INFLUENCE OF SELF-ESTEEM AND SUBSTANCE USE ON DEPRESSION AMONG UNDERGRADUATE STUDENTS OF FEDERAL UNIVERSITY OF LAFIA, NASARAWA STATE, NIGERIA

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ABSTRACT: This study examines how self-esteem and substance use impact depression among undergraduates at the Federal University of Lafia, Nigeria. Three hundred and ninety (390) participants with ages ranging from 19-25 years (Mean= 18.779; SD=11.42) were selected using a simple random sampling technique. A survey research method was adopted for the study. Rosenberg's self-esteem scale, Substance use questionnaire, and Beck's depression inventory were used to collect data. Linear regression was used to analyse hypotheses one and two, and multiple regression was used to analyse hypothesis three. Findings indicated that self-esteem significantly influenced depression among undergraduate students of the Federal University of Lafia ($R = 0.863 = R^2 = 0.547$ ($F_{(1,389)} = 192.192$, $t = 14.170$, $p < .05$). Also, it shows that substance use significantly influenced depression among undergraduate students of Federal University of Lafia ($R = 0.536 = R^2 = 0.213$ ($F_{(1,389)} = 63.820$, $t = 4.711$, $p < .05$). Similarly, the results revealed that self-esteem and substance use jointly influenced depression among undergraduate students of Federal University of Lafia ($R = 0.724 = R^2 = .520$ ($F_{(2, 388)} = 107.544$, $t = -5.087$, $p < .05$). It was recommended that; University management should ensure the availability of mental health resources and support services for students. This could include counselling services, workshops on self-esteem management and well-being, and access to mental health professionals. There should be regular assessment of the mental health and well-being of students through surveys or confidential feedback mechanisms. This can help identify individuals who may be at risk of depression and enable targeted interventions or support. Substance use tests should be done regularly in order to checkmate the illegal use of substances by students.

Keywords: Self-Esteem, Substance Use, Depression, Undergraduate Students, Mental Health Resources

INTRODUCTION

Depression has been defined generally as an affective condition, sometimes pathological, involving emotions of helplessness and hopelessness which can sometimes be overpowering and is often accompanied by a general lowering of psychophysical activity (Rapmund & Moore 2000).

Depression is a severe mental health condition. It's not just about feeling down, sad or moody. Depression can affect all aspects of your daily life and well-being. It is rated by the World Health Organization (WHO) as the fourth most significant cause of global disease burden in terms of its impact on the individual sufferer, the family and society in general in terms of lost productivity. Major depression, as an example of mood disorders, is known to severely reduce the quality of life as well as psychosocial functioning of those affected. Its impact on the burden of disease worldwide has been enormous, with the WHO projecting depression to be the leading cause of mental illness by 2030. Despite several studies on the subject, little has been done to contextualise the condition in Africa, coupled with the fact that there is still much to be understood on the subject. It's a biological illness that can affect your entire body. It has symptoms that have physical changes such as sleep disruption, appetite changes, fluctuations in body weight, and intense fatigue. People with depression have a higher chance of experiencing illness and diseases that reduces lifespan, such as: heart disease, stroke, some types of cancer and diabetes. (Boland & Lovering, 2022).

Also, the WHO has reported that about 450 million people worldwide suffer from mental illness and one in four people meets criteria of mental illness at some point in their life. Among mental disorders, depression is a disease of a global burden affecting 350 million people worldwide. A study conducted on adult populations in the USA reported that the lifetime prevalence of major depressive disorder was 16.2%, and the 12-month prevalence was 6.6%. Surveys conducted in 16 European countries found that 27% of adult Europeans are affected by depression: at least one mental disorder in a 12-month period. The burden of the disease is higher by 50% in females than in males. The prevalence of depression in low- and middle-income countries (LMIC) ranged from 11.1 to 53%. The burden is highest in Afghanistan, the Middle East, and North and Sub-Saharan African countries. It was reported that the prevalence of depression in Ethiopia is 9.1%. Depression disorder presents with depressed mood, loss of interest or pleasure, decreased energy, feelings of guilt or low self-worth, disturbed sleep or appetite, poor concentration, problems thinking and making decisions, and, in severe stages, recurring thoughts of death or suicide. Depending on the number and severity of symptoms, a depressive episode can be categorized as mild, moderate, or severe. An individual with a mild depressive episode will have some difficulties in continuing with ordinary work and social activities but will probably not cease to function completely. On the other hand, it is very unlikely that the individual with severe depressive episode will be able to continue with social, work, or domestic activities, except to a very limited extent. As for moderate depression, the individual would normally have more than the five symptoms that are needed to make the diagnosis of depression. Moderate episodes have a severity that is intermediate between mild and severe depressions.

Depression has many possible causes, including mood disturbance, genetic vulnerability, chronic stressful life, use of psychoactive substances, and medical problems. It is believed that several of these forces interact to bring depression areas in the brain that are affected in cases of depression are the prefrontal cortex, cingulated gyrus, amygdala, hippocampus, thalamus, and hypothalamus. These brain regions are involved in the regulation of motivation, eating,

sleeping, energy level, circadian rhythm, and responses to rewarding and aversive stimuli, which are all abnormal in depressed people. Neurotransmitters that are depleted in patients with depression are serotonin that helps regulate sleep, appetite, and mood and inhibits pain. Reduced serotonin secretion is recorded in patients with depression. Norepinephrine triggers anxiety and is involved in some types of depression. It determines motivation and reward. Norepinephrine and serotonin (5-HT) modulate subcortical and cortical functions that their shortage in states of depression and anxiety contributes to abnormalities in sleep, concentration, attention and memory, arousal states, appetite, and libido.

Depression is a common mental disorder estimated to affect 300 million people worldwide (WHO, 2017). It is characterized by persistent feeling of sadness and inability to enjoy activities one normally enjoys, accompanied by inability to carry out daily activities for at least two weeks. Globally, 4.4% of the world's population was estimated to be suffering from depression. It can either be recurrent or long-standing and significantly impairs an individual's ability to function and cope with daily life (WHO, 2017). It is not the same as simple grief, bereavement or mourning mood, as these are appropriate emotional responses towards unwanted circumstances (Adegboyega et al., 2016). Depression is the leading cause of disability and is a major contributor to the total global burden of disease (WHO, 2018). Although depression can be found across all age groups, it has been found that there are different and diverse manifestations of this mental disorder.

Evidence shows that university students are at a higher risk of having depression compared to the normal population (Ibrahim et al., 2013). This could be because they are a particularly vulnerable group due to the critical transition they undergo from adolescence to adulthood, in addition to facing one of the most stressful moments in a person's life (Islam et al., 2018). Factors such as female gender (Bayati et al., 2009; Ghaedi et al., 2014), hopelessness about the future (Bayati et al., 2009), academic and relationship difficulties (Amarasuriya et al., 2015), financial burden (Pham et al., 2019), low social support (Carrico, 2017), post-traumatic stress disorder and sleeping problems (Peltzer et al., 2013), family problems (Oladele & Oladele, 2016), death of a family member, domestic violence (Amarasuriya et al., 2015), addiction to alcohol disorder and cigarettes (Adewuya et al., 2006) and substance abuse have been found to increase the risk of depression in students (Khan et al., 2012).

Studies conducted in Nigeria have reported the prevalence of depression among young adults, the elderly and IDPs as 25%, 26.2% and 17% respectively Sheikh (2015). In northern Nigeria, depression is the most prevalent mood disorder, with an incidence of 54.5% in patients attending clinics in Northern Nigerian Tertiary Institutions (Aiyelero et al.,2011).

The prolonged 2022 strike action between Nigerian Government and university unions in Nigerian universities has assumed a worrying position, given that the inability of government to pay university workers' salary and welfare will negatively impact their general well-being and that of their dependants. This condition could negatively impact on their self-esteem and consequently depression. This is partly because a lot of the workers resorted to loans and borrowing to survive. Considering that their source of livelihood was withheld by the government, many workers were unable to pay bills and meet basic needs. Using Abraham Maslow's hierarchy of needs, these workers who cannot meet basic physiological needs will not be able to attain high self-esteem needs, thus may slide into depression.

Self-esteem, substance use, and depression have been the subject of extensive research. Several scholars have explored how these factors interact and contribute to the onset or worsening of

depression. Baumeister et al. (2003), conducted research on how low self-esteem can lead individuals to engage in self-defeating behaviours such as substance use, as a coping mechanism. Their research suggested that individuals with lower self-esteem might use substances to temporarily alleviate negative self-perceptions, which can exacerbate depressive symptoms over time. Trzesniewski et al. (2006), In a longitudinal study, found that low self-esteem during adolescence was predictive of depression in adulthood. They also observed that substance use can mediate this relationship, as individuals with low self-esteem might turn to substances to cope with emotional distress, thereby increasing the risk of depression. Also, Robinson et al. (2011), examined the co-occurrence of substance use and depression, finding that low self-esteem is a significant risk factor for both. They concluded that individuals with low self-esteem are more likely to engage in substance use as a form of self-medication, which can contribute to the development or worsening of depressive symptoms. Similarly, Neumann et al. (2009) Investigated the cyclical relationship between self-esteem and substance use, finding that substance use can lower self-esteem over time, which, in turn, can lead to higher rates of depression. This creates a vicious cycle where low self-esteem and substance use reinforce each other, leading to increased vulnerability to depression. Lastly, Otten et al. (2008), explored how self-esteem moderates the relationship between substance use and depression in adolescents. They found that adolescents with lower self-esteem who used substances were at a greater risk for developing depression compared to those with higher self-esteem.

This study aims to examine the influence of self-esteem and substance use on depression among Nigerian undergraduates, a demographic underrepresented in existing research.

Statement of the Problem

Depression is a major public health problem. It accounts for about 60% of global health morbidity, not to mention the economic, social, and psychological effects it poses. It is now the fourth-leading cause of the global disease burden and the leading cause of disability worldwide Hyman (2006). Depression seriously reduces the quality of life for individuals and their families, often worsens the outcome of other physical health problems, and it is a risk factor for suicide.

The prolonged 2022 strike action between the Nigerian Government and university unions in Nigerian universities has assumed a worrying position, given that the inability of the government to pay university workers' salaries and welfare will negatively impact their general well-being and that of their dependents. This condition could negatively impact their self-esteem and, consequently, depression. This is partly because a lot of the workers resorted to loans and borrowing to survive. Considering that the government withheld their source of livelihood, many workers were unable to pay bills and meet basic needs. Using Abraham Maslow's hierarchy of needs, these workers who cannot meet basic physiological needs will not be able to attain high self-esteem needs, thus may slide into depression.

The situation has caused a lot of health-related problems. Staff who were used to running around every day with work-related activities may suddenly become idle, doing nothing at home. (Lawan & Ogunode (2021) submit that most university staff in Nigeria stayed idle during strike actions, and only a few were engaged in other minor work or business. The effects of staying idle by university staff in Nigeria during the strike have led to different illnesses or sicknesses. Backing this submission, Dr Sandeep Govil, Psychiatrist, Saroj Super Speciality Hospital, submits that "Sitting idle for longer duration can lead to anxiety, depression, poor

thinking capacity, loss of concentration, and even decline in memory (Health Shots, 2021). Such ailments can build up into serious complications like forgetfulness, loss of attention, and severe anxiety and depression and other mental health issues". These will influence how people relate to people, judging from their emotions and how they also see their value or worth, as society is expecting much from them and their inability to meet society's demands. Considering the foregoing, it is, therefore, imperative to study the influence of self-esteem and substance use on depression among Undergraduate students of the Federal University of Lafia.

Research Questions

The study was guided by the following research questions:

1. What is the relationship between self-esteem and depression among undergraduate students of the Federal University of Lafia?
2. What is the relationship between substance use and depression among undergraduate students of the Federal University of Lafia?
3. What is the joint relationship between self-esteem and substance use on depression among undergraduate students of the Federal University of Lafia?

Objectives of the study

The study looked at the following objectives:

1. Examine the relationship between self-esteem and depression among undergraduate students of the Federal University of Lafia.
2. Determine the relationship between substance use and depression among undergraduate students of the Federal University of Lafia.
3. Investigate the joint significant relationship between self-esteem and substance use on depression among undergraduate students of the Federal University of Lafia.

Hypotheses

The study tested the following hypotheses:

1. There will be a significant relationship between self-esteem and depression among undergraduate students of the Federal University of Lafia.
2. There will be a significant relationship between substance use on depression among undergraduate students of the Federal University of Lafia.
3. There will be a joint significant relationship between self-esteem and substance use on depression among undergraduate students of the Federal University of Lafia.

Empirical Review of Literature

Self-esteem and Depression

Orth and Robins (2020) used a longitudinal design to study the reciprocal relationship between self-esteem and depression in adults over time. They employed self-report questionnaires, measuring participants' self-esteem and depressive symptoms at multiple points. Their results showed a bidirectional relationship, where low self-esteem predicted an increase in depression,

and vice versa. Based on their findings, they recommended that mental health interventions focus on both enhancing self-esteem and reducing depressive symptoms to break this cycle.

Also, Liu, Wang, and Jiang (2020) studied adolescents using a cross-sectional design to investigate the role of self-compassion in the relationship between self-esteem and depression. They collected data through self-report surveys on self-esteem, self-compassion, and depression symptoms. Their analysis revealed that self-compassion mediated the relationship, with higher self-compassion associated with fewer depressive symptoms among those with low self-esteem. They recommended incorporating self-compassion training into programs for adolescents to reduce depressive symptoms and strengthen self-esteem.

Similarly, Erol and Orth (2022) conducted a longitudinal study to explore the reciprocal relationship between self-esteem and depression in young adults. They collected self-report data at multiple time points, assessing self-esteem and depressive symptoms. The results reinforced the bidirectional relationship, showing that low self-esteem predicted future depressive symptoms and that depression negatively impacted self-esteem. The authors recommended incorporating interventions that address both low self-esteem and depressive symptoms simultaneously, as addressing one could benefit the other.

In the same vein, Lee, Kim, and Cho (2022) examined the role of social support in the relationship between self-esteem and depression among adolescents using a cross-sectional design. They gathered data through questionnaires on self-esteem, depressive symptoms, and perceived social support. Their findings showed that high levels of social support mitigated the negative impact of low self-esteem on depression. Based on these results, the researchers recommended enhancing social support systems in schools and communities to help buffer against depression in adolescents with low self-esteem.

Jiang, You, and Ren (2022) used a mediation model to analyse how emotion regulation strategies influence the relationship between self-esteem and depression. They conducted a survey measuring self-esteem, depressive symptoms, and the use of emotion regulation strategies (e.g., cognitive reappraisal and suppression). Results indicated that adaptive emotion regulation (such as cognitive reappraisal) weakened the negative impact of low self-esteem on depression. The authors recommended incorporating emotion regulation skills into mental health interventions to help individuals with low self-esteem manage depressive symptoms more effectively.

Lastly, Ajayi Olubukola (2020) examined the influence of self-esteem and depression on suicidal ideation among university students. The research was carried out among university students to measure the influence of self-esteem and depression on suicidal ideation. Two hundred and fifty-one participants [251] were sampled from a university for the purpose of this research. The instrument used for this research was a questionnaire. The statistical methods used were t-test and one-way ANOVA. Four hypotheses were tested and the result revealed: Students with high self-esteem [M =12.7877] significantly reported lower suicidal ideation than those with low self- esteem [M =18.5905], df [249] = -6.043, p <.01. The result implies that self-esteem influenced suicidal ideation among students. The results also show that students with low depression [M = 12.8188] significantly reported lower suicidal ideation than those with high depression [M = 19.5222], df [248] = 6.903, p <.01. The result implies that depression influenced suicidal ideation among students. Likewise, the result shows that female students [M =16.1301] were not significantly different from male students [M = 14.3359], df [249] =1.780, p>.05. The result implies that there is no gender difference in suicidal ideation

among students. However, students in 100 level of study [M =15.3469] were not significantly different in suicidal ideation compared to those in 200[M =14.7375], 300[M =14.5000], 400[M = 15.8036] and 500 [M = 19.1000] levels of study. The result means that the level of study has no significant influence on suicidal ideation among students F [4,246] =0.846; p>.05.

Substance use and Depression

Hingson, Zha, and White (2022) conducted a longitudinal study to examine how substance use among young adults impacts depressive symptoms over time. They collected self-report data on alcohol and drug use and depressive symptoms across multiple years. Results indicated that higher levels of alcohol and drug use were associated with a significant increase in depressive symptoms, especially among those who used substances to cope with stress. The authors recommended focusing on coping strategies in substance use interventions, particularly for individuals using substances as a way to manage depressive symptoms.

Thatcher and Clark (2022) studied the mediating role of peer influence on substance use and depression in adolescents. Using a cross-sectional survey, they assessed levels of substance use, depressive symptoms, and peer substance use among adolescents. Their results showed that adolescents with friends who frequently used substances were more likely to experience depressive symptoms, indicating a social contagion effect. They recommended enhancing peer-based prevention programs that educate adolescents on the risks associated with substance use and its link to mental health.

Martinez, Flynn, and Craig (2022) examined the impact of integrated treatment programs for individuals dealing with both substance use disorder (SUD) and depression. They conducted a randomized controlled trial comparing standard SUD treatment with an integrated treatment model that addressed both SUD and depressive symptoms. Results showed that participants in the integrated treatment group experienced greater reductions in both substance use and depressive symptoms. Based on their findings, the authors recommended that mental health treatment facilities consider adopting integrated treatment approaches for dual-diagnosis patients.

Self-esteem, Substance Use and Depression

Smith, Kim, and Hernandez (2022) conducted a longitudinal study on college students to assess how self-esteem and substance use interact to impact depressive symptoms over time. Using self-report surveys, they measured self-esteem, frequency of substance use, and depressive symptoms at multiple points throughout the academic year. Results indicated that students with low self-esteem who also engaged in frequent substance use were at a higher risk for developing depressive symptoms. The authors recommended implementing campus-based programs focused on self-esteem enhancement and substance use education as a preventive strategy for depression.

Garcia and Williams (2022) explored the mediating role of coping strategies in the relationship between self-esteem, substance use, and depression among adolescents. They used a cross-sectional survey to assess self-esteem levels, substance use frequency, depressive symptoms, and preferred coping mechanisms (e.g., adaptive vs. maladaptive coping). Findings showed that low self-esteem and high substance use were associated with greater depressive symptoms, particularly among adolescents who relied on maladaptive coping strategies like avoidance.

The authors suggested incorporating coping skill training into mental health programs to reduce depressive symptoms among youth with low self-esteem and substance use issues.

Patel, Nguyen, and Brown (2022) conducted a randomised controlled trial to examine the effectiveness of an integrated intervention targeting self-esteem, substance use, and depression in high-risk young adults. Participants were assigned to either an integrated treatment group (focusing on self-esteem building, substance use reduction, and mental health counselling) or a control group. The results showed that the integrated treatment group experienced a significant reduction in both substance use and depressive symptoms, particularly among those with initially low self-esteem. The researchers recommended that mental health professionals adopt integrated approaches for treating individuals with co-occurring low self-esteem, substance use, and depressive symptoms.

METHOD

Research Design

A Survey research design was adopted for the study. This design is more appropriate considering the nature of the problem under study. It also complied with the kind of data that the study demands, as questionnaires were used to collect information on people's feelings, attitudes, and opinions from natural settings.

Population, Sample and Sampling Technique

This study used undergraduate students of the Federal University of Lafia, Nasarawa State. Nigeria. The total population for this study was 16,245, and the sample size used was 390.

The study adopted the simple random sampling technique that gave the participants an equal chance of participating in the research.

The sample size for the participants was drawn using Taro Yamane's formula because it is flexible, gives accurate figures, universally accepted and use.

Method of Data Collection

The study employed a service of some research assistants that assisted on the distribution and collection of the questionnaires.

The instruments used were:

Rosenberg's self-esteem scale

Rosenberg's self-esteem scale was developed by Rosenberg in 1965 to measure self-esteem. The scale is a 10-item Likert-format self-report measure with predetermined response patterns ranging from strongly agree (0) to strongly disagree (3).

Substance Use Questionnaire

A 20-item version of the Substance Use Questionnaire developed by Harvey A. Skinner in 1982 was used for this study. Participants were asked how often they used drugs in the past 12 months. The answers were in a Yes/No format. Yes (1), No (0).

Beck's Depression Inventory

The Beck's Depression Inventory (BDI)-long form is a 21-item self-report inventory developed by Beck et al. (1988). It evaluates the level of depression in adolescents (aged 13 and older) and adults. The items include cognitive, affective, somatic, and vegetative aspects of depression.

Method of Data Analysis

The researcher employed various statistical approaches to analyse the data collected, such as linear regression analysis and multiple Regression Analysis.

To test hypothesis 1, linear regression analysis was used to analyse the data collected because linear regression predicts the value of a variable based on the value of another variable.

To test hypothesis 2, linear regression analysis was used to analyse the data collected because linear regression predicts the value of a variable based on the value of another variable.

To test hypothesis 3, the data collected was analysed using multiple regression analysis because multiple regression takes care of more complex relationships.

RESULT

Table 1: Linear Regression analysis showing the relationship between Self-esteem and Depression among undergraduate students of the Federal University of Lafia, Nasarawa State.

Variables	R	R^2	F	β	t	p(sig)
Constant	.863	.547	192.192		-.534	.000
Self-esteem				.863	14.170	.000

Dependent Variable: Depression

The results presented above show that Self-esteem significantly influenced depression among undergraduate students of Federal University of Lafia (R = 0.863 = R^2 = 0.547 (F (1,389) = 192.192, t = 14.170, p < .05). This means that Self-esteem contributed 54.7% variation in depression among undergraduate students of Federal University of Lafia. This finding implies that extreme level of low Self-esteem is likely to bring about an extreme level of low Self-esteem is likely to bring about a higher level of depression among students. Therefore, this hypothesis has been accepted.

Table 2: Linear Regression analysis showing the relationship between Substance Use and Depression among undergraduate students of the Federal University of Lafia.

Variables	R	R^2	F	ß	t	p(sig)
Constant	.536	.213	63.820		4.711	.000
Substance Use				.536	6.907	.000

Dependent Variable: Depression

The results presented above show that substance use significantly influenced depression among undergraduate students of Federal University of Lafia (R = 0.536 = R^2 = 0.213 (F (1,389) = 63.820, t = 4.711, p < .05). This means that substance use contributed 21.3% variation in depression among undergraduate students of Federal University of Lafia. This finding implies that extreme levels of substance use are likely to bring about higher levels of depression among students. Therefore, this hypothesis is confirmed in the study.

Table 3: Multiple Regression analysis showing the joint influence of Self-esteem and Substance Use on Depression among undergraduate students of the Federal University of Lafia.

Variable	R	R^2	F	ß	t	p(sig)
Constant	.724	.520	107.544		-5.087	.002
Self-esteem				.724	14.411	.000
Substance use				.324	5.720	.000

Dependent Variable: Depression

The results presented in the table above revealed that self-esteem and substance use jointly influenced depression among undergraduate students of the Federal University of Lafia (R = 0.724 = R^2 = .520 (F (2, 388) = 107.544, t = -5.087, p < .05). This means that self-esteem and substance use jointly contributed to 52% change depression among undergraduate students of Federal University of Lafia. Therefore, this hypothesis is also confirmed in this study.

DISCUSSION OF THE FINDINGS

Hypothesis 1: There will be a significant relationship between self-esteem and depression among students of Federal University of Lafia. The result of the study has confirmed the hypothesis and it's hereby accepted. This finding implies that an extreme level of low Self-esteem is likely to bring about a higher level of depression among students. This finding supports the work of Orth and Robins (2020) used a longitudinal design to study the reciprocal relationship between self-esteem and depression in adults over time. They employed self-report questionnaires, measuring participants' self-esteem and depressive symptoms at multiple points. Their results showed a bidirectional relationship, where low self-esteem predicted an increase in depression, and vice versa. Based on their findings, they recommended that mental health interventions focus on both enhancing self-esteem and reducing depressive symptoms to break this cycle.

Also, Liu, Wang, and Jiang (2020) studied adolescents using a cross-sectional design to investigate the role of self-compassion in the relationship between self-esteem and depression. They collected data through self-report surveys on self-esteem, self-compassion, and depression symptoms. Their analysis revealed that self-compassion mediated the relationship, with higher self-compassion associated with fewer depressive symptoms among those with low self-esteem. They recommended incorporating self-compassion training into programs for adolescents to reduce depressive symptoms and strengthen self-esteem.

Similarly, Erol and Orth (2022) conducted a longitudinal study to explore the reciprocal relationship between self-esteem and depression in young adults. They collected self-report data at multiple time points, assessing self-esteem and depressive symptoms. The results reinforced the bidirectional relationship, showing that low self-esteem predicted future depressive symptoms and that depression negatively impacted self-esteem. The authors recommended incorporating interventions that address both low self-esteem and depressive symptoms simultaneously, as addressing one could benefit the other.

Hypothesis 2: There will be a significant relationship between substance use and depression among students of the Federal University of Lafia. The result of the study has confirmed the hypothesis and its hereby accepted. The result is also in line with the work of Hingson, Zha, and White (2022) conducted a longitudinal study to examine how substance use among young adults impacts depressive symptoms over time. They collected self-report data on alcohol and drug use and depressive symptoms across multiple years. Results indicated that higher levels of alcohol and drug use were associated with a significant increase in depressive symptoms, especially among those who used substances to cope with stress. The authors recommended focusing on coping strategies in substance use interventions, particularly for individuals using substances as a way to manage depressive symptoms.

Also, Thatcher and Clark (2022) studied the mediating role of peer influence on substance use and depression in adolescents. Using a cross-sectional survey, they assessed levels of substance use, depressive symptoms, and peer substance use among adolescents. Their results showed that adolescents with friends who frequently used substances were more likely to experience depressive symptoms, indicating a social contagion effect. They recommended enhancing peer-based prevention programs that educate adolescents on the risks associated with substance use and its link to mental health.

Hypothesis 3: There will be a joint significant relationship between self-esteem and substance use on depression among undergraduate students of Federal University of Lafia. The result is also in line with the work of Smith, Kim, and Hernandez (2022) who conducted a longitudinal study on college students to assess how self-esteem and substance use interact to impact depressive symptoms over time. Using self-report surveys, they measured self-esteem, frequency of substance use, and depressive symptoms at multiple points throughout the academic year. Results indicated that students with low self-esteem who also engaged in frequent substance use were at a higher risk for developing depressive symptoms. The authors recommended implementing campus-based programs focused on self-esteem enhancement and substance use education as a preventive strategy for depression.

Garcia and Williams (2022) explored the mediating role of coping strategies in the relationship between self-esteem, substance use, and depression among adolescents. They used a cross-sectional survey to assess self-esteem levels, substance use frequency, depressive symptoms, and preferred coping mechanisms (e.g., adaptive vs. maladaptive coping). Findings showed

that low self-esteem and high substance use were associated with greater depressive symptoms, particularly among adolescents who relied on maladaptive coping strategies like avoidance. The authors suggested incorporating coping skill training into mental health programs to reduce depressive symptoms among youth with low self-esteem and substance use issues.

Conclusion

In a bid to investigate the Influence of self-esteem and substance use on depression among undergraduate students of Federal University of Lafia, Nasarawa State. Nigeria. Theories were reviewed, data were collected and the hypotheses were tested. Based on the result, it was concluded that:

i.   Self-esteem has a significant influence on depression among undergraduate students of Federal University of Lafia, Nasarawa State.
ii.   Substance Use has a significant influence on depression among undergraduate students of Federal University of Lafia, Nasarawa State.
iii. Also, Self-esteem and Substance Use have a significant influence on influence on depression among undergraduate students of Federal University of Lafia, Nasarawa State.

Recommendations

i.   The university management should ensure the availability of mental health resources and support services for students. This could include counselling services, workshops on self-esteem management and well-being, and access to mental health professionals.
ii.   There should be regular assessment of the mental health and well-being of students through surveys or confidential feedback mechanisms. This can help identify individuals who may be at risk of depression and enable targeted interventions or support.
iii. Substance use tests should be done regularly in order to checkmate the illegal use of substances by students.

Limitations of the Study

While the study provides valuable insights into the influence of emotional intelligence, and self-esteem on depression among the Students of Federal University Lafia, it is important to consider potential limitations:

i.   The findings may not be applicable to other populations or settings outside of the students at Federal University Lafia. The sample size and specific characteristics of the participants in the study may limit the generalizability of the results to a broader context.
ii.   The study relied on self-report questionnaires, which are subject to potential biases. Participants may provide answers that they believe are more socially acceptable rather than reflecting their true experiences.

Suggestions for further study

Based on the findings and the limitations of the current study, it is recommended a future study replicating this one be conducted. Future studies should expand the research to include different populations such as students in different schools. This would provide more meaningful results for wider generalisation.

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