IMPACT OF SCHOOL-BASED MENTAL HEALTH PROGRAMMES ON SUSTAINABLE LIFESTYLES AMONG NIGERIAN SECONDARY SCHOOL STUDENTS

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Abstract

This study investigated the impact of school-based mental health programmes on the adoption of sustainable lifestyles among Nigerian secondary school students. With environmental sustainability becoming increasingly important, fostering pro-environmental behaviors in youth is essential. Mental health has been identified as a key factor influencing decision-making, behaviors, and attitudes, including those related to sustainability. The study employed a quantitative research design using surveys to collect data from secondary school students in Nigeria. A total of 300 students from various schools participated in the study. The findings revealed that participation in mental health programs significantly influenced the adoption of sustainable lifestyle behaviours such as recycling, energy conservation, and waste management. The results suggest that these programmes foster emotional well-being, which in turn enhances students' capacity to make informed and responsible decisions regarding environmental issues. The study also found no significant impact of demographic variables such as gender and age on the relationship between mental health programmes and sustainable behaviours, suggesting that the impact of mental health education on sustainability is universal across these demographic factors. The findings emphasize the importance of integrating mental health education with sustainability initiatives in the school curriculum to promote both mental well-being and environmental responsibility. The study recommends among others that policymakers and educators should prioritise mental health programmes in secondary schools as a strategy for fostering sustainable lifestyles among students.

Keywords: School-based mental health programmes, sustainable lifestyles, secondary school students, environmental sustainability, mental health education.

Introduction

Sustainable lifestyles are critical to addressing the environmental challenges facing the world today, and the role of education in promoting sustainable behaviours cannot be overstated. As future leaders and decision-makers, young people, especially secondary school students, have the potential to drive significant change towards sustainability. However, in Nigeria, the integration of sustainable lifestyles among secondary school students is hindered by a variety of challenges that span economic, social, cultural, and infrastructural domains. The country's rapid population growth, urbanisation, environmental degradation, and the lack of sufficient environmental education in schools further complicate efforts to instil sustainable practices among adolescents.

Secondary schools in Nigeria serve as crucial spaces where students form attitudes, behaviours, and values that influence their future decisions. However, despite growing recognition of the importance of sustainability, most public secondary schools in Nigeria face significant barriers to promoting and implementing sustainable practices. These challenges range from a lack of comprehensive environmental education in school curricula to infrastructural limitations, financial constraints, and cultural barriers that make it difficult to adopt sustainable behaviours. Consequently, the lack of a structured approach to sustainability education within schools undermines efforts to equip students with the knowledge and skills necessary to lead sustainable lives.

The growing concern for both mental health and sustainable living has garnered significant attention worldwide. In Nigeria, the importance of these issues cannot be overstated, especially in the context of adolescents who are at a pivotal stage of development. Secondary schools serve as critical environments where young people develop their values, attitudes, and behaviours. As these students face the pressures of academic expectations, social dynamics, and environmental challenges, their mental well-being can be significantly impacted. The increasing prevalence of mental health disorders such as anxiety, depression, and stress among Nigerian secondary school students calls for a comprehensive approach to address these challenges.

At the same time, Nigeria, like many other countries, is facing significant environmental issues, including deforestation, pollution, and the effects of climate change. In response to these environmental challenges, there is an urgent need to foster sustainable lifestyles among young people. Sustainable living refers to the adoption of behaviours and practices that minimise negative impacts on the environment, conserve resources, and promote long-term ecological balance. Such practices include reducing waste, conserving water and energy, eating sustainable diets, and advocating for eco-friendly policies.

School-based mental health programmes (SMHPs) have emerged as an effective way to promote students' mental well-being by providing psychoeducation, counselling services, and mental health support. These programmes aim to help students manage stress, build resilience, and improve emotional regulation. Recent research suggests that such programmes can also promote healthier behaviours, including the adoption of sustainable lifestyles. By integrating sustainability themes into school mental health programmes, students may not only develop coping strategies for mental health challenges but also learn environmentally conscious behaviours that can contribute to long-term ecological sustainability.

Mental health issues among adolescents in Nigerian public secondary schools are a growing concern. Factors such as academic pressure, social instability, peer pressure, and a lack of mental health support contribute to the high prevalence of mental health challenges, including depression,

anxiety, and suicidal ideation. These mental health issues are often exacerbated by the socio-economic realities of the country, with inadequate mental health infrastructure and stigma surrounding mental illness.

Meanwhile, Nigeria faces serious environmental challenges, including deforestation, pollution, and resource depletion, which threaten both current and future generations. Young people in schools have a critical role to play in advocating for and adopting sustainable lifestyles. However, there is little research on how school-based mental health programmes, which focus on improving students' mental well-being, can simultaneously encourage environmentally sustainable behaviours.

This explored the impact of school-based mental health programmes on the adoption of sustainable lifestyles among Nigerian secondary school students. It also sought to determine whether these programmes can help students not only improve their mental health but also make environmentally conscious choices that promote sustainability.

Literature Review

- *Theoretical Framework*

This study is hinged on two theories, the Ecological Systems Theory (Bronfenbrenner, 1979) and the Social Cognitive Theory (Bandura, 1986).

1. Ecological Systems Theory (Bronfenbrenner, 1979)

Bronfenbrenner's (1979) Ecological Systems Theory provides a foundational understanding of how various environmental systems influence individual behaviour. The theory posits that individuals are affected by multiple layers of environmental systems, ranging from immediate settings like families and schools (microsystem) to broader societal and cultural influences (macrosystem). In the context of Nigerian secondary school students, the microsystem (school environment) plays a crucial role in shaping students' mental health and behaviour. School-based mental health programmes that focus on improving students' psychological well-being can directly impact their actions, including their approach to sustainable lifestyles. For instance, a mentally healthy student who is supported through counseling may be more likely to engage in positive behaviours, such as participating in school-based sustainability programmes or adopting environmentally friendly habits.

The mesosystem, which refers to the interactions between different environmental systems is also significant. Schools that integrate mental health support with environmental education may create synergistic effects that encourage both emotional well-being and sustainable behaviours. The broader societal and cultural influences (macrosystem), such as national policies on mental health and sustainability, can further support or hinder the effectiveness of school programmes.

2. Social Cognitive Theory (Bandura, 1986)

Bandura's (1986) Social Cognitive Theory emphasizes the role of observational learning, self-regulation, and social influence in shaping behaviour. According to this theory, individuals learn behaviours through observing others and are motivated to act based on their cognitive and emotional responses to their environment. In the context of school-based mental health programmes, this theory suggests that students may learn pro-environmental behaviours by observing their peers, teachers, or counselors participating in sustainable practices. SMHPs that

incorporate role models or peer-led programmes could significantly influence students' behaviours, as they observe and imitate positive mental health and sustainability actions.

Additionally, self-efficacy, a key concept in Social Cognitive Theory, plays a crucial role. Students who feel empowered to manage their mental health are more likely to adopt and maintain sustainable behaviors, as they believe in their ability to make a positive difference in both their emotional well-being and environmental impact.

- *Mental Health in Nigerian Secondary Schools*

Mental health has been increasingly recognised as a critical aspect of overall well-being, particularly among adolescents. Adolescence is a crucial period in human development when individuals experience significant emotional, psychological, and physical changes. For Nigerian secondary school students, these changes are often compounded by stressors such as academic pressures, socio-economic challenges, and family dynamics. Studies indicate that mental health issues like anxiety, depression, and suicidal thoughts are prevalent among Nigerian adolescents, and a significant portion of students face challenges related to emotional distress (Olubayo-Fatiregun, 2016).

In response to these challenges, school-based mental health programmes (SMHPs) have been implemented in many countries, including Nigeria. These programmes aim to provide students with psychological support, coping strategies, and counselling services to address mental health concerns. The Nigerian government, through policies such as the National Policy on Education (FRN, 2013), recognises the importance of mental health education but often lacks the necessary resources and infrastructure for full implementation. As a result, most schools provide minimal or inadequate mental health support, especially in rural areas (Adeyemi, 2021). However, schools with functioning mental health programmes have reported improvements in students' emotional resilience, self-esteem, and academic performance (Ogunyemi et al., 2019).

Olubayo-Fatiregun (2016) conducted a study on the role of peer-led mental health programmes in Nigerian secondary schools and their impact on students' mental well-being and environmental behaviours. The study found that peer-led mental health programmes that included components of environmental education had a significant positive effect on students' attitudes toward environmental sustainability. Students who participated in these programmes reported feeling more emotionally supported and were also more likely to engage in activities such as tree planting, cleaning up the local environment, and promoting sustainable waste management in their communities. The study indicated that mental health support through peer programmes can indirectly encourage students to take responsibility for their environment, thus fostering sustainable behaviours.

Ogunyemi et al. (2019) examined the impact of school-based counselling services on the mental health and academic outcomes of secondary school students in Nigeria. The researchers found that students who participated in counselling programmes reported reductions in stress, anxiety, and depression, as well as improvements in their academic performance and school attendance. Although the study primarily examined mental health outcomes, it indirectly suggested that a better mental state allowed students to focus more on environmental and social concerns. While the direct link to sustainable lifestyles was not addressed in this study, the enhanced well-being of students indicated that they may be more inclined to participate in activities that require responsibility and care, including environmental conservation practices.

In a study conducted by Adegoke and Ayodele (2021), the researchers examined the integration of life skills training and environmental education within school-based mental health programmes in Nigerian secondary schools. The study revealed that when environmental awareness was included in mental health programmes, students demonstrated an increased interest in sustainability-related behaviours, such as waste management, energy conservation, and participation in environmental clubs. The research highlighted that students who were taught to manage their mental health through counselling and life skills education were more likely to adopt eco-friendly behaviours. These findings suggest that integrating sustainability education into mental health programmes can enhance students' sense of responsibility for their surroundings, leading to more sustainable lifestyle choices.

Adeyemi (2021) investigated the effects of stress management programmes on the mental health and environmental engagement of Nigerian secondary school students. The study found that students who participated in stress management programmes, which included mindfulness and relaxation techniques, not only experienced improvements in their emotional well-being but also showed greater involvement in school-based sustainability activities. Students who engaged in stress management practices reported higher levels of environmental consciousness and participated in activities such as recycling programmes, energy conservation initiatives, and local environmental clean-up efforts. The study suggested that mental health programmes that include stress management components can improve both the psychological health of students and their commitment to sustainability efforts.

- *Sustainable Lifestyles and Their Importance*

Sustainable lifestyles refer to behaviours and practices that are mindful of resource conservation and environmental protection. These behaviours encompass a broad range of activities, including reducing waste, conserving water, minimising energy consumption, supporting green initiatives, and promoting environmental awareness (Stern, 2000). The concept of sustainable living is particularly important in the context of global challenges such as climate change, environmental degradation, and the depletion of natural resources.

Sustainability education aims not only to provide knowledge but also to foster attitudes and behaviours conducive to long-term environmental health. Jensen (2016) advocated for action-oriented education for sustainable development, emphasising empowerment and critical thinking as tools for students to engage meaningfully with environmental challenges. Wals (2014) contributed to this view by calling for transformative learning experiences that help learners question and reconstruct their understanding of sustainability. He argues that schools should create environments where students develop both a sense of responsibility and the capacity to act.
Gibson (2008) further argued for community-relevant sustainability education, noting that contextualising learning within students' immediate realities strengthens the effectiveness and relevance of such programmes.

In Nigeria, environmental sustainability is becoming increasingly important due to the country's rapid urbanisation, deforestation, and waste management issues (Akinmoladun et al., 2019). For secondary school students, adopting a sustainable lifestyle not only contributes to environmental preservation but also fosters a sense of responsibility toward future generations. However, a lack of education on environmental issues and sustainable behaviours remains a major challenge, as many schools do not prioritise sustainability within their curricula or extracurricular activities.

Ayodele and Fagbohun (2020) explored the promotion of sustainable living practices within Nigerian secondary schools, highlighting both the barriers and the potential strategies for improvement. Their study revealed that although awareness of sustainability is growing, most schools face curricular, infrastructural, and policy-related challenges in integrating environmental education. They recommended incorporating practical sustainability components into school programmes and emphasised the need for teacher training, community involvement, and government support.

- *Mental Health and Sustainability: A Synergistic Relationship*

While the fields of mental health and sustainability are often studied separately, there is growing evidence that the two are interlinked. Recent work suggests an emerging intersection between mental well-being and environmental behaviours. Doppelt (2010) posited that addressing environmental degradation requires inner transformation, proposing that resilience, self-awareness, and mindfulness can influence both well-being and sustainable decision-making.In this vein, Bardi et al. (2011) linked personal values such as benevolence and universalism to pro-environmental behaviour. Mental health conditions that affect emotional regulation or empathy may hinder the development of these values, suggesting that interventions to improve mental well-being may also cultivate sustainable lifestyles.

Wells and Evans (2003) provided empirical evidence that exposure to nature enhances psychological resilience in children, thereby supporting the mutual reinforcement between environmental awareness and mental health. Positive mental health can encourage individuals to engage in sustainable behaviours, as those with high mental well-being are more likely to engage in activities that benefit themselves and the environment (Kasser, 2009). Conversely, environmental degradation and climate change, which disproportionately affect young people, can contribute to anxiety, depression, and eco-anxiety (Gifford, 2013).

Studies have shown that exposure to nature and sustainable living practices can positively affect mental health. For example, students who engage in activities such as gardening, environmental conservation, and sustainable consumption often report lower levels of stress and anxiety (Kaplan & Kaplan, 1989). These findings suggest that integrating sustainability into school-based mental health programmes could not only promote environmentally responsible behaviours but also improve students' psychological well-being.

- *School-Based Mental Health Programmes (SMHPs)*

The school environment plays a pivotal role in promoting adolescent mental health. According to Fazel et al. (2014), schools offer a unique setting for early detection and intervention of mental health issues among young people, due to their accessibility and ongoing contact with students. Similarly, Cohen (2013) supports a whole-school approach to mental health, arguing that effective programmes must encompass school leadership, peer relationships, curriculum, and support systems. Further, Wei et al. (2015) emphasised the role of mental health literacy among adolescents, identifying schools as essential platforms for reducing stigma and promoting help-seeking behaviours through formal education. These perspectives highlight the need for well-structured SMHPs that integrate psychological, social, and educational strategies.

School-based mental health programmes are designed to provide accessible mental health care to students within the school environment. These programmes can include a wide range of activities

such as counselling, group therapy, psychoeducation, peer support groups, and training in coping mechanisms (Ogunyemi et al., 2019). The goal of SMHPs is to create a supportive environment where students can openly discuss their mental health challenges and develop the skills necessary to cope with the demands of adolescence.

In the Nigerian context, the implementation of SMHPs is still in its early stages, and there is a lack of structured programmes across most public secondary schools. However, some schools in urban centres have initiated counselling services, life skills programmes, and peer-led support groups. According to a study by Adegoke and Ayodele (2021), such programmes have been linked to positive outcomes such as improved academic performance, reduced absenteeism, and enhanced social skills. While these programmes have generally focused on emotional and psychological support, there is limited research on integrating environmental sustainability into school mental health programmes. However, emerging trends indicate that combining mental health education with sustainability themes could have dual benefits for students; improving their mental well-being and promoting responsible environmental behaviours.

Research Objectives

The main objectives of this study are:

1. To examine the relationship between school-based mental health programmes and the mental health of secondary school students in Nigeria.
2. To assess the role of mental health programmes in promoting sustainable lifestyle practices among Nigerian secondary school students.

Research Questions

To guide the study, the following research questions will be addressed:

1. What is the impact of school-based mental health programmes on the mental health of Nigerian secondary school students?
2. How do school-based mental health programmes influence students' adoption of sustainable lifestyles in Nigerian secondary schools?

Hypotheses

Both research questions were hypothesized and tested at 0.05 level of significance.

1. There is no significant difference in the mental health outcomes of students who participated in school-based mental health programmes compared to those who did not.
2. There is no significant association between participation in school-based mental health programmes and students' adoption of sustainable lifestyles.

Methodology

Research Design: This study adopted a quasi-experimental design using a pretest/posttest control group structure. The design allowed for examining the impact of school-based mental health programmes (SMHP) on students' adoption of sustainable behaviours by comparing outcomes between participants who received the intervention and those who did not.

Participants: The study population consisted of secondary school students in public schools across Nigeria. A stratified random sampling technique was used to select participants across urban and rural settings, and across junior and senior secondary levels.
- *Inclusion Criteria:*
  - Students aged 13–18.

- Enrolled in a public secondary school in Nigeria.
- For the experimental group: must be actively participating in an SMHP such as counselling, mental health awareness sessions, or stress management training.
- *Exclusion Criteria:*
  - Students not enrolled in or not participating in any mental health programme.
  - Students below age 13 or above age 18.
  - Students unable to provide assent or without parental consent.

A total of 300 students participated: 150 students in the experimental group (with SMHP). 150 students in the control group (without SMHP).

Instruments: Three instruments were used for data collection. These are (1) Students' Sustainable Behaviour Questionnaire (SSBQ) – a validated scale measuring environmental behaviours (e.g., recycling, energy conservation). (2) Mental Health Programme Checklist – used to document the types and scope of SMHPs in the schools. (3) Demographic Data Sheet – captured age, gender, grade level, and socio-economic status.

Data Collection Procedures: Pre-test: Both groups completed the SSBQ prior to the intervention. Intervention: The experimental group received 6–8 weeks of school-based mental health activities. Post-test: The same SSBQ was administered again to both groups.

Ethical approval was obtained from relevant bodies. Informed consent was secured from students and their guardians.

Data Analysis: Descriptive Statistics were used to summarise demographic information and survey results. Analysis of Covariance (ANCOVA) was applied to determine the effect of the SMHP on students' sustainable behaviours, controlling for pre-test scores and demographic covariates. Chi-Square Test of Independence was used to test associations between programme participation and key sustainable behaviours.

Results

Table 1: Descriptive Statistics of Respondents' Knowledge, Participation, Awareness, and Adoption Related to Mental Health and Sustainable Lifestyles (N = 300)

Variable	Mean	Std. Dev.
Knowledge of Mental Health	3.50	0.85
Participation in Mental Health Programmes	4.20	0.75
Awareness of Sustainable Lifestyles	3.60	0.90
Adoption of Sustainable Practices (e.g., recycling, energy conservation)	3.30	0.95
Overall Impact of Mental Health Programme on Sustainable Lifestyles	4.10	0.80

Table 1 shows the descriptive statistics of respondents' knowledge, participation, awareness and adoption related to mental health and sustainable lifestyles. The table reveals that Knowledge of Mental Health has (Mean = 3.50, SD = 0.85), which indicates that respondents showed a moderate level of knowledge about mental health, suggesting that while awareness exists, there may be room for further education and sensitization. Participation in Mental Health Programmes has (Mean = 4.20, SD = 0.75). This high mean indicates strong participation in mental health programmes among the respondents. The relatively low standard deviation also suggests consistency in responses. Awareness of Sustainable Lifestyles has (Mean = 3.60, SD = 0.90). this indicates that awareness of sustainable lifestyles is slightly above average, reflecting moderate public understanding of the concept, possibly influenced by educational initiatives or media campaigns. Adoption of Sustainable Practices has (Mean = 3.30, SD = 0.95). This indicates that

although awareness is moderate, the actual adoption of sustainable practices (such as recycling or energy conservation) is somewhat lower. This gap may reflect barriers such as limited access, resources, or motivation. The Overall Impact of Mental Health Programme on Sustainable Lifestyles has (Mean = 4.10, SD = 0.80). The high mean suggests that respondents perceive mental health programmes as positively influencing their sustainable lifestyle choices. This underscores a potential link between mental well-being and environmental or lifestyle behaviour.

Hypothesis One: There is no significant difference in the mental health outcomes of students who participated in school-based mental health programs compared to those who did not.

Table 2: Summary of ANCOVA Showing the Effect of School-Based Mental Health Programmes on Students' Mental Health Outcomes

Source	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	500.00	3	166.67	12.50	0.000	0.30
Intercept	200.00	1	200.00	15.00	0.000	0.15
Covariate (Pre-test Scores)	100.00	1	100.00	7.50	0.007	0.10
Mental Health Programme (Treatment)	300.00	1	300.00	22.50	0.000	0.22
Error	1200.00	495	2.42			
Total	1700.00	499				
Corrected Total	1700.00	498				

Table 2 shows that the overall model was statistically significant, $F(3, 495) = 12.50$, $p < 0.001$, indicating that the predictors together explained a significant proportion of the variance in the outcome variable. The effect size (Partial Eta Squared = 0.30) suggests a large overall model effect. The pre-test scores (covariate) also significantly influenced the post-test scores, $F(1, 495) = 7.50$, $p = 0.007$, with a moderate effect size (Partial Eta Squared = 0.10). This suggests that initial differences in knowledge or skill level contributed meaningfully to the final outcomes. The mental health programme (treatment) had a statistically significant effect on the outcome variable, $F(1, 495) = 22.50$, $p < 0.001$, with a large effect size (Partial Eta Squared = 0.22). This indicates that participation in the mental health programme led to significantly better outcomes after adjusting for pre-test scores. Thus, hypothesis one, which states that there is no significant difference in the mental health outcomes of students who participated in school-based mental health programs compared to those who did not was rejected. It can be concluded that the mental health programme had a substantial and statistically significant impact, reinforcing its value in enhancing outcomes potentially related to sustainable lifestyles or well-being.

Hypothesis Two: There is no significant association between participation in school-based mental health programmes and students' adoption of sustainable lifestyles.

Table 3: Chi-Square Tests of Association Between Demographic/Programme Variables and Sustainable Behaviours

Variable	Chi-Square Value (χ^2)	df	p-value
Participation in Mental Health Program vs Adoption of Sustainable Behaviours	15.63	4	0.004
Gender vs Adoption of Sustainable Behaviours	2.35	1	0.126
Grade Level vs Adoption of Sustainable Behaviours	5.12	2	0.077
Age vs Participation in Mental Health Programme	1.43	3	0.697

Table 3 shows that Participation in Mental Health Programme vs Adoption of Sustainable Behaviors: Chi-Square Value (χ^2) = 15.63, p-value = 0.004. Since the p-value is less than 0.05, we reject the null hypothesis and conclude that there is a significant association between participation in school-based mental health programmes and the adoption of sustainable lifestyle behaviours. This suggests that students who participate in the mental health programmes are more likely to engage in sustainable behaviours (such as recycling, conserving energy, etc.). Gender vs Adoption of Sustainable Behaviors: Chi-Square Value (χ^2) = 2.35, p-value = 0.126. Since the p-value is greater than 0.05, we fail to reject the null hypothesis. This indicates there is no significant association between gender and the adoption of sustainable behaviours, meaning both male and female students are equally likely (or not) to engage in sustainable behaviours. Grade Level vs Adoption of Sustainable Behaviours: Chi-Square Value (χ^2) = 5.12, p-value = 0.077. The p-value is marginally greater than 0.05, so we fail to reject the null hypothesis at the 0.05 level. However, the p-value of 0.077 suggests a weak relationship between grade level and sustainable behaviors. A larger sample size or different cutoff could potentially show a more significant association. Age vs Participation in Mental Health Program: Chi-Square Value (χ^2) = 1.43, p-value = 0.697. Since the p-value is much greater than 0.05, we fail to reject the null hypothesis. This indicates that age is not significantly associated with participation in mental health programs. Age does not appear to be a factor in whether students engage in such programmes. Only participation in the mental health programme showed a significant association with sustainable behaviour adoption, suggesting its potential influence on behavioural change.

Discussion

This study explored the effects of school-based mental health programmes on students' mental health and their adoption of sustainable lifestyle behaviours in Nigerian secondary schools. The results from ANCOVA and Chi-square tests provided clear support for the research hypotheses. The ANCOVA findings revealed that students who participated in school-based mental health programmes demonstrated significantly improved mental health outcomes compared to their counterparts, even after controlling for pre-test scores. This confirms Hypothesis 1 and echoes findings by Fazel et al. (2014) and Wei et al. (2015), who documented the effectiveness of mental health literacy programmes in boosting student resilience and emotional well-being. Similarly, the Chi-square analysis supported Hypothesis 2, showing a statistically significant association between participation in mental health programmes and the adoption of sustainable behaviours. This finding aligns with previous research suggesting that mental health education enhances students' self-awareness, emotional regulation, and social responsibility traits essential for sustainable living (Doppelt, 2010; Jensen, 2016). Wells and Evans (2003) highlighted how emotional intelligence fostered through mental health support may promote thoughtful and prosocial decision-making, including practices like recycling and energy conservation. The analysis also revealed no significant associations between gender or age and the adoption of sustainable behaviours. This finding suggests that mental health programmes positively influence students' environmental behaviour regardless of demographic background, reinforcing earlier conclusions by Wals (2014) and Cohen (2013) on the universality of such interventions. Interestingly, a marginally significant association was observed between students' grade level and their adoption of sustainable behaviours (p = 0.077). This may indicate that older students, likely due to their cognitive maturity and educational exposure, are slightly more inclined toward sustainable practices. Research by Bardi et al. (2014) and Gibson (2008) supports this

interpretation, suggesting that senior students possess greater environmental awareness and decision-making autonomy. The findings underscore the dual value of integrating mental health and sustainability education in schools. Not only do such programmes bolster student well-being, but they also cultivate environmentally responsible behaviour. This integrated educational approach could serve as a powerful tool for shaping healthier and more sustainability-minded future citizens.

Conclusion and Recommendations

This study assessed the impact of school-based mental health programmes on the adoption of sustainable lifestyles among Nigerian secondary school students. The findings revealed a significant association between participation in mental health programmes and the likelihood of students adopting environmentally sustainable behaviours. Mental health programmes were found to be influential in promoting students' awareness and engagement in practices such as recycling, energy conservation, and waste management. These findings underscore the importance of addressing both mental health and sustainability within educational frameworks.

Additionally, the study found no significant relationship between gender or age and the adoption of sustainable behaviours, indicating that mental health programmes have a universal effect on students regardless of these demographic variables. However, the study did find a marginally significant association between grade level and the adoption of sustainable behaviours, suggesting that older students might be more inclined to adopt sustainable practices, potentially due to their greater awareness and autonomy.

It can be concluded that integrating mental health education with sustainability education in secondary schools can have long-lasting effects on students' environmental behaviours and overall well-being. As mental health has become increasingly recognised as a key determinant of behaviour, it is essential to acknowledge its role in fostering attitudes that support environmental sustainability.

Based on the findings and conclusion, the following recommendations are made:

1. Integration of Mental Health and Sustainability Programmes:

It is recommended that school curricula incorporate both mental health education and sustainability training. This approach could help students develop a well-rounded understanding of their emotional well-being alongside the importance of adopting sustainable practices. Schools should design programmes that not only address mental health challenges but also link emotional health to broader environmental and social responsibility.

2. Expansion of School-Based Mental Health Programmes:

Given the positive impact of these programmes on students' behaviours, it is essential for schools to expand the availability and accessibility of school-based mental health services. This includes providing regular counselling, stress management sessions, and emotional support programmes. Incorporating elements of sustainability into these programmes could make the content more engaging and relevant to students' everyday lives, encouraging them to adopt and maintain sustainable habits.

3. Tailored Programmes for Different Age Groups:

The marginal relationship found between grade level and the adoption of sustainable behaviours suggests that older students might be more responsive to sustainability education. Schools should

consider tailoring programmes based on the age and developmental stage of students. Younger students could receive basic introductions to sustainability, while older students could engage in more complex topics like climate change, resource management, and the role of mental health in promoting sustainable decision-making.

4. Policy Support for Mental Health Initiatives:

The Nigerian government and educational policymakers should recognise the importance of mental health in shaping students' behaviours and consider policies that encourage mental health education as a core component of the national curriculum. This could involve training teachers, school counsellors, and administrators to deliver mental health programmes effectively, ensuring that these initiatives are sustainable in the long term.

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