demographic characteristics of participants with drug addiction (N = 125). The mean age of the participants was 22.60 years (SD = 3.41). A majority of participants were men (n = 81, 65%), while women constituted 35% (n = 44). Regarding education, most were bachelor's students (n = 86, 69%), followed by master's students (n = 39, 31%). In terms of socioeconomic status, 60% (n = 75) belonged to the lower class, 28% (n = 35) to the middle class, and 12% (n = 15) to the upper class.

Table 2

Characteristics of Participants with Gaming Addiction (N=119)

Characteristics	f	%	M	SD
Age			22.86	3.34
Gender				
Men	70	59		
Women	49	41		
Educational Level				
Bachelor	79	66		
Master	40	34		
Socioeconomic Status				
Lower Class	49	41		
Middle Class	56	47		
Upper Class	16	12		

Note. *f*=Frequency, *%*= Percentage, *M*= Mean, *SD*= Standard Deviation.

The table presents the demographic characteristics of participants with gaming addiction (N = 119). The mean age of the participants was 22.86 years (SD = 3.34). Men comprised 59% (n = 70) of the sample, while women made up 41% (n = 49). In terms of education, most were bachelor's students (n = 79, 66%), whereas 34% (n = 40) were

master's students. Regarding socioeconomic status, 41% (n = 49) belonged to the lower class, 47% (n = 56) to the middle class, and 12% (n = 16) to the upper class.

Table 3

Relationship between Study Variables among Individuals with Drug Addiction (N=125)

Variables	1	2	3	4
1. Drug Addiction	-	.26**	.28**	.34**
2. Depression		-	.41**	.51**
3. Anxiety			-	.35**
4. Stress				-

Note. **$p<.01$

The table demonstrates drug addiction has positive and significant relationship with depression ($r = .26$**, **$p < .01$), anxiety ($r = .28$**, **$p < .01$), and stress ($r = .34$**, **$p < .01$). Similarly, depression showed significant positive associations with anxiety ($r = .41$**, **$p < .01$) and stress ($r = .51$**, **$p < .01$). Anxiety was also positively correlated with stress ($r = .35$**, **$p < .01$).

Table 4

Relationship between Study Variables among Individuals with Gaming Addiction (N=119)

Variables	1	2	3	4
1. Gaming Addiction	-	.19*	.19*	.12
2. Depression		-	.70**	.35**
3. Anxiety			-	.47**
4. Stress				-

Note. $p<.05$*, $p<.01$**

The table demonstrates gaming addiction has significantly correlated with depression ($r = .19$*, *$p < .05$) and anxiety ($r = .19$*, *$p < .05$), whereas its association with stress ($r = .12$, $p > .05$) was not significant. Depression showed significant relationship with anxiety ($r = .70$**, **$p < .01$) and stress ($r = .35$**, **$p < .01$). Anxiety was also positively and signficantly correlated with stress ($r = .47$**, **$p < .01$).

Table 5

Mean differences based on Individuals with Drug Addictions and Gaming Addictions with respect to Study Variables (N=244).

	Individuals with DA (n=125)		Individuals with GA (n=119)				
Variables	M	SD	M	SD	t (242)	p	Cohen's d
Depression	8.52	4.27	6.06	2.86	5.30	<.001	0.67
Anxiety	9.52	3.85	7.75	3.98	3.53	<.001	0.45
Stress	7.57	3.30	7.36	2.95	.51	.60	0.06

Note. ***$p<.001$, *M*= Mean, *SD*= Standard Deviation, DA= Drug Addiction, GA= Gaming Addiction

The table compares mean differences between individuals with drug addiction (DA; $n = 125$) and gaming addiction (GA; $n = 119$) on depression, anxiety, and stress. Results showed that individuals with DA reported significantly higher levels of depression ($M = 8.52$, $SD = 4.27$) than those with GA ($M = 6.06$, $SD = 2.86$), $t(242) = 5.30$, ***$p < .001$, $d = 0.67$, indicating a medium-to-large effect size. Similarly, individuals with DA had significantly higher anxiety scores ($M = 9.52$, $SD = 3.85$) compared to GA participants ($M = 7.75$, $SD = 3.98$), $t(242) = 3.53$, ***$p < .001$, $d = 0.45$, reflecting a medium effect size. However, no significant difference was found between DA ($M = 7.57$, $SD = 3.30$) and GA ($M = 7.36$, $SD = 2.95$) on stress, $t(242) = 0.51$, $p = .60$, $d = 0.06$.

Discussion

Substantial studies have shown mental health outcomes, i.e., depression, anxiety, and stress, in relation to drug addiction and gaming addiction. However, comparison between two groups, i.e., individuals with drug addiction and individuals with gaming addiction, with respect to these mental health outcomes has not been widely studied, particularly in Pakistan among university students. Therefore, the study aims to fill this gap to come up with effective implications.

The findings depict that individuals with drug addiction have a positive and significant relationship with mental health outcomes, i.e., depression, anxiety, and stress. The result of this study is aligned with a previous study, which employed a cross-sectional design and comprised medical students in Karachi, Pakistan, with a mean age of 21.3 years. It reported a 70% prevalence of depression, anxiety, and stress. Substance use had a significant relation with depression, anxiety, and stress (Khan et al., 2006). Another cross-sectional study depicted that a study was conducted among 600 individuals with drug addiction, particularly students in Pakistan, with a mean age of 29.5 years. Using DSM-5 criteria, the study found a high prevalence of depression, anxiety, and stress among participants (Siddiqui et al., 2024).

The reason behind the significant relationship of drug addiction with depression, anxiety, and stress could be Pakistani cultural factors, i.e., family conflict, low socioeconomic status, and financial pressure (the demographic table for individuals with drug addiction depicts a higher percentage of drug addiction). A biological reason could be that drugs alter the neurotransmitter balance in the brain, i.e., dopamine and serotonin, thus impairing emotional regulation and adversely affecting mood, which results in depression, anxiety, and stress. Psychologically, in Pakistan, students with poor coping mechanisms to deal with academic and financial pressure and low resilience face mental health problems, particularly those who abuse drugs.

The findings also depict that individuals with gaming addiction have a significant relationship with depression and anxiety, but not with stress. A previous similar study conducted on Pakistani young adults, particularly students, depicted that online Ludo game addiction had a significant relationship with negative emotions, i.e., depression, anxiety, stress, and tension (Shahid et al., 2024). Another previous study carried out on 254 medical students across Pakistan showed that internet addiction had a significant relationship with depression, anxiety, and stress, indicating a high burden of psychological problems among students (Ahmad et al., 2025).

The reason behind gaming addiction's positive and significant relationship with depression and anxiety could be due to social withdrawal, underachievement in academic activities, poor sleep, worthlessness, and hopelessness, which consequently arise as depressive and anxiety symptoms. Anxiety may also be elevated from the competitive nature of the game and the fear of losing. However, stress is usually associated with external pressures like workload and family conflict—in a nutshell, short-term challenges—rather than long-term addictive behavioral patterns.

The independent sample t-test depicts that individuals with drug addiction scored significantly higher on depression and anxiety and higher, though not significantly, on stress compared to their counterparts with gaming addiction. A previous study revealed that a cross-sectional design using purposive sampling recruited 200 male students with substance use disorder from rehabilitation centers in Karachi. Findings showed significant correlations of substance use disorder with depression, anxiety, and stress, indicating strong associations with psychological distress (Khan et al., 2022). Another previous cross-sectional study recruited 552 students internationally (M age = 24.9) using purposive sampling. Gaming addiction showed significant associations with depression, anxiety, and stress, while coping styles partially mediated these relationships. Unlike mere gaming engagement, addiction remained directly linked to poorer mental health, highlighting maladaptive coping as a crucial factor explaining vulnerability among students (Loton et al., 2016). Studies have shown that the significant level for individuals with drug addiction in relation to mental health outcomes, i.e., depression, anxiety, and stress, is higher than that for individuals with gaming addiction in Asian and Middle Eastern collective norm societies (Fooladi et al., 2014; Mohamed et al., 2020; Yen et al., 2019).

The cultural perspective of why individuals with drug addiction scored higher on depression and anxiety could be due to social stigma, religious factors (as drug addiction is haram in Islam), and the judgment of norms against those individuals. In contrast, gaming is more tolerated and not as heavily stigmatized in Pakistani culture. Most participants

with drug addiction were from lower socioeconomic classes, as shown in the demographic table, which is another factor contributing to psychological distress. The biological factor should not be neglected, as drugs imbalance neurotransmitters in the brain, adversely affecting mood and causing emotional dysregulation. The reason behind the nonsignificant difference in stress between individuals with drug and gaming addiction could be due to facing similar life stressors. The slightly higher score of individuals with drug addiction could be due to financial instability and societal stigma, while individuals with gaming addiction may use games to escape stress. These factors could be marginal, as the difference was not significant for stress between the two groups.

Limitations and Recommendations

The first and most important limitation of the study is the limited cohort, i.e. only 244, which may not be an accurate representation of individuals with drug addiction and gaming addiction. The study is based on questionnaires that are written in English; it is possible that Pakistani university students may not have the capacity to fully understand all the content of the questionnaire, as the instruments were in English, and rather selected the options that may not be an exact representation of them. Future studies need to use translated scales in Urdu, which could be easier to understand. The study adopted a purposive sampling technique; the snowball technique could have been more cost-effective; therefore, future studies need to adopt the snowball sampling technique.

One more limitation of the study is that it adopted a cross-sectional correlational study design, which means collecting data at once; a longitudinal design is recommended in future to measure variables with respect to the time span among individuals with addiction. The study is more general in approach, with variables like gaming addiction and drug addiction; future studies may specify the drug names and game names or at least mention those names in the demographic characteristics. The data were collected only from Islamabad, Swat, Karachi, and Lahore. Future studies need to adopt online data collection through Google Forms to gather data from more regions of Pakistan for generalizability and cost-effectiveness.

Strengths & Implications

The study possesses several strengths, i.e. the study made separate demographic and correlation tables for individuals with drug addiction and separate ones for those with gaming addiction to make it easy for the reader to understand. The study made the comparison between individuals with drug addiction and gaming addiction with respect to mental health outcomes, stress, anxiety, and depression, which is a rare study in contemporary times, and it fills the gap in the previous literature by comparing two groups and providing literature.

The result of the study showed that there is a need for implications, i.e. mental health awareness programs in the university to increase awareness regarding addictive behaviours and how to overcome those addictions, i.e. encouraging help from mental health professionals. The media has to play a positive role in spreading awareness, too; TV channels need to invite mental health professionals to discuss addictive behaviour and its relationship with mental health problems. Individuals with drug addiction are stigmatised in society, like Pakistan; awareness needs to be spread in the community to be a helping hand and a supporting hand rather than criticising and stigmatising them, which eventually worsens mental health. The family members need to be psycho-educated, particularly.

The government also needs to make rehabilitation centers, enhance the facilities for them, take control over the drug supply, and stricter legislature needed to be made for those suppliers and sellers. The gap in governmental authorities needs to be addressed to stop supply and give strict punishment to those who are involved in such activities. The universities need to have counseling centers that provide adequate counseling to the affected students to overcome their behavioral addiction. Workshops and seminars need to be held in the educational institutions to spread awareness and enhance the mental health of the students.

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