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The Risks Associated with Drug Abuse and Addiction on the Academic Performance of Niger State College of Education Students in the Artificial Intelligence Era: Implications for Community Service and Education

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A B S T R A C T

This study investigated the impact of drug abuse and addiction on the academic performance of students at Niger State College of Education, Minna, in the artificial intelligence era. A descriptive survey design was employed, with a sample of 220 NCE II students randomly selected from various departments. Data were collected using the Students' Drug Abuse and Addiction Questionnaire (SDAAQ) and analyzed using frequency counts, percentages, and t-test statistics. The findings indicated no significant differences in the mean effects of drug abuse, addiction, parental care, and health implications on students' academic performance. Nevertheless, the study emphasizes drug abuse as a critical academic and social concern among students. The findings highlight the need for community service–based interventions, including awareness campaigns, counseling, and rehabilitation programs involving educational institutions, families, and community stakeholders, to promote students' academic success and well-being in the artificial intelligence era.

A R T I C L E   I N F O

1. INTRODUCTION

A drug is a substance that affects the functioning of the human body (Hanifah & Kennedy, 2025). Drugs may be natural or chemical in nature, and when used appropriately according to a doctor's prescription, they can improve and support bodily systems. The World Health Organization (WHO) defines a drug as any substance that, when introduced into a living organism, can modify the state of equilibrium or the normal functioning of the body. However, drug use becomes problematic when substances are consumed without medical supervision or prescription. Drug abuse refers to the intake of drugs without a doctor's advice and includes the harmful or hazardous use of psychoactive substances such as alcohol and illegal narcotics. Drug abuse is also defined as the excessive or improper use of prescription or over-the-counter medications, as well as the frequent consumption of illicit drugs.

The consequences of drug abuse include legal problems, physical health risks, and exposure to dangerous situations. Drug abuse is associated with various health challenges such as liver damage, cancer, heart disease, dizziness, and mental disorders. These conditions may arise from overdose, misuse of pain-relief medications, or prolonged substance dependence. In addition to health risks, drug abuse contributes to social problems such as crime, violence, homelessness, and insecurity within communities. Addiction is recognized as a chronic and relapsing brain disorder characterized by compulsive drug-seeking behavior despite harmful consequences. Among students, commonly abused substances include tobacco, alcohol, cannabis, cocaine, heroin, opium, morphine, and other psychoactive drugs, all of which negatively affect physical health, emotional stability, and academic performance.

Some students engage in drug use with the belief that it enhances their physical strength, confidence, or ability to function academically. Others report that substance use enables them to express emotions or respond to situations more freely. However, such practices often result in serious negative outcomes, including impaired judgment, abnormal behavior, and poor academic performance. These challenges are particularly critical in the artificial intelligence era, which requires high levels of concentration, cognitive engagement, adaptability, and digital competence from students. Artificial intelligence (AI) refers to advanced technological systems designed to perform tasks that typically require human intelligence, such as problem-solving, learning, language processing, and data analysis (Aina *et al*., 2023). As AI becomes increasingly integrated into education, students' mental health and academic discipline play a crucial role in achieving meaningful learning outcomes.

Drug abuse has become a persistent social problem that has penetrated educational institutions and surrounding communities. It poses a serious threat not only to students' academic performance but also to societal development and security. The prevalence of drug abuse among students contributes to disciplinary problems, health risks, violence, and the spread of communicable diseases, thereby affecting both campus and community environments. Addressing this issue requires collaborative efforts that extend beyond the classroom, involving families, educational institutions, and community-based interventions such as awareness campaigns, counseling services, and rehabilitation support as part of community service initiatives.

Based on previous reports on community service (Oladimeji *et al.,* 2023; Saadu, 2023; Jibril *et al.,* 2023; Pranathi & Kamraju, 2024; Saadu, 2024; Suleiman *et al.,* 2025; Olomola *et al.,* 2025; Amin, 2024; Maulana *et al.,* 2023; Hidayat & Nandiyanto, 2022), this study therefore aims to examine the risks associated with drug abuse and addiction on Niger State College of Education students' academic performance in the artificial intelligence era. More specifically, the study aims to:

(i)   determine the impact of drug abuse and addiction on Niger State College of Education students' academic performance in the artificial intelligence era;

(ii)   examine the influence of parental care on drug abuse and addiction and its effect on students' academic performance in the artificial intelligence era;

(iii) determine the influence of drug abuse and addiction on Niger State College of Education students' academic performance in the artificial intelligence era; and

(iv) examine the health implications of drug abuse and addiction on Niger State College of Education students' academic performance in the artificial intelligence era, with implications for community service interventions.

The study was guided by the following research questions:

(i)   What is the mean impact of drug abuse and addiction on Niger State College of Education students' academic performance in the artificial intelligence era?

(ii)   What is the mean influence of parental care on drug abuse and addiction among Niger State College of Education students' academic performance in the artificial intelligence era?

(iii) What is the mean influence of drug abuse and addiction on Niger State College of Education students' academic performance in the artificial intelligence era?

(iv) What are the mean health implications of drug abuse and addiction on Niger State College of Education students' academic performance in the artificial intelligence era?

The novelty of this study lies in its integration of drug abuse and academic performance analysis within the context of the artificial intelligence era, while emphasizing the role of community service–oriented educational and preventive strategies to address substance abuse among college students.

2. METHODS

The study adopted a descriptive survey research design. The population comprised all students of Niger State College of Education, Minna, while the target population consisted of NCE II students. A total of 220 students were randomly selected from various schools within the college to serve as the sample for the study.

Data were collected using the Students' Drug Abuse and Addiction Questionnaire (SDAAQ), a four-point Likert-scale instrument. The questionnaire consisted of five sections: Section A covered respondents' biodata; Section B focused on the impact of drug abuse and addiction on students' academic performance; Section C examined the influence of parental care; Section D addressed the influence of drug abuse and addiction on academic performance; and Section E focused on the health implications of drug abuse and addiction.

The instrument was subjected to face and content validation by two experts in Science Education. Their suggestions were incorporated into the final version of the questionnaire. Data collection was carried out by the researchers with the assistance of trained research assistants, and all administered questionnaires were retrieved immediately after completion. The collected data were analyzed using frequency counts, percentages, and t-test statistics at the 0.05 level of significance.

3. RESULTS AND DISCUSSION

The results of this study are presented and discussed to address the research questions and test the stated hypotheses regarding the risks associated with drug abuse and addiction on the academic performance of Niger State College of Education students in the artificial

intelligence era. The analysis focuses on students' perceptions of the academic, parental, and health-related implications of drug abuse and addiction.

Table 1 presents the percentage responses of students regarding the impact of drug abuse and addiction on human organs and its consequent effect on academic performance in the artificial intelligence era.

Table 1. Percentage responses of COE Minna students on the impact of drug abuse and addiction on human organs

S/N	Items	SA	A	D	SD
1	Drug abuse and addiction can affect human organs such as the liver and in turn affect students' academic performance	176 (80%)	28 (12.72%)	10 (4.54%)	7 (3.1%)
2	Drug abuse and addiction can affect the kidney and in turn affect academic performance	189 (75.90%)	30 (13.63%)	15 (6.81%)	5 (2.27%)
3	Drug abuse and addiction can result in brain damage and affect academic performance	167 (75.90%)	20 (9.09%)	13 (5.90%)	10 (4.54%)
4	Drug abuse and addiction can affect psychological appearance and academic performance	138 (62.72%)	50 (22.72%)	19 (4.09%)	13 (5.90%)
5	Drug abuse and addiction can lead to mental disorder and affect academic performance	138 (62.72%)	44 (20%)	22 (10%)	16 (7.27%)

The responses in **Table 1** indicate that a large proportion of the respondents strongly agreed or agreed that drug abuse and addiction negatively affect vital organs such as the liver, kidney, brain, and psychological well-being, thereby influencing academic performance. This suggests that students are aware of the health consequences of substance abuse and its potential to impair cognitive functioning, concentration, and learning capacity. In the artificial intelligence era, where students are expected to demonstrate high levels of cognitive engagement, digital literacy, and adaptability, such health challenges may further hinder academic achievement. These findings highlight the need for preventive and rehabilitative community service programs that focus on health education and awareness within both campus and surrounding communities.

The influence of parental care on drug abuse and addiction and its effect on academic performance is presented in **Table 2**.

Table 2. Percentage responses of COE Minna students on the influence of parental care on drug abuse and addiction

S/N	Items	SA	A	D	SD
1	Broken homes can lead to drug abuse and affect academic performance	163 (74.09%)	46 (20.90%)	9 (4.09%)	2 (0.90%)
2	Parental negligence can lead to drug abuse and affect academic performance	147 (66.81%)	67 (30.45%)	6 (2.72%)	0 (0.00%)
3	Parental attitude can result in drug abuse and affect academic performance	130 (59.09%)	60 (27.27%)	22 (10.00%)	8 (3.63%)
4	Siblings' carelessness can lead to drug abuse and affect academic performance	141 (64.09%)	43 (19.54%)	29 (13.18%)	7 (3.18%)
5	Free mingling without monitoring can lead to drug abuse and affect academic performance	150 (68.18%)	42 (19.09%)	20 (9.09%)	8 (3.63%)

The results in **Table 2** reveal that most respondents perceived parental care as a significant factor influencing drug abuse and addiction among students. High levels of agreement were

recorded for items related to broken homes, parental negligence, and lack of monitoring. These findings emphasize the role of the family environment in shaping students' behaviors and academic outcomes. From a community service perspective, this underscores the importance of family-oriented interventions, parenting education programs, and community sensitization initiatives aimed at strengthening parental involvement and supervision. Such programs can serve as preventive strategies to reduce substance abuse among students and improve their academic performance.

The influence of drug abuse and addiction on students' academic performance is presented in **Table 3**.

Table 3. Percentage responses of COE Minna students on the influence of drug abuse and addiction on academic performance

S/N	Items	SA	A	D	SD
1	Drug abuse and addiction constitute a serious threat to academic performance	175 (79.54%)	10 (4.54%)	15 (6.81%)	20 (9.09%)
2	Drug abuse leads to lack of curiosity in academic activities	147 (66.81%)	40 (18.18%)	16 (7.27%)	17 (7.72%)
3	Drug abuse causes misbehavior and affects academic performance	166 (75.45%)	24 (10.90%)	20 (9.09%)	10 (4.54%)
4	Drug abuse leads to withdrawal from school	136 (61.81%)	44 (9.09%)	23 (10.43%)	17 (7.72%)
5	Drug abuse results in low academic performance	152 (69.09%)	29 (13.18%)	20 (9.09%)	19 (8.63%)

The data in **Table 3** show that the majority of respondents agreed that drug abuse and addiction negatively influence academic performance through reduced curiosity, misbehavior, school withdrawal, and low academic achievement. These outcomes suggest that substance abuse disrupts students' motivation and engagement with academic tasks. In the artificial intelligence era, effective learning requires sustained attention, problem-solving skills, and the ability to interact with digital tools. Drug abuse undermines these competencies, thereby limiting students' capacity to benefit from AI-enhanced educational environments. Community service initiatives, such as peer mentoring, student-led awareness campaigns, and counseling services, can play a vital role in addressing these challenges and promoting positive academic behaviors.

The health implications of drug abuse and addiction are presented in **Table 4.**

Table 4. Percentage responses of COE Minna students on health implications of drug abuse and addiction

S/N	Items	SA	A	D	SD
1	Treatment may be permanent or temporary depending on the drugs abused	182 (82.72%)	20 (9.09%)	11 (5.00%)	7 (3.18%)
2	Drug abuse poses a serious threat to the future of society	144 (65.45%)	41 (18.63%)	25 (11.36%)	10 (4.54%)
3	Drug abuse can lead to mental and psychiatric illness	130 (59.09%)	57 (25.90%)	24 (10.90%)	9 (4.09%)
4	Drug abuse leads to insecurity	162 (73.63%)	22 (10.00%)	26 (11.81%)	10 (4.54%)
5	Drug abuse can lead to untimely death	136 (61.81%)	58 (26.36%)	20 (9.09%)	6 (2.72%)

The findings in **Table 4** indicate strong agreement among respondents regarding the severe health and societal consequences of drug abuse and addiction. These include mental illness, insecurity, and threats to societal development. Such outcomes not only affect individual students but also place a burden on families, educational institutions, and communities. The results reinforce the need for comprehensive community service interventions involving collaboration between colleges, healthcare providers, law enforcement agencies, and community organizations to address substance abuse holistically.

The hypotheses testing further revealed no significant differences in the mean impact of drug abuse, addiction, parental care, and health implications on students' academic performance in the artificial intelligence era. Although the statistical results indicated no significant differences, the descriptive findings demonstrate that students perceive drug abuse as a serious academic, health, and social problem. This suggests that while the magnitude of impact may not differ significantly across variables, the presence of drug abuse remains a critical issue requiring sustained attention.

Overall, the results and discussion highlight that drug abuse and addiction pose substantial risks to students' academic performance, health, and social well-being. The findings support the integration of community service–based strategies, such as awareness campaigns, counseling services, rehabilitation programs, and family engagement initiatives, as effective approaches to mitigating the effects of drug abuse. These interventions are particularly important in the artificial intelligence era, where students' cognitive readiness and well-being are essential for meaningful participation in technologically driven educational environments. Finally, this study adds new information regarding community service as reported elsewhere (Oladimeji *et al.,* 2023; Saadu, 2023; Jibril *et al.,* 2023; Pranathi & Kamraju, 2024; Saadu, 2024; Suleiman *et al.,* 2025; Olomola *et al.,* 2025; Amin, 2024; Maulana *et al.,* 2023; Hidayat & Nandiyanto, 2022).

4. CONCLUSION

This study examined the risks associated with drug abuse and addiction on the academic performance of students at Niger State College of Education, Minna, in the artificial intelligence era. The findings revealed that although no significant differences were found in the mean impact of drug abuse, addiction, parental care, and health implications on students' academic performance, drug abuse remains a serious academic, health, and social concern among students. Drug abuse negatively affects students' physical health, mental stability, learning motivation, and ability to effectively engage with academic activities, particularly in a technologically demanding educational environment.

The study further highlights that drug abuse among students extends beyond individual behavior and poses broader challenges to families, educational institutions, and the surrounding community. In the artificial intelligence era, where academic success requires high levels of cognitive engagement, discipline, and adaptability, substance abuse undermines students' readiness to benefit from modern educational technologies. Therefore, addressing drug abuse among students requires not only institutional policies but also collaborative efforts involving families, community stakeholders, and educational institutions through structured community service initiatives.

Based on the findings of this study, the following recommendations are made to reduce drug abuse and addiction among students and to enhance their academic performance:
(i)   Educational institutions should organize regular community service–based awareness campaigns, seminars, and public lectures to educate students and community members

on the negative effects of drug abuse on academic performance and health, particularly in the artificial intelligence era.

(ii)   Students who exhibit poor academic performance as a result of drug abuse should be referred to appropriate rehabilitation and counseling services in collaboration with parents, healthcare providers, and relevant community agencies.

(iii) Counseling units within colleges should be strengthened to provide continuous academic and psychological support to students, with active involvement from level advisers and departmental counselors as part of student-focused community service programs.

(iv) Parents and guardians should be encouraged to closely monitor their children's academic progress, peer relationships, and social activities through community-based parenting education initiatives aimed at preventing drug abuse.

(v)   School authorities should regulate and monitor student activities within and around the campus to discourage behaviors that may promote drug abuse, while fostering a safe and supportive learning environment.

(vi) Religious and community-based organizations should actively participate in preventive education by promoting positive values, moral discipline, and healthy lifestyles through outreach programs and community engagement.

(vii) Teachers, lecturers, parents, and community leaders should serve as positive role models by avoiding substance abuse behaviors in the presence of students, reinforcing the principle that effective prevention begins at home and within the community.

5. REFERENCES

Aina, M. A., Gbenga-Epebinu, M. A., Olofinbiyi, R. O., Ogidan, O. C., and Ayedun, T. O. (2023). Perception and acceptance of medical chatbot among undergraduates in Ekiti State University, Nigeria. *British Journal of Education*, *11*(11), 1-14.

Amin, M. R. (2024). Role of non-governmental organizations in disaster response and recovery efforts: An investigation in Bangladesh. *ASEAN Journal of Community Service and Education, 3*(1), 57–68.

Hanifah, S., Ball, P.A., and Kennedy, R.A. (2025). Nature of precipitation resulted from intravenous drugs incompatibility. *ASEAN Journal for Science and Engineering in Materials*, *4*(2), 151-158.

Hidayat, A. Z., and Nandiyanto, A. B. D. (2022). Socialization of digital literacy in compiling a balanced healthy menu to members of the PKK movement team of Purwakarta Regency. *ASEAN Journal of Community Service and Education, 1*(1), 77–82.

Jibril, A. O., Issa, U. A., and Abidemi, S. R. (2023). Unveiling social consequences: Examining effects of tricycle transportation riders' growth from a community service perspective. *ASEAN Journal of Community Service and Education, 2*(2), 117–126.

Maulana, I., Asran, M. A., and Ash-Habi, R. M. (2023). Implementation of sustainable development goals (SDGs) No. 12: Responsible production and consumption through community empowerment to reduce household waste. *ASEAN Journal of Community Service and Education, 2*(2), 141–146.

Oladimeji, R. M., Odefunsho, O. A., and Adeoye, M. A. (2023). Community service perspective on intervention strategies by parents–teachers associations: Challenges and prospects. *ASEAN Journal of Community Service and Education, 2*(1), 45–50.

Olomola, S. O., Olutola, A. T., and Adamu, G. K. (2025). Community service assessment of senior secondary school students' enrolment and attitudes toward formal education. *ASEAN Journal of Community Service and Education, 4*(1), 29–42.

Pranathi, O., and Kamraju, M. (2024). Exploring the influence of gender in political campaigns: A comparative study from a community service perspective. *ASEAN Journal of Community Service and Education, 3*(1), 1–10.

Saadu, U. T. (2023). Influence of parenting styles on moral skills acquisition of primary school pupils: Community service perspective. *ASEAN Journal of Community Service and Education, 2*(2), 105–116.

Saadu, U. T. (2024). Relationship between parental factors and use of abusive words among primary school pupils: A community service perspective. *ASEAN Journal of Community Service and Education, 3*(1), 11–26.

Suleiman, Y., Abdulazeez, B. T., Ibrahim, A., Ahmed, A. A., and Abdulmumin, I. A. (2025). Strengthening teaching excellence and student success through virtual mentoring: A qualitative exploration with additional community service perspective. *ASEAN Journal of Community Service and Education, 4*(1), 59–70.