

Perceived Effect of Post-pandemic Experiences on Student's Academic Stress and Mental Health: A Case Study of Social Science Education Students of the University of Nigeria, Nsukka

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Abstract

The study investigated the perceived effect of post-pandemic experiences on students' academic stress and mental health: A case study of Social Science Education students of the University of Nigeria, Nsukka. The study adopted a descriptive design. The sample size consists of 165 (26 male and 139 female) students. The study was guided by four research questions and two null hypotheses. Data were collected using a structured questionnaire. The instrument was validated by three experts from the Departments of Social Science Education and Science Education of the University of Nigeria. The Cronbach alpha coefficient was 0.76. Data were analyzed using mean, while the null hypotheses were tested with a t-test at $p \leq 0.05$. The result showed that the students experienced class extension beyond school hours ($\bar{x}=3.60$), missed lectures ($\bar{x}=3.54$), inadequate time to study materials ($\bar{x}=3.52$), and frequent and congested lectures ($\bar{x}=3.50$), among others. On the perceived effect on mental health, the study found that students experienced tense feelings severally during class presentations due to lack of time to prepare ($\bar{x}=3.27$), frequent panic after the pandemic due to academic work overload ($\bar{x}=3.22$), feelings of disinterest in academic activities ($\bar{x}=3.21$), among others. Results from the hypotheses show that significant gender difference was found in the perceived effect of post-pandemic experiences on students' academic stress but not on their mental health. The study recommended among other things that students should employ effective and positive strategies in managing their activities to reduce the occurrence of academic stress and mental health challenges.

Keywords: Pandemic, Experiences, Academic Stress, Mental Health

Introduction

A pandemic is a disease outbreak that spreads across countries or continents. It affects more people and takes more lives than an epidemic. A pandemic usually occurs on a scale that crosses international boundaries, affecting people on a worldwide scale (WHO, 2020). Globally, mankind has experienced many significant health emergencies in recent history. One of such global health emergencies is the Corona Virus Disease 2019 (COVID-19). The outbreak of the COVID-19 pandemic posed a great threat to the whole of

humanity all over the world (Roy, & Kaur, 2020).

The pandemic brought about significant disruptions to education in the affected countries of the world. Emerging evidence from some of the countries indicates that the pandemic gave rise to learning losses and an increase in inequality. The pandemic has had a peculiar dissipating impact on education in Nigeria and other countries through decreased levels of education, broadened existing divide in learning access and outcomes, and increased school dropouts

(Dorn et al., 2020). The threat posed to education is compounded due to peculiar vulnerabilities, including poor health systems, poverty and inequality, hunger, internally displaced populations, high population densities, urban-rural divide, and out-of-school population (Obiako& Adeniran, 2020). Pandemics have created a serious threat to short- and long-term physical and mental health as well as the social wellbeing of all groups in society. Vulnerable groups, including university students, were especially affected by the COVID-19 pandemic (Fruehwirth et al., 2021) resulting in some experiences subsequently. These experiences are what the researchers conceptualized as post-pandemic experiences.

Post-pandemic experiences refer to the changes in human lives that have occurred as a result of the COVID-19 pandemic. These experiences can include changes in the way individuals work, socialize, learn, and interact with others. As a result of the pandemic, many universities have shifted to online classes, virtual labs, and remote assignments, which can lead to a different learning experience compared to in-person classes. University students have had to become more adept at using technology for learning, communication, and socialization. Many university students have faced financial challenges as a result of the pandemic, such as job loss, reduced income, and increased expenses for housing and technology. They may have also experienced a sense of isolation and disconnection from their peers, faculty, and campus life as a result of social distancing measures and reduced on-campus activities.

Studies conducted among college and university students in various parts of the world, including the UK, found evidence of increasing levels of anxiety, depression, distress and other mental health conditions among this population (college and

university students) during and after the pandemic (Fruehwirth et al., 2021; Ma et al., 2020). Hence, while Nigeria is battling with underlying educational challenges that have kept the country behind in getting young people ready for the dynamic workplace (Dan-Nwafor et al., 2020; Obiako& Adeniran, 2020; Yinka & Adebayo, 2020), COVID-19 impacts further exacerbate this problem as students now experience higher academic stress levels (Habeb et al., 2023).

Academic stress is a serious challenge among many students. Academic stress according to Reddy et al. (2018) is the pressure that comes from large amount of workload, too much material to be studied and insufficient study time to show their best academic performance. Post pandemics experiences have resulted in significant increases in stress, anxiety, depression, and suicidality among students of higher institutions (Husky et al., 2020; Patsali et al., 2020). Aside from dealing with stressors related to a potentially unfamiliar online learning environment, students are also coping with the emotional impact of COVID-19 which affected their mental health (Clalaugh et al., 2021).

The COVID-19 pandemic significantly impacted the educational sector, leading to a global shift to remote learning. As students returned to in-person learning, they faced various challenges and experiences; some common post-pandemic experiences reported by students include social readjustment difficulties as students struggled to reconnect with peers and teachers after prolonged isolation. Also, the transition back to in-person learning exposed gaps in understanding and learning losses. Students dealt with anxiety, depression, and trauma related to the pandemic. Students also developed a new appreciation for in-person learning and social interactions (Okagbue et al., 2023). Some students became more tech-

savvy, expected hybrid learning options, and learned to adapt to changing circumstances, and developed coping strategies. These students adjusted to various teachers' efforts to support them post-pandemic. Some other students struggled to balance schoolwork, extracurricular activities, and social life, which came with adverse effects on the students' mental health (Bruffaerts et al., 2018).

Mental health is a state of mental well-being that enables people to cope with the stresses of life, realize their abilities, learn well and work well, and contribute to their community. It is an integral component of health and well-being that underpins individual and collective abilities to make decisions, build relationships and shape the world (World Health Organization [WHO], 2022). Mental health according to United Nations (2016) is a positive concept related to the social and emotional wellbeing of people and communities (Manwell et al., 2015). Factors responsible for poor and good mental health of students are not limited to academic stress, health emergencies like Covid-19 outbreak which most often result to depression among university students. These often condition students to the risk of suicide, substance abuse, low self-esteem and poor performance in academics (Ismail & Shujaat, 2018). The competitive environment nature of education that is characterized with huge demanding and time challenging routine often leaves many students to high levels of stress and when students appraise their education as a challenge, they tend to see it more as threat that must be conquered or battled with which has adverse effects on their mental health (Yu et al., 2015). This may differ with respect to gender. Gender refers to the characteristics of women, men, girls and boys that are socially constructed. Both genders are challenged with having to keep up with the high demands required to thrive

in the university environment due to academic stress (National Library of Medicine, 2021). To meet these demands, students (both genders) must be able to work and function under pressure. In addition, female students reported stress-related issues, such as low self-esteem, pressure from exams, and depression (Thawabien&Qaisy, 2012). Higher levels of general and academic stress were also shown to be greater in female students than their male counterparts (Rahardjo et al., 2013).

Men and women also experience different kinds of mental health problems. Mental health differences between women and men have been attributed to sex and gender differences (Otten et al., 2021). While women exceed men in internalizing disorders such as depression and anxiety, men exhibit more externalizing disorders such as substance abuse and anti-social behaviour, which are problematic for others (Rosenfield & Mouzon, 2013).

Post Covid-19 experiences exposed many students to mental health challenges. Some common mental health problems among college students have been stress, relationship difficulties, low self-confidence, loneliness and homesickness anxiety, eating problems, depression and suicidal ideation (Li et al., 2021). However, this study determined the post covid-19 experience of undergraduate students with a focus on Social Science Education students and how they influence the student's academic stress and mental health while profiling strategies to ameliorate the effect of the identified challenges.

This study examined the perceived effect of post pandemic experience on students' academic stress and mental health: a case study of Social Science education students in University of Nigeria, Nsukka. Specifically, this study answered the following research questions:

1. What are the post pandemic experiences of Social Science education students in University of Nigeria, Nsukka?
2. What are the perceived effects of post pandemic experiences on academic stress of social science education students in University of Nigeria, Nsukka?
3. What are the perceived effects of post pandemic experiences on mental health of Social Science education students in University of Nigeria, Nsukka?
4. What are the strategies for ameliorating the effects of post pandemic experiences on Social Science education students' academic stress and mental health?

The following hypotheses were tested at 0.05 level of significance

H₀₁: There is no significant difference in mean response of male and female students on perceived effects of post pandemic experiences on academic stress of Social Science education students in University of Nigeria, Nsukka

H₀₂: There is no significant difference in mean response of male and female students on the perceived effects of post pandemic experiences on students' mental health

Methodology

Study Design: The study adopted a descriptive survey research design. Descriptive survey research design aims at collecting data and describing in a sequential and systematic manner the characteristics of a specific population.

Study Population: The population of the study consisted of 655 Social Science education students of UNN in the 2022/2023 academic session in University of Nigeria, Nsukka (Social Science Education UNN Departmental Data, 2023).

Sample and Sampling Technique: The sample for this study was 165 200 level and 300 level

students from the Department of Social Science Education which is the total population. This was made up of 26 male students and 139 female students. The choice of 200 and 300 level students is based on the fact that they experienced the pandemic and will provide experiential responses to the survey. 400 level students were excluded due to the fact that they are caught up with trying to finish up their projects and thus may not be able to have time to respond to the survey.

Instrument for Data Collection: The instrument used in collecting data for the present study was a questionnaire. The questionnaire was constructed by the researchers in line with the research objectives. The questionnaire was divided into two; sections A and B. Section A obtained the personal data of the respondents while section B comprised 4 clusters (A-D) structured to elicit information from the respondents based on the research questions. Cluster A obtained information on post-pandemic experiences of Social Science education students. Cluster B obtained information on the perceived effects of post-pandemic experiences on Social Science education students' academic stress; Cluster C obtained information on the perceived effects of post-pandemic experiences on Social Science education students' mental health. Cluster D obtained information on strategies for ameliorating the effects of post-pandemic experiences on Social Science education students' academic stress and mental health. The items were arranged on a four-point scale of strongly agree (4), agree (3), disagree (2) and strongly disagree (1).

Validation and Reliability of the Instrument: The instrument for this study was validated by three experts in the Faculty of Education. Two were from Social Science Education (Economics Education) and one from Science Education (Measurement and Evaluation). The validated instrument was trial tested on

20 students that were selected from Art Education Departments in the University of Nigeria which was different from the Department covered by the study. The reliability coefficient of 0.76 was determined using the Cronbach Alpha reliability coefficient showing acceptable internal consistency of the test items.

Data Collection Procedure: The researchers visited and sought permission from the HOD of the Department of Social Science Education University of Nigeria, Nsukka before the commencement of the study. The researchers with the help of two assistants (each from the Social Studies and Political Science units respectively) administered 165 copies of the questionnaire to the students of Social Science Education students in print form. The process of responding to the questionnaires was explained to the students to ensure that valid data were collected. The researchers collected the questionnaire as soon as the respondents filled in their responses which ensured one hundred percent of the questionnaire collection.

Data Analysis: The data collected were analyzed using mean and standard deviation. The responses/items with a mean score of

2.50 and above were accepted while responses/items below 2.50 were rejected. The null hypothesis was tested using a t-test at a 0.05 level of significance. The null hypothesis was not rejected when the calculated p-value was less than 0.05 alpha level. The mean values on the hypothesis's tables were ascertained by calculating the cluster mean for the research questions (Cluster B and C) under investigation separately for both males and females.

Results

Post-pandemic experiences of students

The post-pandemic experiences of students include: clashing of lectures (3.65), congestion of lessons (3.63), lack of leisure (3.56), excessive study materials (3.49), excessive course contents (3.48), assignment overload (3.44), academic calendar without break (3.34), class extension beyond school hours (3.33), reduced social life (3.24), inability to comprehend lecture content (3.13), unfriendly online alternated lectures (3.10), reduced lecturer-student relationship (3.03), frequent lectures (3.01) and boring lectures (2.84)

Table 1: Mean rating of the post-pandemic experiences of the respondents

Item statement	Mean	Standard deviation	Decision
Clashing of Lectures	3.65	.54	Agree
Congestion of lessons	3.63	.48	Agree
Lack of leisure	3.56	.52	Agree
Excessive study materials	3.49	.59	Agree
Excessive course contents	3.48	.66	Agree
Assignment overload	3.44	.68	Agree
Academic calendar without break	3.34	.83	Agree
Class extension beyond school hours	3.33	.70	Agree
Reduced social life	3.24	.80	Agree
Inability to comprehend lecture content	3.13	.69	Agree
Unfriendly online alternated lectures	3.10	.74	Agree
Reduced Lecturers-students' relationship	3.03	.82	Agree
Frequent Lectures	3.01	.74	Agree
Boring Lectures	2.84	.77	Agree

Perceived effects of post pandemic experiences on academic stress of Social Science Education Students

Results on table two below show that class extension beyond school hours led to academic overload (3.60), missing lectures due to class clashes resulted in inability to cover/complete course/lecture contents (3.54), inadequate time to study materials brought about increase in failure rate as result of too much unlearned material (3.52),

frequent and congested lectures resulted in academic burnout (3.50), frequent lectures resulted in inadequate time to attend extra curricula activities (3.43), assignment overload reduced my leisure time (3.43), assignment overload reduced my ability to study effectively (3.32) and unfriendly online alternated lectures manifested in inability to comprehend lecture content (3.14).

Table 2: Perceived effects of post pandemic experiences on academic stress of Social Science Education Students

Item Statement	Mean	Standard deviation	Decision
Class extension beyond school hours led to academic overload	3.60	.56	Agree
Missing lectures due to class clashes resulted in inability to cover/complete course/lecture contents	3.54	.72	Agree
Inadequate time to study materials brought about increase in failure rate as result of too much unlearned material	3.52	.60	Agree
Frequent and congested lectures resulted in academic burnout	3.50	.65	Agree
Frequent lectures resulted in inadequate time to attend extra curricula activities	3.43	.68	Agree
Assignment overload reduced my leisure time	3.43	.64	Agree
Assignment overload reduced my ability to study effectively	3.32	.78	Agree
Unfriendly online alternated lectures manifested in inability to comprehend lecture content	3.18	.73	Agree

Perceived effects of post pandemic experiences on mental health of Social Science education students in University of Nigeria, Nsukka

Analysis on table 3 below showed that students: experienced tensed feeling severally during class presentation due to lack time to prepare (3.27), frequently panicked after the pandemic due to academic work overload (3.22), experience feeling of disinterest in academic activities as a result of post

pandemic class extension beyond school hours (3.21), had feelings of nervousness as a result of inability to finish assignment (3.11), had feeling of hopelessness as a result of inability to balance academic and social life (3.04), was unable to manage some post pandemic experience made me feel depressed (3.03), experienced frequent dizziness as a result of post pandemic boring lectures (2.97) among others.

Table 3: Mean rating of the perceived effects of post pandemic experiences on mental health of social science education students in University of Nigeria, Nsukka

Item Statement	Mean	Standard deviation	Decision
I experienced tensed feeling severally during class presentation due to lack time to prepare	3.27	.71	Agree
I frequently panicked after the pandemic due to academic work overload	3.22	.77	Agree
I experience feeling of disinterest in academic activities as a result of post pandemic class extension beyond school hours	3.21	.74	Agree
I had feelings of nervousness as a result of inability to finish assignment	3.11	.78	Agree
I felt hopeless as a result of inability to balance academic and social life	3.04	.80	Agree
Inability to manage some post pandemic experience made me feel depressed	3.03	.83	Agree
I experience frequent dizziness as a result of post pandemic boring lectures	2.97	.75	Agree

Strategies for ameliorating the effects of post pandemic experiences on Social Science education students’ academic stress and mental health

Analysis on table 4 below showed that academic counseling (3.34), reduction the academic workloads (3.33), encouraging students to visit health clinic (3.22), improving social support among friends and family (3.20), use of online materials (3.15),

attending to academic activities one at a time to avoid mental health challenges (2.98), deliberately avoid classes to reduce stress level (2.67), avoiding assignments (2.57) and fixing classes on weekend to cover contents (2.56) are strategies for ameliorating the effects of post pandemic experiences on Social Science education students academic stress and mental health

Table 4: Strategies for ameliorating the effects of post pandemic experiences

Item Statement	Mean	Standard deviation	Decision
Academic counseling of the student on the management of mental health brought about by the pandemic	3.34	.68	Agree
Schools should reduce the academic workloads of the students in order to reduce the menace of mental health	3.33	.68	Agree
Encouraging students to visit health clinic when experiencing signs of mental stress	3.22	.73	Agree
Improving social support among friends and family	3.20	.85	Agree
Use of online materials to support learning contents for easy comprehension	3.15	.83	Agree
Attending to academic activities one at a time to avoid mental health challenges	2.98	.87	Agree
Deliberately avoid classes to reduce stress level	2.67	1.05	Agree
Avoiding assignments	2.57	1.03	Agree
Fixing classes on weekend to cover contents	2.56	1.08	Agree

Gender difference on the perceived effect of post pandemic experiences on academic stress and mental health of the respondents

Table 5 shows the summary of t-test on the gender difference on the perceived effect of post pandemic experiences on students' academic stress. The data contained in the table above show that the value of t-test -2.39 is significant at 0.018. Since the p-value (0.018) is less than 0.05 level of significance then the null hypothesis is rejected. The mean

difference on the perceived effect of post pandemic experiences on students' mental health was not significant; $t = 0.367$, $p = 0.714$. Since the p value (0.714) is greater than 0.05 level of significance, the null hypothesis is not rejected which stated that there is no significant difference in mean response of male and female students on the perceived effects of post pandemic experiences on students' mental health.

Table 5: Gender difference on the perceived effect of post pandemic experiences on academic stress and mental health of the respondents

Gender	Frequency	Mean	T - value	Degree of freedom	Sig. (2-tailed)
Academic stress					
Male	26	3.23	-2.392	163	0.018
Female	139	3.48			
Mental health					
Male	26	3.08	-0.367	163	0.714
Female	139	3.13			

Discussion of Findings

This study identified various post-pandemic academic experiences of the university students with a focus on Science Education students. These post pandemic experiences include boring lectures, too frequent lectures, academic calendar without breaks, class extension beyond school hours, unfriendly online alternated lectures, reduced social life, clashing of lectures, congestion of lessons, lack of leisure, excessive study materials, excessive course contents, and reduced lecturers-students' relationship. The findings of the study agree with Ebohon et al. (2021) finding which stated that the outbreak of COVID-19 led to changes in normal academic activities which led to new experiences in the universities in the post-COVID-19 era.

This study also revealed that class extension beyond school hours led to academic overload, missing lectures due to class clashes resulted in the inability to cover/complete course/lecture content, and inadequate time to study materials brought

about an increase in failure rate as a result of too much unlearned material, frequent and congested lectures resulted in academic burnout, frequent lectures resulted in inadequate time to attend extra curricula activities, assignment overload reduced my leisure time, assignment overload reduced my ability to study effectively and unfriendly online alternated lectures manifested in inability to comprehend lecture content. The findings suggest that extended class hours may lead to academic overload, causing stress and decreased productivity. Class clashes might result in missed lectures, making it difficult for students to keep up with course material. Inadequate study time could also lead to increased failure rates due to unlearned material. Findings also highlight that frequent and congested lectures cause academic burnout, leading to mental exhaustion and decreased motivation. Also, excessive lectures leave little time for extracurricular activities, limiting students' opportunities for personal growth and

development. Moreover, assignment overload reduces leisure time, leading to an unhealthy academic work-life balance. Excessive assignments also hinder effective studying, as students may feel overwhelmed and unable to fully engage with course material. Furthermore, unfriendly online learning environments can lead to difficulty comprehending lecture content, highlighting the importance of user-friendly and engaging online platforms. This finding is in agreement with Robledillo et al. (2022) which found that academic stress after the outbreak of COVID-19 and the increased academic stress was attributed to academic over-burden. The finding also aligns with Dey and Kumar (2022) which found that students experienced academic stress after the outbreak of COVID-19. The increase in students' academic stress in post post-pandemic era can be attributed to congested academic activities because of less time to cover academic materials.

The finding of this study showed that the perceived effect of post-pandemic experiences on academic stress of Social Science Education students varied by gender. The mean values of the male and female students showed that females had higher mean values than males implying that female students had higher levels of academic stress caused by post-COVID-19 experiences than their male counterparts. This gender disparity is a crucial insight, as it highlights the need to consider the unique challenges and perspectives of male and female students in the academic environment. Several factors might contribute to this disparity: social and emotional responsibilities, learning style and environment as well as career and future concerns. This is in line with Rahardjo et al. (2013) which found that academic stress was also shown to be greater in female students than their male counterparts. The finding also agrees with Lai et al. (2022) which found that

females experienced higher academic stress than male students.

This study further found that students: experienced tense feelings severally during class presentations due to lack of time to prepare, frequently panicked after the pandemic due to academic work overload, experienced feelings of disinterest in academic activities as a result of post-pandemic class extension beyond school hours, had feelings of nervousness as a result of inability to finish assignment, had feeling of hopelessness as a result of inability to balance academic and social life, was unable to manage some post-pandemic experience made me feel depressed, experienced frequent dizziness as a result of post-pandemic boring lectures. As a response to the COVID-19 outbreak and the lockdown measures, many schools suspended in-person classes and evacuated students from their campuses. The reopening of the schools came with increased academic stress which occasioned strong negative emotions among university students with high levels of psychological challenges that they faced which adversely affected the students' mental health status. This finding is in line with the findings of Baumann et al. (2021), Gogoi et al. (2022), and Olawade et al. (2021) findings which showed that covid-19 affected students' mental health. This negative effect of COVID-19 experiences on students' mental health was because of academic stress, anxiety, and the associated depression. This underlines the relationship between academic stress and the mental health of the students as increased academic stress and mental health challenges were all found among the students. Therefore, a reduction in academic stress experienced by the students could also lead to negative mental health conditions associated with post-pandemic experiences. The finding of this study also showed that though the females had higher mean scores,

there was no significant difference in the mean response of male and female students on the effects of post-pandemic experiences on their mental health. This means that post-pandemic experiences had similar effects on both male and female students' mental health. Rosenfield and Mouzon (2013) found that females reported higher mental health problems than their male counterparts. The present study shows that male and female students of Social Science Education being in the same class, attending the same lecture, and being exposed to the same learning contents among others could be the reason for no significant difference found by this study on the effects of post covid-19 experiences on their mental health. However, the findings did not corroborate with the findings of Otten et al. (2021) who reported that there is a difference in the mental health status of female and male students.

The findings of this study showed that academic counseling, reduction the academic workloads, encouraging students to visit health clinics, improving social support among friends and family, use of online materials, attending to academic activities one at a time to avoid mental health challenges, deliberately avoid classes to reduce stress level, avoiding assignments and fixing classes on weekend to cover contents are strategies for ameliorating the effects of post-pandemic experiences on Social Science education students academic stress and mental health.

Conclusion

This study concludes that students had post-pandemic experiences and these post-pandemic experiences affected their academic stress and mental health. Hurried academic activities often led to missed lectures, inadequate study time, burnout, and reduced leisure time resulting in academic stress. Consequently, the students experienced

stress, panic, disinterest, nervousness, hopelessness, and depression, which affected their mental health. However, various strategies were identified to ameliorate the negative effects of the stress associated with post-pandemic academic activities. These include switching to online classes and reducing the academic workload of the students were identified for ameliorating the effects of post-pandemic experiences on students' academic stress and mental health.

Recommendations

The following recommendations were made by the researchers based on the study's findings:

1. Students should employ effective and positive strategies in managing their activities (academic, religious, social and political) to reduce the occurrence of academic stress and mental health challenges.
2. The school management should involve the student bodies in the planning of the academic calendar and not only during implementation. This will help in resolving the issue of congested lectures among others
3. There is need for parents and school managements to increase students' access to guidance and counselling services to help in reducing the negative implications of academic stress and mental health challenges associated to post pandemic experiences.

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