

Journal of Development and Social Sciences www.jdss.org.pk



RESEARCH PAPER

Drug Advertisements: Role of Media in Adoption of Drugs among **Students**

¹Dr. Muhammad Manshoor Hussain Abbasi* ² Muhammad Aarish Rai

- 1. Assistant Professor, Department of Humanities, COMSATS University, Islamabad, Pakistan
- 2. BS-Psychology Student, Department of Humanities, COMSATS University, Islamabad, Pakistan

*Corresponding Author: manshoor_hussain@comsats.edu.pk

ABSTRACT

Significant scientific evidence exists regarding the role of drug advertisements in media on the desensitization and adoption of drugs among the masses. Primarily, this study aims to investigate the influence of such active and passive drug advertisements on drug inclination and onset patterns among Pakistani students. Twenty participants between the ages of 18 to 26 were selected and asked to share whether they believed drug advertisements have had a conscious or sub-conscious role in their friends' or own temptations/experimentations with drug substances. Both qualitative and quantitative methods of analysis were used to analyse the responses. In the qualitative phase, semi-structured interviews were conducted aimed at exploring participants' observations and opinions regarding the topic. Thematic analysis was used to analyse this qualitative data. Later, the participants were asked to fill out a 5-point Likert-type scale consisting of fourteen items aimed at exploring the same notion quantitatively. The results demonstrate a positive correlation between drug advertisements and students' drug endeavours. Many end up becoming addicts, which then opens the door for a range of mental health problems which are discussed. An expanded sample obtained via random sampling is recommended to further validate these findings.

Addiction and Mental Health, Cigarettes, Drug Advertisements, Drug Initiation, Drug **KEYWORDS** Onset, Drug Temptation, Student Drug Use, Subliminal Messaging

Introduction

Human civilization has gone through drastic changes since the Industrial Revolution. The industrial revolution - although very beneficial - has also had its drawbacks. One such drawback is that the drug and narcotics production rate has increased. Due to this, the drug supply rate has increased in the general marketplace. A variety of drugs are easily available and as a result, more and more people are becoming addicts. The growing number of students is also linked with drug use/abuse. As evident from this proposal's topic, we hope to investigate the tendency of drug use among the students.

It is generally believed that drug use/abuse among students is increasing. However, we must admit that these observations are hugely subjective and are not necessarily factual. Another subjective belief is that the advertisement of drugs in media is largely responsible for this possible, not certain, increase in drug use/abuse among adolescents. Again, no evidence is provided in defense of these claims. This study focuses on scientifically investigating these claims – seeking evidence for the abovementioned claims and evaluating them as reliable or not, based on collected evidence. Precisely stating, the claims made are: (1.) drug use/abuse among students is increasing. (2.) Advertisement of drugs in media is responsible for the assumed increase in drug use/abuse among students.

After the evaluation of evidence, if it is found that advertisement of drugs in mainstream media does not impact the behaviour of adolescents towards drugs, then it would lead to a confident rejection of the position popularly held by the masses that, advertisement of drugs in media impacts the behaviour of students regarding drugs use/abuse. Contrary to this, if it is found that the advertisement of drugs in media does indeed impact the behaviour of students - causing an increase in drug use among students

– then it will lead to the verification of the popularly held opinion. Once the validity of this commonly held opinion is established, we can work on developing preventative measures to reverse the impact of the studied phenomenon.

Additionally, if it is found that drug advertisements in media indeed impact the behaviour of students, causing an increase in drug use, this experimental drug use carries a significant risk of developing into an addiction (Wagner & Anthony, 2002). Addiction is a chronic, relapsing disorder characterized by compulsive drug seeking, continued use despite harmful consequences, and long-lasting changes in the brain (American Psychiatric Association, 2013).

Drug addiction is classified as a mental health disorder, recognized by its inclusion in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5). This classification acknowledges the profound impact addiction has on an individual's cognitive, behavioural, and emotional functioning.

Chronic drug use leads to neuroadaptive changes in the brain, particularly in areas involved in reward, stress, and self-control. These changes can make it increasingly difficult for individuals to resist the urge to use drugs, thereby perpetuating the cycle of addiction (Volkow et al., 2016).

Substance use disorders are often comorbid with other mental health conditions such as anxiety, depression, and bipolar disorder. The presence of these co-occurring disorders can exacerbate the severity of addiction and complicate treatment. For example, Grant et al. (2016) found that individuals with substance use disorders are significantly more likely to experience mood disorders compared to the general population.

Addiction can disrupt social relationships, academic performance, and employment opportunities, leading to increased stress, stigma, and isolation. This can create a vicious cycle where the individual uses substances to cope with the negative consequences of their addiction, further entrenching their dependence (Kelly et al., 2017).

The scope of this study could significantly impact our understanding of the role of media advertisements in influencing drug use behaviour among students. If it is determined that these advertisements do indeed contribute to an increase in drug use, this underscores the need for targeted prevention strategies and regulatory measures to mitigate the impact of media exposure on youth substance use. Recognizing addiction as a mental health disorder highlights the importance of comprehensive interventions that address both the behavioural and neurobiological aspects of addiction. This approach is crucial for promoting the overall well-being of students and reducing the societal burden of substance use disorders.

Definitions

To continue with the proposed topic, it is first necessary to exactly define the terms that are to be used throughout the study. The topic is "Influence of Drug Advertisements on Students' Mental Health." Here words like advertisement, and drugs influence demand precise definitions.

The term 'drug' when used throughout the study would mean 'any substance/chemical utilized without the prescription of a physician, whose main aim is pleasure-seeking rather than treating/curing a disease or a disorder.' These drugs can be cigarettes, velo, vape, cannabis, opium, alcohol etc (Chengodu & Lawrentschuk, 2022).

The term 'advertisement' used throughout the study would refer to 'any passive, subliminal or active promotion, marketing/sponsoring, sale, endorsement, glamorisation or

publicising of any product/substance that falls under the previously stated definition of a drug on popular media platforms like social media, television commercials, cinema, music industry, game development industry etc.' This definition encompasses various forms of media promotion and marketing strategies for convincing and propaganda purposes (Moravčíková, 2020). Mostly, when the term advertisement would be used throughout this study, it would be advertisement, particularly in the field of media.

'Influence' is defined as 'any negative or positive change observed in the behaviour of students regarding the adoption of drugs as a consequence of drug advertisements in media' (Montagne, 2011).

Literature Review

The relevant literature on the topic tries to study this phenomenon as far back till the 19th century when drug corporations like cigarette companies used to advertise their products in print media like the newspaper (Amos & Haglund, 2000). These adverts contained deceptive claims overstating the potential benefits of such products while largely failing to mention their harms (Gratale, 2020). The purpose such an analysis intends to serve is that it enables us to understand that over glamorization of drugs in films, ads, and music videos is not solely a recent instance of the 21st century only; rather all this has a well-established root in the beginning stages of media as well.

In recent times, this promotion practice of directly advertising drugs has been replaced by much more nuanced, subliminal tactics (Soomro, 2018). Direct adverts for cigarettes on TV have been replaced by heroes smoking cigarettes in films – creating a type of subliminal correlation between ideas of success, courage, and velour with that of cigarettes and drugs in general (Dozier et al., 2005).

The audience mostly viewing this type of media content is young adults, most of them are students. Students who are in school receive most of their information regarding drugs via socially approved sources like parents, TV etc. As students grow up and upgrade to college and university level, their information sources expand – now friends and friend discussions play an important role in the dissemination of drug-related ideas (Clark, Kowitz & Duckworth, 1975).

On the other hand, being exposed to famous media content like films and seasons displaying drugs has been noticed to play an important role in students adopting drugs. For instance, the Netflix season "Peaky Blinders" in which the main character Thomas Shelby is observed to smoke around 3000 cigarettes throughout the whole show have resulted in an increase in cigarette adoption patterns among young fans (Kefali, 2022).

There are two primary ways of displaying drugs in media. One is the active and direct advertising of such products in TV commercials and social media ads (Amos & Haglund, 2000). Second is the subliminal and indirect way of displaying such products like in films and TV seasons like the case of Peaky Blinders discussed above (Clark et al., 1975). Considering sincere concerns, there has been a ban on direct advertising of drug products throughout most of the world in recent times (Lykouras et al., 2021). This was made possible when major organizations like The Prevention of Nicotine Addiction movement in the United States – who actively advocate against the display of drugs in media – displayed significant scientific evidence establishing a direct correlation between smoking practices in media and the adoption of cigarettes among student-aged demographics (Casitas et al., 2009). Noticing the drastic consequences of the media's role, Casitas et al. (2009) have called the "cinema as a vector of expansion of the smoking epidemic".

One study which specifically focused on investigating the effect of exposure to smoking in movies on young adult smoking in New Zealand concluded that there is a

significant relationship between exposure to smoking in movies and cigarette adoption patterns among participants (Gendall et al., 2016). Considering these findings, Gendall et al. 2016 have even referred to on-screen smoking as inherently a form of drug advertising.

A similar study concluded that exposure to drug-related media content increases the risk for initiation among children, with greater exposure resulting in a higher risk for the adoption of such products i.e. "scientifically plausible mechanisms whereby promotion could influence initiation to exist" (DiFranza et al., 2006). Exposure to pro-drug media desensitizes the youth regarding drugs and more than doubles the odds of initiating (Wellman et al., 2006). Upon a systematic analysis we find that "exposure to movie smoking makes viewers' attitudes and beliefs about smoking and smokers more favourable and has a dose-response relationship with adolescent smoking behaviour" (Charlesworth & Glantz, 2005).

Although we have mentioned cigarette-related phenomena here, the effect of drug marketing and promotion in media in not only limited to cigarette adoption patterns. Many other stimulants like cocaine, marijuana, LSD, alcohol etc. have similar onset patterns among youth if they are constantly exposed to such themes. Media content like music videos/lyrics, films, TV seasons etc. do lead to having a liberal, pro-drug perception regarding drugs among the masses (Motyka & Al-Imam, 2021).

Overall, significant scientific data demonstrates that exposure to drug-related media content does indeed increase the onset and adoption patterns concerning drugs among not only students but among the general masses as well. For instance, research by Winpenny et al. (2020) found that adolescents exposed to alcohol advertisements were more likely to initiate alcohol consumption earlier and engage in binge drinking behaviours compared to those with less exposure. This same hypothesis is explored and tested in this research to find out find the findings of established research accurately fit and apply to a Pakistani context as well.

The transition from experimental drug use to addiction is a critical concern influenced by exposure to drug advertisements. Addiction develops through a complex interplay of genetic, environmental, and behavioural factors, with media exposure serving as a potent environmental trigger. Research by Volkow et al. (2016) discusses how repeated exposure to drugs alters brain function, reinforcing addictive behaviours and making individuals more susceptible to addiction over time. According to the Substance Abuse and Mental Health Services Administration (SAMHSA, 2020), approximately 7.7% of young adults aged 18-25 meet the criteria for a substance use disorder, indicating the significant impact of early drug use on long-term addiction risk.

Drug addiction is recognized as a mental health disorder characterized by compulsive drug-seeking and use despite negative consequences. The Diagnostic and Statistical Manual of Mental Disorders (DSM-5) identifies substance use disorders based on specific criteria related to impaired control, social impairment, risky use, and pharmacological criteria (American Psychiatric Association, 2013).

Chronic drug use leads to neuroadaptive changes in the brain, affecting reward pathways and cognitive functions (Volkow et al., 2016). These changes contribute to compulsive drug-seeking behaviours and impair decision-making abilities. Substance use disorders are associated with increased rates of anxiety disorders, depression, and other mood disorders (Grant et al., 2016). Co-occurring mental health conditions exacerbate the severity of addiction and complicate treatment outcomes. Addiction disrupts social relationships, academic performance, and employment opportunities, leading to heightened stress, stigma, and isolation (Kelly et al., 2017).

Bandura's Social Learning Theory

One major theoretical concept that backs up the phenomena of people replicating a behaviour after witnessing it – in the media or general life – is the social learning theory by Albert Bandura. Bandura (1969) conducted a famous experiment in which children were exposed to situations in which an adult was violently hitting a bubo doll. In response to this exposure, Bandura (1969) noticed that the children also started hitting the bubo doll aggressively (replication of an observed behaviour). Hence, social learning theory posits that people are likely to replicate, repeat, and adopt the patterns/behaviours they observe/notice regularly in the long run (Bandura, 1969).

Cultivation Theory of Media

Another interesting theory that is relevant to our study is the cultivation theory. Cultivation theory suggests that long-term exposure to media content shapes individuals' perceptions of social reality (Gerbner et al., 1986). Gerbner, a communications professor, and Gross, a sociologist, conducted extensive research on the effects of television on viewers' perceptions of social reality. Their work laid the foundation for understanding how repeated exposure to media content, particularly television, can shape individuals' beliefs, attitudes, and behaviours over time. Gerbner and Gross explored the concept of "mean world syndrome," which suggests that heavy television viewers tend to perceive the world as more dangerous and violent than it is due to the prevalence of violent content in media programming (Gerbner et al., 1986). Similarly, in our study, cultivation theory can play a in understanding if students are likely to significant role change attitudes/beliefs/behaviours regarding drugs after being exposed to relevant media content. If so, cultivation theory would better explain the reasons (i.e. exposure to such media content) behind this change.

Material and Methods

Research Design

The research follows a self-report format as in; the personal opinions of participants were explored regarding the effect of an independent variable (drug advertisements in media) on the dependent variable (change in beliefs, perceptions and adoption practices of students regarding drugs). Both qualitative and quantitative methods were used to study and investigate the research questions. The quantitative method was used to denote the percentages of responses from strongly agree to strongly disagree on a 5-point Likert scale developed by us to study questions deemed most appropriate in the investigation of the topic. A qualitative method was used in that the participants were subjected to semi-structured interviews to explore their opinions in detail – which were then evaluated through the process of thematic analysis.

Procedure

The participants in this study mostly included university students (20 males) – except one participant was a drop-out. Utilizing personal contacts, this sample of 20 students was gathered. Each participant was first subjected to a semi-structured interview followed by a 14-item questionnaire required to be filled in by them. Each interview lasted approximately between 7 to 20 minutes. Interviews were conducted with the participants' consent. The answering of a 5-point Likert scale with 14 items at the end of the interview was part of the quantitative section of the research.

Analysis

The interviews were recorded. For the qualitative analysis, 5 themes were extracted from the qualitative data (i.e. interview responses) for thematic analysis. The first theme was exposure to drug advertisements. The second theme was the influence of drug advertisements. The third theme was media and peer pressure. The fourth theme was personal temptation. The last theme was the attitude towards regulation. Then codes were given to each theme, and frequency was calculated for participants in each category.

In the quantitative analysis, the 14-item questionnaire was further divided into five subscales. The first theme subscale measured exposure to drug advertisements. The second subscale measured the influence of drug advertisements. The third subscale measured media and peer pressure. The fourth subscale measured personal temptation. And the last subscale measured attitude towards regulation

Results and Discussion

The study followed two approaches for data collection i.e. qualitative and quantitative. Twenty male participants were first interviewed (semi-structured interview) and the same participants were asked to fill a 5-point Likert-type questionnaire form consisting of 14 items directed at understanding the phenomena related to the research. In the qualitative approach, five major themes were extracted through the data collected through semi-structured interviews. In the quantitative approach, the 14-item questionnaire was further divided into five subscales – each of them directed at measuring the previous five major themes of the qualitative part quantitatively.

In the following, a discussion regarding both methods of measurement is carried out. First, the qualitative data is observed and then the quantitative data.

Table 1
Thematic Analysis

I nematic Analysis			
Themes		Frequency	
(Qualitative	Codes	(Quantitative	Verbatim
Analysis)		Analysis)	
Exposure to Drug Advertisements	Social media exposure, mainstream media exposure, celebrity endorsements, glamorization in movies/TV shows	All twenty participants (100%) stated that they have been exposed to drug-related advertisements either actively or passively.	'There was this movie "Kabir Singh." Apart from that, there is this season "Peaky Blinders." Now a guy who does not smoke with his friends would feel tempted to try it out after watching such content. He will think of himself as Tommy Shelby. Or if he is going through a breakup, he will think of himself as Kabir Singh [while smoking].' 'First of all, "Peaky Blinders" is very out there. Because of it, every child is out there holding a cigarette trying to be Thomas Shelby.' 'In fact, Velo is nothing compared to the other things I have noticed For example, take any Netflix series like "Narcos." It is a whole season aimed at promoting drugs and even drug cartels. People fantasise about such seasons and then want to become like them. Pablo Escobar is one of the examples who is significantly glamorised in the season. I know a few people in my neighbourhood when I used to play football who got inspired by that season and 'Narcos' used to be written on their mobile covers. They were trying to become like the characters of the season – drug cartels etc. Of course, such content promotes such behaviours.' 'Velo is a new product that has been launched recently. I do see its advertisements in the media Even in TV shows when they show masculine characters, they always add that to his persona that he would be either smoking or drinking alcohol.'

'If we talk about drugs then [I've seen] ads, dramas – especially the hero character in these – and songs etc – like that Indian guy Siddhu Moose Wala Punjabi songs.'

'Some of my friends in my circle share such content on their posts or Instagram stories. I have noticed ... in movies, characters like Sanjay Datt – I have also noticed them [using drugs].'

'If I talk about social media then a lot of people share stories – or even posts – displaying alcohol bottles etc... Velo ads on Instagram and YouTube.'

Influence of Drug Advertisements

Glamorization perception, 'cool' perception, normalization perception, adoption patterns among students

(95%) participants stated that there subliminal messaging to glamorize normalise drug use among viewers and students adopt such patterns as a result (there is an increase in drug use among students because of media).

'For example, when I was in my first year or second year of college; when my peers close to me used to do drugs or when I used to see such things in movies, I used to think that all this was very cool. I used to be impressed by them, to be honest.'

'They develop a personality character in films and dramas which is supposed to be a glamorised character. Now this character can be either positive or negative. The viewers relate to that character and after that, whatever that character does is a source of inspiration for the audience [students]. This tool is used for the advertisement of drugs like smoking, drinking etc.'

'I think that people who get addicted to cigarettes etc do that after being influenced by social media or their friends ... Such advertisements are so much today that people perceive such behaviours as cool now.'

Yes, I have tried drugs \dots but then I left it immediately. Why did I try it? Only to become cool, to take pictures or videos. 2019

'In reality, I think that the whole purpose of them to make such ads is to make it look "cool." For example, like Velo ... Most of the seasons that I have watched display this as something "cool".'

'As far as students are concerned, in universities etc smoking and things like that are quite common. There is also its tool type something like 'vape;' which is quite common. ... There is no doubt that students engage in all this.'

'Peaky Blinders is again another example in which not only smoking is promoted but also alcohol is promoted. Back in the day when I started watching Peaky Blinders, they glamorised alcohol so much that I found myself imagining and acting as if I was taking a shot of alcohol even if I were drinking a normal beverage. Some of my friends used to drink lemon malt but they did so imagine they were drinking alcohol.'

I think that there is an increase in drug use among students as a result of the glamorization of such content in media. ... There are these famous rappers in Pakistan who use such stuff. Many students get influenced to try drugs after seeing their content ... Apart from that, there is this season "Peaky Blinders." Many students get influenced to try smoking after watching it – they think Thomas Shelby is smoking so I will smoke as well ... Because of these things all this becomes common among students.'

Media and Peer Pressure

Peer influence, media influence, peer discussions, social pressure 17 (85%) participants acknowledge media and peer pressure as two of the major influencers for drug use among students.

'Both media and peer pressure are very interconnected. If there were no such advertisements in the media, none of your friends would do drugs. When someone does drugs, they do it after being influenced by media and then their friends get influenced by them and start as well (peer pressure). I believe it is a cycle and we cannot say that one has more influence than the other.' Temptation,

use

media

influence

personal

behaviour

personal drug

history,

participants

they

that

media.

Personal

Temptation

'I think that your friends have a more role in influencing you to use drugs. But then again, those friends who are influencing someone to use drugs might themselves be influenced to use those drugs through media. It has a double impact.' '[Regarding the debate between the influence of media vs. peer pressure with regards to drug adoption patterns], both play their respective roles somewhere in our lives at least. Now we can debate which of these two influences more ... but the fact remains that these both are interlinked.' (70%)'I tried cigarette after being influenced by that TV series called Peaky Blinders in which there is this Shelby stated have character who does this." personally tried or felt a temptation to 'Sometimes I have also thought of trying it [velo] (because try a drug after being of its advertisements) ... but I've never tried it. influenced by the 'No, I never did it because I used to play football ... but yes, there was a temptation to try. So much so, that I guess I was at a point in my life where I decided to try it once or twice. What is the harm, I thought. But Alhamdullilah Allah helped me, and I never did.' For example, when I am driving, and I play music that is

sad (or has sad vibes) then I automatically think that there should be a cigarette with this song. So, I eventually smoke to enjoy that vibe.

'Sometimes when you are watching such content on media, you do get triggered to go out and light a cigarette yourself.'

Attitude towards Regulation 15 (75%)'I do believe that regulation should be practised Regulation opinion, need participants stated [regarding drug advertisements] because social media is that there should be starting to become a crucial part of our lives as we are for stricter regulations, stricter regulations moving forward. We cannot escape from it.' censorship regarding drug content in media. 'Yes, regulation should be in place because most of our generation uses social media. Even if someone doesn't have such a company, they are picking up such ideas from

> 'Definitely, there should be censorship. These things should never be glamorised.'

there and then using it.'

You cannot leave such things unregulated under the pretext of "freedom of choice." Censorship should be practised.'

'Regarding regulation, I believe age restriction should be a must if we can't do more.'

Theme I: Exposure to Drug Advertisements

All 20 (100%) of the participants in the study state that yes, drugs are advertised in media and that they have been exposed to some type of passive, subliminal or active promotion, marketing, endorsement, glamorisation or publicising of a drug product on popular media platforms like social media, television commercials, cinema, music industry at the very least.

Theme II: Influence of Drug Advertisements

95% of the participants in the study state that they believe there is a motive in the media to glamorize and normalise drugs. They say that drugs are displayed as something being 'cool.' All this has a direct influence on the perceptions, beliefs, behaviour of students regarding drug adoption patterns as displayed in media.

95% of the participants said that due to this, they believe there is an increase in drug use among students.

Theme III: Media and Peer Pressure

85% of the participants in the study state that although peer influence is one of the significant factors contributing to the increase of drug use among students, media nonetheless still plays an important role in the entire phenomenon.

Many participants express this as a never-ending cycle in which media influences, drug use is adopted, the social circles in which that drug use is common then influence the non-users in that group to try, the non-users eventually adopt drug use, they go on to influence their other peers and so on...

Many participants also shared that it is highly possible that those peers who use drugs etc. influenced their other non-user peers to adopt this behaviour as well; they started drug use after getting influenced by media.

Theme IV: Personal Temptation

70% of the participants in the study state that in retrospect, they have either tried or at least felt a temptation to try a drug after being influenced by media.

Some of the participants who smoke already say that if they watch something like a TV show or video in which someone is smoking, they feel a strong urge to go out and smoke themselves because of it.

This theme is especially important in finding out the direct influence of drug-related media content on the affective and behavioural aspects of the study participants in a direct and unfiltered self-report form.

Theme V: Attitude towards Regulation

75% of the participants in the study state that they think that stricter regulations should be in place on an institutional level to limit the level of advertisement of drugs in media which, in turn, will decrease the level of exposure to drug advertisements among students.

In indirect words, this insight signifies a sub-conscious confirmation of the belief that media *does* influence students to use drugs.

If the participants believed that media does not influence the adoption of drugrelated practices, they would have never called for censorship

Conclusion

As evident from both the qualitative and quantitative analyses, most of the participants of the research are regularly exposed to drug-related media content. Moreover, both qualitative and quantitative analysis demonstrates that there is a direct influence of drug advertisements on the perceptions, beliefs, behaviour of students regarding drugs and their adoption. Some participants even say that they might have started drugs after being influenced by the media. Others say that they feel a strong urge to do drugs after seeing relevant content on the media during their day.

These findings confirm the hypothesis of both the social learning theory – which postulates that students would be likely to adopt, replicate, and repeat the type of drugrelated themes they are exposed to in media – and the cultivation theory – which posits that

the type to drugs themes students are exposed to in media would go on to define their social reality i.e. their beliefs, perceptions, and behaviours regarding and towards drugs and its adoption (Bandura, 1969; Gerbner et al., 1986).

The results of qualitative and quantitative analyses conclude that according to the participants of the study, there is a lot of drug-related advertisement in media (both actively and passively) which students are regularly exposed to, which, in turn, has a direct influence on the perceptions, beliefs, behaviour of students regarding drug adoption.

Most students perceive drugs as something cool and associate them with glamour because of similar media depictions. A strong curiosity and temptation build surrounding drugs and many end up adopting drugs permanently, therefore – which eventually leads to addiction (Wagner & Anthony, 2002), initiating an entire range of mental health problems among students.

Recommendations

The current study has a few limitations. One is that the study used purposive sampling i.e. immediate contacts of the researcher. To further solidify the findings, it is suggested that a random sample is used in future analysis. Secondly, the current sample of twenty participants can be expanded to include more participants for generalizability purposes. Additionally, a representative random sample of females can be used in future studies to include the opinions of females regarding the topic as well.

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