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Financial Stress and Sleep Deprivation as Correlates of Mental Health among Undergraduate Students in Selected Public Universities in Imo State

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ABSTRACT
The mental wellbeing of university students is paramount, as academic engagement is based on a sound mental health. Based on this, the present study investigated the relationship between financial stress, sleep deprivation and students' mental health. A correlational research design was adopted which focused on undergraduate students in Imo State. A sample of 384 respondents was drawn from three selected public universities using a balloting technique. Data were collected using three researcher-made instruments: the Financial Stress Scale (FSS), Sleep Deprivation Scale (SDS), and Mental Health Scale (MHS). Each scale comprised 15 items rated on a 4-point Likert Scale. The instruments were face and content validated by specialists in Educational Psychology, as well as Measurement and Evaluation. Internal consistency reliability, assessed through Cronbach's alpha yielded acceptable coefficients of .75 for the FSS, .70 for the SDS, and .78 for the MHS. Simple linear regression was used to answer the research questions, while the hypotheses were tested using Analysis of Variance (ANOVA) at a .05 significance level. Results of the data analyzed showed that both financial stress and sleep deprivation have a significant negative correlation with students' mental health. In light of these findings, the study recommends that schools should establish a system of small, emergency funds managed directly through the student affairs department, which would provide immediate, short-term relief to financially struggling students.
Keywords: Financial stress, sleep deprivation, mental health, undergraduate students

INTRODUCTION

Tertiary education represents the highest stage of formal learning within the organized hierarchy of the educational system. In Nigeria, this level of education encompasses all formal instruction that takes place after a student completes secondary school. According to Akinola and Ashafa (2025), this includes institutions such as universities, polytechnics, and colleges of education. The main purpose of this advanced schooling is clearly outlined in the National Policy on Education. The document states that the system is meant to "contribute to national development through high level manpower training; and reduce skill shortages through production of skilled manpower relevant to the needs of the labour market" (Federal Republic of Nigeria, 2014, p. 39). Essentially, the goal is to equip individuals with the high-level skills needed to help the country develop, and also fill gaps in the workforce. Generally, society has viewed higher education as a valuable environment for young adults to develop intellectually, and specialize in their area of interest. It is typically a time filled with major changes in a student's academic life, social circles, and personal development. Far from the expected, the reality of colleges and universities today has shifted. Rather than just being a place of intellectual and social advancement, these institutions are now widely recognized as a leading cause of continuous, long-term stress. Today's

students are faced with multiple burdens. They must cope with strict academic requirements, face the difficulties of fitting into new social environments, and carry a growing anxiety about whether they will actually find a job after graduation. While all students face these common challenges, two specific issues stand out as having a considerable impact on their overall health and daily life: financial stress and disrupted sleep.

Financial stress has become a widespread challenge for university students across the globe. This problem is driven by increasing tuition fees, higher daily living expenses, and a lack of dependable financial support in many regions. This burden often turns into enduring anxiety and a deep feeling of instability. Furthermore, students are frequently forced to take on strength and time-demanding part-time jobs, which drain their physical, mental and emotional energy. Highlighting the heightened risk for certain groups. Robb (2017) observed that students from lower-income backgrounds face multiple pressures such as costs for tuition, housing, and basic daily needs while often lacking access to sufficient grants or scholarships that could assist their education. According to Baker et al. (2019) more than 60% of students deal with moderate to serious financial strain, mostly caused by high tuition fees and the burden of student loans. Focusing specifically on Nigeria, Ogbuagu et al. (2024) asserted that a large portion of university students suffer from mild to moderate stress, directly linking these feelings to financial hardships. This "student struggle" takes place against a backdrop of national economic hardship. As Ojabello (2024) noted, the country has suffered severe economic shocks, including the rapid loss of its currency's value, extreme inflation, and the resulting spike in the cost of living. The situation worsened significantly in 2023 when the government removed its fuel subsidy. According to the Nigerian Economic Summit Group as cited Olusina (2025), this policy shift created a "butterfly effect" that triggered widespread inflation which by June 2024 had climbed to 34.2%, marking it the highest in 28 years. The same group (the Nigerian Economic Summit Group) highlighted by Olusina (2025), pointed out that this inflation is fuelled by soaring food prices, which hit 40.9% in June 2024, and worsened by a collapsing exchange rate that over the course of a single year shifted from 769 Naira to the US dollar in June 2023 to 1,471 Naira by June 2024.

Financial stress affects university students in a lot of ways. To manage the high costs of their education, some students from low income families frequently take on low-paying or emergency jobs. Because of this, many who originally enrolled as full-time students are forced to switch to part-time status. They often have to skip their lectures to go to work or manage small businesses, simply to earn enough money to stay enrolled at the expense of their studies. Aside distracting them from their academic work, the financial pressure combined with an exhausting workload creates severe stress and deep psychological challenges. As Moore et al. (2021) explained, when financial struggles force students to take on extra life responsibilities, it adds a mental burden that often leads to anxiety, depression, high distractibility, and other mental health problems.

At the same time, experiencing a lack of sleep which is characterized as inconsistent sleep schedules, short sleeping hours, or waking up feeling tired, has become a defining feature of the student's "campus lifestyle." The demanding nature of school life, combined with social obligations and the continuous pull of digital devices, regularly cuts into the time meant for sleep. This is highly concerning because sleep provides the necessary basis for mental sharpness, the ability to recall information, and the regulation of emotions. The overall quality of a person's sleep is a critical aspect of physical and mental wellness, guiding a wide range of necessary bodily and mental functions (Suraj et al., 2025). Expanding on this point, Ohayon et al. (2017) emphasized that while high-quality sleep is essential for optimal functioning, consistently poor sleep is directly tied to negative health consequences such as a decline in thinking abilities, emotional instability, and the development of chronic illnesses. Iheka (2025) argued that sleep most times is underrated in its role of ensuring good and quality life which is why some individuals jeopardize with it. She further warned that stripping the body of necessary rest acts as a trigger for severe bodily and mental health issues, specifically increasing the risk of depression, ongoing anxiety, a quick temper, and cardiovascular complications.

University students often experience more sleep problems than students at any other level of schooling. This happens because the university environment and academic activities are much more demanding and

very different from what they experienced during their basic and secondary education. In addition to dealing with these new academic challenges, most of these students are entering the "early adult" stage of life. During this time, they are expected to make independent choices and often have to figure out how to cover some or all of their living expenses, especially if their families cannot afford to pay for their higher education. Between these new adult responsibilities and the demands of university classes, students end up losing a significant amount of sleep. According to Moussa-Chamari et al. (2024), college students regularly give up their sleep to make up for not having enough hours in the day. They further asserted that this lack of time is driven by their daily lifestyles, including intense academic pressure, financial stress, excessive screen time, and social activities. Missing out on sleep can lead to several sleep disorders which can directly harm a student's mental well-being and lower their academic grades (Alamir et al., 2022; Gao, 2022). When this lack of sleep goes on for a long time, the physical damage becomes much worse. Chronic sleep deprivation can lead to serious mental health struggles, metabolic problems that result in weight gain and obesity, and make the body more sensitive to pain, all of which negatively change how students perceive and feel about their overall physical health (Moussa-Chamari, 2024).

When considering student welfare within an educational setting, their mental well-being must be treated as the highest priority. To understand this priority, Iheka (2024) described mental health as "a state of wellbeing that facilitates one to make rational decisions in order to cope with the demands and stress of life, as well as contribute and adapt well to the ever-changing society" (p. 60). Taking a broader view, the World Health Organization as cited in Azad-Marzabadi et al. (2015) explained that mental health is not just being free of mental illness but instead encompasses a positive psychological state characterized by a strong belief in one's abilities, personal independence, general competence, the ability to form healthy relationships across different generations, and the full realization of a person's emotional and intellectual potential. Despite these ideal definitions, conditions such as anxiety and depression remain the most common hurdles university students face and these carry heavy consequences, often negatively impacting a student's academic performance, their motivation, and their willingness to engage with peers on campus (Wong et al., 2023). Financial difficulties and lack of good quality sleep frequently act as major triggers for these issues.

Research by Guan et al. (2022) reveals that students facing financial troubles experience noticeably higher levels of psychological distress, indicating a clear and strong correlation between financial strain and symptoms of anxiety and depression. Looking closely at this issue, Mohamed et al. (2025) studied students in the Faculty of Technology Management and Business (FPTP) at Universiti Tun Hussein Onn Malaysia (UTHM), and confirmed a strong connection between the pressure of financial strain and the development of mental health problems. Similarly, Olusina (2025) investigated how financial stress affect both the academic performance and mental health of students at a university in Lagos, Nigeria. The findings revealed that lacking financial stability directly hurts a student's ability to succeed in their studies. Furthermore, it triggers deep emotional struggles, leading to feelings of anxiety, depression, reduced self-worth, and a tendency to pull away from social interactions. Aside financial issues, the quality of sleep a student gets also plays a major role in their mental health. For example, a study by Ogunsemi et al. (2018) involving undergraduates at Obafemi Awolowo University in Ile-Ife found that exactly 50.1% of the students suffered from poor sleep. The researchers noted that this lack of adequate sleep was closely tied to psychological distress, showing up clearly as signs of anxiety and depression. Supporting this idea, Perkovic et al. (2024) studied medical students in Croatia and discovered an even higher rate of poor sleep, affecting 67.9% of the group. Along with this lack of quality sleep, a large portion of these students showed signs of mental strain, with 38.8% showing symptoms of depression, 45.3% experiencing anxiety, and 40.4% dealing with high stress levels.

Statement of the problem

Though the undergraduate experience is widely envisaged as a door to intellectual development and skill acquisition for personal and nation building, it is increasingly recognized as a period of significant stress. In the specific context of Imo State, Nigeria, this stage of education is superimposed upon a challenging socioeconomic setting. Nigerian students are faced with not only the universal pressures of academic rigor and social transition but also the realities of a national economy characterized by inflation, currency

devaluation, and high youth unemployment. These factors translate directly into great financial stress, a burden that is shouldered heavily by the student population. Financial stress has become a pervasive feature of the student experience, potentially acting as a primary and chronic stressor.

At the same time, sleep has been identified as a factor that affects mental health and cognitive function when deprived. The university environment, with its irregular schedules, academic deadlines, and often sub-optimal living conditions, inherently poses challenges to good quality sleep. When compounded by persistent financial worries which manifest as contemplation at night, the pressure to engage in income-generating activities at the expense of sleep, or anxiety about unmet needs, the risk of significant sleep disruption escalates. This disruption is not merely a matter of fatigue; sleep deprivation is a well-established risk factor for a spectrum of adverse outcomes, including impaired concentration, reduced academic performance, and a compromised immune system.

Therefore, the main problem this research addresses is the critical knowledge gap regarding the relationships between the financial stress experienced by undergraduates in Imo State, sleep deprivation, and their subsequent mental health outcomes. The absence of this deep understanding hinders the development of effective, holistic support – particularly in Imo state where there are limited studies that addressed these aspects of students' experience. Without this evidence, students may continue to suffer in a silent crisis where financial worry erodes sleep, poor sleep degrades mental health, and deteriorating mental health further complicates financial and academic stability, all without adequate recognition or intervention from the institutions tasked with their development. This study aims to unravel these correlations to provide a clear evidence of how the independent variables affect students' mental wellbeing. Therefore, this study aims to explore the correlations between financial stress, sleep deprivation, and mental health among university students in Imo State. Specifically, it seeks to:

1. Determine the relationship between financial stress and students' mental health
2. Determine the relationship between sleep deprivation and students' mental health

Based on the objectives, the following research questions guided the study:

1. What is the relationship between financial stress and students' mental health?
2. What is the relationship between sleep deprivation and students' mental health?

The following hypotheses were tested at .05 level of significance:

1. The relationship between financial stress and students' mental health is not statistically significant
2. The relationship between sleep deprivation and students' mental health is not statistically significant

METHOD

The study is a correlation research that aims to ascertain the relationship between financial stress, sleep deprivation and mental health of undergraduate students in selected public universities in Imo State. The area of study is Imo state which has six (6) public universities: Two federal universities (Federal University of Technology Owerri, and Alvan Ikoku Federal University of Education, Owerri), four state universities (Imo State University, Owerri; Kinsley Ozumba Mbadiwe University, Ogboko; University of Agriculture and Environmental Sciences, Umuagwo; University of Innovation, Science and Technology, Omuma). For this study, three universities (two federal universities – Federal University of Technology Owerri and Alvan Ikoku Federal University of Education, Owerri, and one state university – Imo state University Owerri) were selected because they have the greatest population of students and also are proximal to the researchers. The population of the study is 384 undergraduate students which was obtained using Cochrane's formula for unknown population with a confidence level of 95, margin error of .05 and estimated proportion of .50. A sample of sixty-four (64) students were randomly selected from each of the sampled schools using balloting.

The instruments for data collection were researcher-made instruments titled "Financial Stress Scale" (FSS), "Sleep Deprivation Scale" (SDS) and "Mental Health Scale" (MHS). FSS has 15 items which rated students' financial stress, SDS has 15 items that rated students' sleep deprivation, and MHS sought the students' mental health using 15 items. The rating is done through a 4-point likert scale of Strongly Agree (SA) – 4 points, Agree (A) – 3 points, Disagree – 2 points, and Strongly Disagree (SD) – 1 point.

These instruments were face and content validated by specialists in Educational Psychology and Measurement and Evaluation. To test its reliability, Cronbach Alpha Statistics was used to ascertain its internal consistency. The result obtained yielded a coefficient of .75 for FSS, .70 for SDS, and .78 for MHS which are all acceptable. The permission of the participants were sought and granted before the study was carried on the sampled schools. The researchers visited the schools and administered the instruments on the participants after obtaining their permission. Adequate time was provided for the participants to rate the item statements. After the instruments were properly rated, they were immediately collected from the participants. This ensured a 100% return rate. The data obtained from the administered instruments were statistically analyzed using simple linear regression to answer the research questions, while the hypotheses were tested using ANOVA at .05 level of significance.

RESULTS

Table 1: Simple linear regression on the relationship between financial stress and students' mental health

Model	R	R^2	Adjusted R	Remark
1	-.521	-.271	1.273	Moderate Negative Relationship

Table 1 shows a negative relationship between financial stress and students' mental health. The regression coefficient of -.521 indicates that the negative relationship is moderate. This proves that financial stress and students' mental health are negatively correlated, and that increase in the financial stress experienced by students leads to a moderate decrease in their mental health.

Table 2: Analysis of Variance on the significance of relationship between financial stress and students' mental health

Source	DF	Sum of Square	Mean Square	F Statistic	P-value
Regression	1	3115.222	3115.222	355.219	.000
Residual	382	3350.0875	8.7699		
Total	383	6465.3099	16.8807		

Table 2 is the test of significance of the relationship between financial stress and students' mental health using ANOVA. The probability value of .000 at .05 level of significance shows that the relationship between financial stress and students' mental health is statistically significant. Therefore the null hypothesis which stated that "the relationship between financial stress and students' mental health is not statistically significant" is rejected. Financial stress significantly correlates with students' mental health negatively.

Table 3: Simple linear regression on the relationship between sleep deprivation and students' mental health

Model	R	R^2	Adjusted R	Remark
1	-.410	-.168	1.173	Moderate Negative Relationship

Table 3 shows a negative relationship between sleep deprivation and students' mental health. The regression coefficient of -.410 indicates that the negative relationship is moderate. This proves that sleep deprivation and students' mental health are negatively correlated, and that increase in the sleep deprivation leads to a moderate decrease in their mental health.

Table 4: Analysis of Variance on the significance of relationship between sleep deprivation and students' mental health

Source	DF	Sum of Square	Mean Square	F Statistic	P-value
Regression	1	2818.239	2818.238	318.670	.000
Residual	382	3059.931	8.844		
Total	383	5878.170	16.940		

Table 4 is the test of significance of the relationship between sleep deprivation and students' mental health using ANOVA. The probability value of .000 at .05 level of significance shows that the relationship between sleep deprivation and students' mental health is statistically significant. Therefore the null

hypothesis which stated that "the relationship between sleep deprivation and students' mental health is not statistically significant" is rejected. Sleep deprivation significantly correlates negatively with students' mental health.

DISCUSSION OF FINDINGS

The study examined the relationship between financial stress, sleep deprivation and mental health of undergraduate students in Imo state. Based on the analysis of data obtained in response to the first research question, it was discovered that financial stress has a moderate negative relationship with students' mental health. On further testing the significance of this finding using ANOVA at .05 level of significance, a pval of .000 showed that the moderate negative relationship between financial stress and students' mental health is significant. This finding can be attributed to the fact that once a student is not financially stable, it leads to anxiety about their ability to cope with the demands of schooling as well as afford a healthy living condition by adequately catering for their basic needs. Such state of worry becomes stressful especially when they have to take on strenuous work in order to generate income that would help them cope in school. Aside the physical stress, the mental health of such a student is compromised by the constant anxiety, or depression that may accompany their situation. Studies such as Guan et al. (2022) agrees with this finding by revealing that students facing financial troubles experience noticeably higher levels of psychological distress, signifying a clear and strong correlation between financial strain and symptoms of anxiety and depression. In same line, Olusina (2025) study revealed that lacking financial stability triggers deep emotional struggles, leading to feelings of anxiety, depression, reduced self-worth, and a tendency to pull away from social interactions.

In line with the second objective of the study, the second research question sought the relationship between sleep deprivation and mental health. The result of the analysis carried out proved that sleep deprivation negatively correlated with mental health moderately. It was also found that the relationship is significant. Based on the relevance of a good quality sleep in enhancing a person's health and physical wellbeing, a compromised sleep, or a deprived one is sure to affect the individual negatively. The university environment with its academic and social demands often interferes with the student gaining enough sleep which in turn affects their mental health. This finding aligns with Ogunsemi et al. (2018) study which found that lack of sleep was closely tied to psychological distress, showing up clearly as signs of anxiety and depression. In agreement is Perkovic et al. (2024) study that discovered students who lacked adequate sleep showed signs of mental strain, with 38.8% showing symptoms of depression, 45.3% experiencing anxiety, and 40.4% dealing with high stress levels.

CONCLUSION

The researchers studied the undergraduate students in Imo State to understand the relationship between their financial stress, their sleep habits, and their overall mental well-being. The main purpose of doing this was to examine if the financial problems students face harm their state of mind, and to also see how failing to get good sleep can do the same. The university is already a challenging environment, but when students are forced to worry about their financial problems and lack enough sleep, it takes a serious toll on their brain and their emotions which subsequently affect how they feel mentally. The data collected from the participants in the study were statistically analysed which indicated a moderate negative relationship between the independent variables – financial stress and sleep deprivation, and the dependent – mental health of undergraduate students in Imo state. More importantly, these findings proved to be significant. This means the relationship discovered are not just random or based on luck, but truly existing. In simple terms, this study proves that financial stress and sleep deprivation negatively correlated with students mental health significantly.

RECOMMENDATION

Based on the obvious impact of financial stress and sleep deprivation on students' mental health, the following recommendations were made to safeguard their wellbeing:

1. Schools should establish a system of small, emergency funds managed directly through the student affairs department, which would provide immediate, short-term relief to financially struggling students.
2. Aside offering emergency help, schools must also actively guide students in managing their daily finances through organizing workshops that deal on such theme.
3. In situations where students' loan is approved, schools must take their role as financial guides very seriously and ensure that students only borrow what is absolutely necessary.
4. Lecturers should be mindful of how they assign work, making a conscious effort to spread out due dates of assignments rather than stacking all assignment and tests within few days as this would help students get enough sleep.

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