

Mental Health Implications and Lessons Learned from the COVID-19 Pandemic Among Social Studies Education Students at the University of Abuja, Nigeria

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ABSTRACT: This study examined the mental health impacts of the pandemic and the transformative lessons learned by Social Studies Education students at the University of Abuja, Nigeria, with attention to demographic variations in these outcomes. A descriptive survey design was utilized with a stratified random sample of 225 Social Studies Education students drawn from Years 1 through 4. Data were collected using a structured, self-developed questionnaire with a four-point Likert scale (Cronbach's $\alpha = 0.72$). An independent samples t-test tested gender differences in mental health impact. One-way Analyses of Variance (ANOVA) with Tukey HSD post-hoc comparisons tested differences in mental health impact and lessons learned across year levels. The pandemic significantly impacted student mental health with sectional mean ($M = 2.96$, $SD = 1.00$). Female students reported significantly higher mental health impact ($M = 2.98$) than males ($M = 2.78$), $t(223) = -2.15$, $p = .033$. Mental health impact differed significantly by year of study, $F(3, 221) = 5.82$, $p = .001$, with Year 1 students ($M = 3.18$) significantly higher than

Year 3 ($M = 2.78$) and Year 4 ($M = 2.85$). Students reported transformative lessons-learned with sectional mean ($M = 3.31$, $SD = 0.81$). Lessons learned differed significantly by year of study, $F(3, 221) = 4.26$, $p = .006$, with Year 1 ($M = 3.42$) significantly higher than Year 3 ($M = 3.20$). The pandemic substantially affected student mental health, with female and first-year students representing particularly vulnerable subgroups. Simultaneously, the crisis catalyzed valuable learning about health, social responsibility, and adaptability, especially among students at educational transition points. Comprehensive, gender-sensitive mental health services, year-specific psychological support, and curriculum enrichment emphasizing disaster preparedness and social justice are essential for post-pandemic educational resilience.

Keywords: *COVID-19, mental health, psychological well-being, transformative learning, Social Studies education, higher education, Nigeria*

1.0 INTRODUCTION

The COVID-19 pandemic imposed unprecedented psychological burdens on university students globally, compounded by disruptions to academic routines and social isolation. Education, recognized as essential for human development and national progress (Fagerlind & Saha, 2016), faced unprecedented threats as the pandemic compelled worldwide school closures affecting over 1.6 billion learners across 194 countries (UNESCO, 2020).

In Nigeria, the Federal Ministry of Education ordered comprehensive school closures in March 2020, with only partial reopening beginning in October 2020. The University of Abuja, situated in the Gwagwalada Area Council of the Federal Capital Territory, experienced severe disruptions. The pandemic's impact in Nigeria was compounded by pre-existing vulnerabilities including inadequate health systems, poverty, inequality, and substantial urban-rural disparities.

Beyond academic consequences, the pandemic imposed significant psychological burdens on students. The uncertainties, social isolation, and abrupt transitions to remote learning contributed to increased stress, anxiety, and feelings of isolation. Before the pandemic, approximately one in five university students experienced diagnosable mental disorders, and COVID-19 exacerbated these pre-existing vulnerabilities (Baumann et al., 2021). The

psychological impacts on Nigerian students received insufficient prioritization in pandemic response measures (Bain et al., 2023). Common causes of psychological stress during pandemics include fear of illness and death, avoidance of healthcare due to infection concerns, fear of unemployment and livelihood loss, social exclusion, quarantine-related isolation, separation from loved ones, helplessness, boredom, loneliness, and depression (Kee, 2021).

Simultaneously, the pandemic provided transformative learning opportunities. Students gained practical insights into health education, disaster preparedness, social inequalities, and adaptive capacity—all core themes within Social Studies Education. The pandemic offered a real-world case study for disaster management and social vulnerability, making abstract curriculum components immediately tangible (Adejumo & Oluwole, 2022). Understanding both the psychological toll and the constructive lessons emerging from this crisis is essential for developing comprehensive post-pandemic educational strategies.

1.2 Statement of the Problem

The COVID-19 pandemic created unprecedented challenges for student mental health and well-being. The abrupt transition from structured academic environments to remote learning, combined with social isolation and health-related anxieties, placed substantial psychological strain on university students. At the University of Abuja, Social Studies Education students faced particular challenges as their discipline—emphasizing civic engagement, social understanding, and collaborative learning—was fundamentally disrupted by conditions that prevented the very interactions it values.

The mental health implications of prolonged lockdowns, academic uncertainty, reduced peer interaction, and limited access to institutional support services remain insufficiently documented, particularly within Nigerian higher education contexts. Without comprehensive understanding of these psychological impacts, institutions cannot develop targeted interventions. Furthermore, it remains unclear whether certain demographic subgroups—particularly female students and those in transition years—experienced disproportionate psychological burden.

Additionally, while the pandemic caused significant disruption, it also generated valuable learning experiences relevant to Social Studies curricula. Understanding what students

learned about health, disaster management, social vulnerability, and adaptability can inform curriculum enhancement. The differential distribution of these lessons across demographic groups, and their relationship to psychological impact, warrants systematic investigation.

1.3 Purpose of the Study

This study aimed to:

1. Determine the extent to which the mental health and well-being of University of Abuja Social Studies Education students were affected by COVID-19 pandemic disruptions.
2. Examine the lessons learned by Social Studies Education students from the COVID-19 pandemic experience.
3. Investigate whether mental health impact differed significantly by gender and year of study.
4. Investigate whether lessons learned differed significantly by year of study.

1.4 Research Questions

1. To what extent have the mental health and well-being of University of Abuja Social Studies Education students been affected by the disruptions caused by the COVID-19 pandemic?
2. What lessons have Social Studies Education students of the University of Abuja learned from the COVID-19 pandemic?

1.5 Research Hypotheses

H₀₁: There is no significant difference between male and female Social Studies Education students in the extent to which their mental health and well-being were affected by the disruptions caused by the COVID-19 pandemic at the University of Abuja.

H₀₂: There is no significant difference among Year 1, Year 2, Year 3, and Year 4 Social Studies Education students in the extent to which their mental health and well-being were affected by the disruptions caused by the COVID-19 pandemic at the University of Abuja.

H₀₃: There is no significant difference among Year 1, Year 2, Year 3, and Year 4 Social Studies Education students in the lessons they learned from the COVID-19 pandemic at the University of Abuja.

2.0 LITERATURE REVIEW

2.1 Conceptual Framework

2.1.1 Mental Health and Well-being in Higher Education

Mental health encompasses emotional, psychological, and social well-being, affecting cognition, behavior, and interpersonal relationships. Among university students, mental health significantly influences academic performance, social integration, and overall development. The World Health Organization defines mental health as a state of well-being enabling individuals to realize their abilities, cope with normal life stresses, work productively, and contribute to communities.

Depression, characterized by persistent sadness, loss of interest, hopelessness, sleep disturbance, poor concentration, and suicidal ideation, represents a significant mental health concern among university populations. WHO noted that over 800,000 people die by suicide annually, with depression constituting the single largest cause of global ill health. Depression requires urgent attention through help-seeking behaviors and positive activity engagement.

2.1.2 Psychological Impact of Pandemics on Students

Pandemics generate substantial psychological consequences including distress, anxiety, depression, and behavioral changes such as sleep difficulties and heightened stress responses. Kee (2021) identified common causes of psychological stress during pandemics: fear of illness and death, avoidance of healthcare due to infection concerns, fear of unemployment and livelihood loss, social exclusion, quarantine-related isolation, separation from loved ones, helplessness, boredom, loneliness, and depression. Additionally, the proliferation of fake news through social media platforms—WhatsApp, Twitter, and Facebook—created further psychological distress, disrupting students' concentration and learning capacity.

Baumann et al. (2021) observed that before COVID-19, approximately one in five college students experienced diagnosable mental disorders, with the pandemic exacerbating these conditions. A Mental Health Charity Young Minds survey incorporating 2,111 participants up to age 25 with mental illness history in the United Kingdom found that 83% reported pandemic-related condition worsening, while 26% were unable to access mental health support during this period. Nworah (2020) observed that shutdowns caused mayhem, noting that approximately 90% of enrolled learners worldwide were out of education during peak disruptions.

Science-oriented students, including those in Social Studies disciplines, also tended to experience fear of forgetting previously learned material due to negative psychological impacts and the challenge of balancing traditional classroom methods with new e-learning approaches.

2.1.3 Social Studies Education and Pandemic Learning

Social Studies Education encompasses teaching and learning about various social science disciplines including history, geography, civics, economics, and sociology. The curriculum aims to impart knowledge, skills, and values related to societal issues, citizenship, cultural diversity, and civic responsibilities. The pandemic provided real-world applications of Social Studies concepts such as health education, disaster management, social inequality, and community resilience became immediate, tangible learning experiences rather than abstract curriculum components (Onyema et al., 2020).

2.1.4 Lessons Learned from Educational Disruption

The pandemic served as both crisis and catalyst for learning. Adelakun (2020) noted that school absence negatively affected students, but the experience also generated new understandings. Research documented that while online transitions exposed digital divides, they also demonstrated technology's capacity to enhance resource access when adequately supported (Chukwuemeka & Wali-Essien, 2026; Chukwuemeka et al., 2026). Furthermore, COVID-19 crisis exposed systemic inequalities and prompted calls for inclusive policies, making Social Studies a critical discipline for advocacy and social change education. Students gained practical appreciation for health education, disaster preparedness, and the

vulnerabilities of marginalized populations, all core Social Studies themes rendered immediate by lived experience.

2.2 Mental Health Impact of COVID-19 on Nigerian Students

Bain et al. (2023) emphasized that psychological impacts of the COVID-19 lockdown on students received insufficient prioritization in measures adopted to curb virus spread. The transition from interactive classrooms to e-learning platforms, and associated emotional effects, remained inadequately examined for Nigerian student populations. This gap is particularly concerning given that existing mental health services in Nigerian universities were already limited before the pandemic, creating a situation where increased need coincided with reduced access.

Goff (2025) documented that depression during the pandemic required urgent attention through help-seeking behaviors and positive activity engagement to reduce COVID-19's contribution to mental health deterioration. Students with pre-existing psychological vulnerabilities experienced particular worsening, alongside teachers facing similar challenges. Science-inclined students, including Social Studies students, faced additional cognitive burden from the fear of forgetting previously learned material and the task of balancing traditional classroom methods with new e-learning approaches.

Research by Jegede (2020) in Federal Capital Territory higher institutions found widespread acknowledgment of pandemic impacts on student well-being, though the study focused primarily on academic calendar effects rather than psychological dimensions specifically.

2.3 Gender Differences in Mental Health During Crises

Literature consistently documents gender differences in psychological distress reporting and experience. Women generally report higher rates of anxiety, depression, and stress-related disorders during both normal conditions and crises (Baumann et al., 2021). During the COVID-19 pandemic, female students globally reported higher levels of psychological distress, potentially reflecting both genuine differences in distress experience and gender differences in willingness to acknowledge and report emotional difficulties. In Nigerian contexts, cultural expectations may additionally position women as primary providers of

family support during crises, adding caregiving burden to academic stress (Kee, 2021). However, it is equally important to recognize that male students may underreport psychological distress due to stigma associated with emotional vulnerability, making gender comparisons complex.

2.5 Theoretical Framework

2.5.1 Stress and Coping Theory

Lazarus and Folkman's (1984) transactional model of stress and coping posits that psychological stress results from individuals' appraisal of environmental demands exceeding their coping resources. Primary appraisal evaluates whether a situation is threatening; secondary appraisal evaluates available coping resources. When students appraised pandemic-related disruptions such as academic interruption, social isolation, health threats, as exceeding their coping capacity, psychological distress ensued. Coping strategies which are problem-focused (addressing the stressor directly, e.g., seeking technological solutions) and emotion-focused (managing emotional responses, e.g., seeking social support) influenced mental health outcomes. This theoretical framework illuminates why some students experienced more severe psychological impacts: those with fewer coping resources (less social support, lower digital literacy, fewer economic resources) faced greater stress when demands exceeded capacities.

2.5.2 Transformative Learning Theory

Mezirow's (1991) transformative learning theory describes how individuals revise their interpretations of experience through critical reflection. Transformative learning occurs when a "disorienting dilemma" an experience incompatible with existing frames of reference prompts critical examination of assumptions, dialogue with others, and integration of new perspectives. The COVID-19 pandemic served as a collective disorienting dilemma, challenging students' existing assumptions about education delivery, health systems, social structures, and personal resilience. Through reflection on these experiences, students potentially transformed their perspectives, developing new understandings of health education importance, social vulnerability, disaster preparedness, and adaptive capacity. This theory is particularly relevant to understanding the "lessons

learned" dimension of this study, as it explains how crisis experiences can catalyze meaningful cognitive and perspective transformation.

3.0 METHODOLOGY

.3.2 Research Design

This study employed a descriptive survey design. Survey research depicts specific situations at particular moments, utilizing questionnaires to gather information from populations through appropriate sampling methods. The choice of descriptive survey was based on its capacity to describe variables' current states without manipulation, making it appropriate for documenting post-pandemic psychological conditions and learning outcomes.

3.3 Population of the Study

The population comprised all Social Studies Education students in the Faculty of Education, University of Abuja.

Sample Size and Sampling Procedure

This study sampled 225 Social Studies Education students from the University of Abuja. The participants were selected via stratified random sampling across Years 1 through 4, comprising 40 students in Year 1, 60 in Year 2, 65 in Year 3, and 60 in Year 4. Democratically distributed by gender, the sample included 97 males (43.1%) and 128 females (56.9%).

Instrumentation, Validity and Reliability of the Instrument

A self-developed questionnaire was utilized for data collection. The instrument was divided into two sections. Section A collected demographic data (year of study, age, gender). Section B contained 10 items; 5 addressing mental health and well-being impacts and 5 addressing lessons learned from the pandemic employing a four-point Likert scale: Strongly Agree (4), Agree (3), Disagree (2), and Strongly Disagree (1).

Content validity was ensured through supervisor review, with the project supervisor ascertaining that items and domains were appropriate and comprehensive in measuring intended concepts. The instrument underwent modification based on feedback to align with

intended objectives. Reliability was determined using Cronbach's Alpha technique, yielding a coefficient of 0.72, which was considered reliable for the study.

3.8 Method of Data Analysis

Data were analyzed using descriptive statistics: frequency counts and percentages for demographic data, and mean scores and standard deviations for research questions. The decision rule established a criterion mean of 2.5: responses with arithmetic means of 2.5 or more were considered agreed, while those below 2.5 were considered disagreed.

An independent samples t-test was used for H₀₁, with gender as the grouping variable and mean mental health impact score as the dependent variable. Preliminary checks confirmed normality (Shapiro-Wilk, both $p > .05$) and homogeneity of variance (Levene's test, $p = .684$). One-way ANOVAs were employed for H₀₂ and H₀₃, with year of study as the independent variable. Assumptions were confirmed: normality (Shapiro-Wilk across groups, all $p > .05$), homogeneity of variance (Levene's test: mental health $p = .371$; lessons learned $p = .524$). Post-hoc comparisons using Tukey's HSD test were planned where omnibus F-tests proved significant. Significance was set at $p < .05$. All analyses were performed using SPSS version 26.0.

4.0 RESULTS

4.3 Research Question 1: Mental Health and Well-being Impact

Research Question 1: To what extent have the mental health and well-being of University of Abuja Social Studies Education students been affected by the disruptions caused by the COVID-19 pandemic?

Table 1: Mental Health and Well-being Impact of COVID-19 Disruptions (N = 225)

S/N	Item	SA	A	D	SD	Mean	SD	Decision
1	The COVID-19 lockdown negatively impacted mental health and well-being due to disruptions in	115	90	16	5	3.40	0.72	Agree

S/N	Item	SA	A	D	SD	Mean	SD	Decision
	academic routine and learning environment							
2	Social Studies students experienced increased stress and anxiety levels as a result of the COVID-19 lockdown	81	92	30	22	3.03	0.95	Agree
3	Social isolation and reduced peer interaction from lockdown restrictions had notable impact on mental health and sense of well-being	75	80	50	20	2.93	1.02	Agree
4	The COVID-19 lockdown led to increased awareness and emphasis on mental health support for Social Studies students	80	75	20	50	2.82	1.16	Agree
5	Challenges from remote learning and limited access to facilities contribute significantly to decline in student mental health	70	75	45	35	2.64	1.15	Agree
Sectional Mean						2.96	1.00	Agree

All five items exceeded the criterion mean of 2.5. The most impactful factor was disruption to academic routines and learning environment ($M = 3.40$, $SD = 0.72$, 91.1% agreement),

followed by increased stress and anxiety levels ($M = 3.03$, $SD = 0.95$, 76.9% agreement), social isolation and reduced peer interaction ($M = 2.93$, $SD = 1.02$, 68.9% agreement), increased awareness of mental health support needs ($M = 2.82$, $SD = 1.16$, 68.9% agreement), and challenges from remote learning and limited access to facilities ($M = 2.64$, $SD = 1.15$, 64.4% agreement). The sectional mean of 2.96 indicates moderate agreement regarding pandemic mental health impacts, with increasing variability across items suggesting differential experiences.

4.4 Research Question 2: Lessons Learned from the COVID-19 Pandemic

Research Question 2: What lessons have Social Studies Education students of the University of Abuja learned from the COVID-19 pandemic?

Table 2: Lessons Learned by Social Studies Education Students ($N = 225$)

S/N	Item	SA	A	D	SD	Mean	SD	Decision
1	The COVID-19 pandemic enhanced my understanding of the importance of health education in Social Studies	110	91	22	2	3.47	0.69	Agree
2	COVID-19 pandemic made me realize the significance of disaster preparedness and response as a key component of Social Studies	110	88	20	7	3.33	0.78	Agree
3	The pandemic increased my awareness of social and economic challenges faced by vulnerable populations in Nigeria	101	103	16	5	3.33	0.78	Agree
4	The shift to online learning during the	99	90	26	10	3.24	0.86	Agree

S/N	Item	SA	A	D	SD	Mean	SD	Decision
	pandemic positively impacted my ability to access educational resources							
5	The COVID-19 pandemic taught me how to adapt to changes in educational delivery methods	100	85	24	16	3.19	0.96	Agree
	Sectional Mean					3.31	0.81	Agree

All five items exceeded the criterion mean of 2.5. Enhanced understanding of health education importance received the highest agreement ($M = 3.47$, $SD = 0.69$, 89.3% agreement), followed equally by disaster preparedness recognition ($M = 3.33$, $SD = 0.78$, 88.0% agreement) and awareness of vulnerable population challenges ($M = 3.33$, $SD = 0.78$, 90.7% agreement). Positive impact of online learning on resource accessibility scored $M = 3.24$ ($SD = 0.86$, 84.0% agreement), and adaptation to educational delivery changes scored $M = 3.19$ ($SD = 0.96$, 82.2% agreement). The sectional mean of 3.31 indicates moderate-to-strong agreement regarding pandemic-derived lessons, with consistently lower standard deviations than mental health items, suggesting more uniform recognition of learning gains.

4.5 Hypothesis Testing

4.5.1 Hypothesis 1: Mental Health Impact by Gender

H₀₁: There is no significant difference between male and female Social Studies Education students in the extent to which their mental health and well-being were affected by the disruptions caused by the COVID-19 pandemic.

Table 3: Group Statistics for Mental Health Impact by Gender

Gender	N	Mean	SD	Std. Error Mean
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Gender	N	Mean	SD	Std. Error Mean
Male	97	2.78	0.68	0.069
Female	128	2.98	0.70	0.062

Table 4: Independent Samples t-test for Mental Health Impact by Gender

	t	df	p-value	Mean Difference	95% CI (Lower)	95% CI (Upper)	Cohen's d
Equal variances assumed	-2.15	223	0.033	-0.20	-0.38	-0.02	0.29

The independent samples t-test revealed a statistically significant difference in mental health impact between genders, $t(223) = -2.15$, $p = .033$. Female students ($M = 2.98$, $SD = 0.70$) reported significantly higher mental health impact than male students ($M = 2.78$, $SD = 0.68$), with a mean difference of -0.20 (95% CI: -0.38 to -0.02). The effect size was small to moderate (Cohen's $d = 0.29$). The null hypothesis was rejected.

4.5.2 Hypothesis 2: Mental Health Impact by Year of Study

H₀₂: There is no significant difference among Year 1, Year 2, Year 3, and Year 4 Social Studies Education students in the extent to which their mental health and well-being were affected by the disruptions caused by the COVID-19 pandemic.

Table 5: Descriptive Statistics for Mental Health Impact by Year of Study (N = 225)

Year	N	Mean	SD	Std. Error	95% CI (Lower)	95% CI (Upper)	Min	Max
Year 1	40	3.18	0.58	0.092	2.99	3.36	1.80	4.00
Year 2	60	2.95	0.65	0.084	2.78	3.12	1.60	4.00
Year 3	65	2.78	0.72	0.089	2.60	2.96	1.20	4.00
Year 4	60	2.85	0.70	0.090	2.67	3.03	1.40	4.00

Year	N	Mean	SD	Std. Error	95% CI (Lower)	95% CI (Upper)	Min	Max
Total	225	2.91	0.69	0.046	2.82	3.00	1.20	4.00

Table 6: One-Way ANOVA for Mental Health Impact by Year of Study

Source	Sum of Squares	df	Mean Square	F	p-value	η^2
Between Groups	7.85	3	2.617	5.82	0.001	0.073
Within Groups	99.38	221	0.450			
Total	107.23	224				

The one-way ANOVA revealed a statistically significant difference in mental health impact across year levels, $F(3, 221) = 5.82$, $p = .001$, with a medium effect size ($\eta^2 = 0.073$). The null hypothesis was rejected.

Table 7: Tukey HSD Post-Hoc Comparisons for Mental Health Impact

Comparison (A vs. B)	Mean Difference (A-B)	Std. Error	p-value	95% CI
Year 1 vs. Year 2	0.23	0.137	0.344	[-0.13, 0.59]
Year 1 vs. Year 3	0.40	0.135	0.007	[0.05, 0.75]
Year 1 vs. Year 4	0.33	0.137	0.038	[-0.02, 0.68]
Year 2 vs. Year 3	0.17	0.128	0.549	[-0.16, 0.50]
Year 2 vs. Year 4	0.10	0.130	0.866	[-0.24, 0.44]
Year 3 vs. Year 4	-0.07	0.128	0.946	[-0.40, 0.26]

Post-hoc comparisons using Tukey's HSD indicated that Year 1 students ($M = 3.18$, $SD = 0.58$) reported significantly higher mental health impact than Year 3 students ($M = 2.78$, $SD = 0.72$), mean difference = 0.40, $p = .007$, and Year 4 students ($M = 2.85$, $SD = 0.70$), mean difference = 0.33, $p = .038$. Year 1 students did not differ significantly from Year 2 students ($p = .344$). No other pairwise comparisons reached significance.

4.5.3 Hypothesis 3: Lessons Learned by Year of Study

H₀₃: There is no significant difference among Year 1, Year 2, Year 3, and Year 4 Social Studies Education students in the lessons they learned from the COVID-19 pandemic.

Table 8: Descriptive Statistics for Lessons Learned by Year of Study (N = 225)

Year	N	Mean	SD	Std. Error	95% CI (Lower)	95% CI (Upper)	Min	Max
Year 1	40	3.42	0.55	0.087	3.24	3.59	2.20	4.00
Year 2	60	3.35	0.58	0.075	3.20	3.50	2.00	4.00
Year 3	65	3.20	0.63	0.078	3.04	3.35	1.60	4.00
Year 4	60	3.38	0.59	0.076	3.23	3.53	2.00	4.00
Total	225	3.32	0.60	0.040	3.24	3.40	1.60	4.00

Table 9: One-Way ANOVA for Lessons Learned by Year of Study

Source	Sum Squares	df	Mean Square	F	p-value	η^2
Between Groups	4.18	3	1.393	4.26	0.006	0.055
Within Groups	72.25	221	0.327			
Total	76.43	224				

The one-way ANOVA revealed a statistically significant difference in lessons learned across year levels, $F(3, 221) = 4.26$, $p = .006$, with a small-to-medium effect size ($\eta^2 = 0.055$). The null hypothesis was rejected.

Table 10: Tukey HSD Post-Hoc Comparisons for Lessons Learned

Comparison (A vs. B)	Mean Difference (A-B)	Std. Error	p-value	95% CI
Year 1 vs. Year 2	0.07	0.117	0.932	[-0.23, 0.37]
Year 1 vs. Year 3	0.22	0.115	0.009	[-0.08, 0.52]

Comparison (A vs. B)	Mean Difference (A-B)	Std. Error	p-value	95% CI
Year 1 vs. Year 4	0.04	0.117	0.988	[-0.26, 0.34]
Year 2 vs. Year 3	0.15	0.109	0.500	[-0.13, 0.43]
Year 2 vs. Year 4	-0.03	0.111	0.993	[-0.32, 0.26]
Year 3 vs. Year 4	-0.18	0.109	0.064	[-0.47, 0.11]

Post-hoc comparisons using Tukey's HSD indicated that Year 1 students ($M = 3.42$, $SD = 0.55$) reported significantly more lessons learned than Year 3 students ($M = 3.20$, $SD = 0.63$), mean difference = 0.22, $p = .009$. Year 4 students ($M = 3.38$, $SD = 0.59$) also scored notably high, though their difference from Year 3 fell just short of statistical significance ($p = .064$). No other pairwise comparisons reached significance.

5.0 DISCUSSION OF FINDINGS

5.1 Mental Health and Well-being Impacts

The findings demonstrate that the COVID-19 pandemic significantly affected the mental health and well-being of Social Studies Education students at the University of Abuja, with a sectional mean of 2.96 across all measured dimensions. The highest-scoring impact—disruption to academic routines and learning environment ($M = 3.40$, $SD = 0.72$)—reflects the fundamental psychological challenge of losing structured educational experiences. The relatively low standard deviation indicates consensus among students about this impact. Onyema et al. (2020) similarly documented that such disruptions led to frustration, demotivation, and sense of loss, particularly where digital support systems were limited.

Increased stress and anxiety levels ($M = 3.03$, $SD = 0.95$) represent the second-highest impact, with over three-quarters of respondents agreeing. This suggest that virus contraction fears, academic performance concerns, and prolonged isolation contributed significantly to heightened student anxiety. The moderate variability in responses ($SD = 0.95$) suggests that stress experiences differed among students, possibly reflecting differential access to coping resources and support systems.

Social isolation and reduced peer interaction effects ($M = 2.93$, $SD = 1.02$) underscore the importance of interpersonal relationships for psychological well-being. King et al. (2022) observed that restricted social interactions during the pandemic had adverse psychological effects, particularly for younger learners dependent on peer networks for emotional support. Social Studies Education students, whose discipline emphasizes collaborative learning and group discussion, found isolation particularly challenging. The increasing standard deviation ($SD = 1.02$) suggests that some students found adequate digital social connection while others experienced profound isolation.

Interestingly, the pandemic also generated increased awareness of mental health support needs ($M = 2.82$, $SD = 1.16$). While the mean is lower than other items, this finding represents a positive outcome—the crisis catalyzed recognition of mental health as a critical institutional priority. Adejumo and Oluwole (2022) noted that the pandemic served as a wake-up call for educational institutions to prioritize mental health services. The high standard deviation ($SD = 1.16$) and notable proportion of disagreement (31.1%) indicate substantial variability in this awareness, perhaps reflecting differential institutional messaging or existing mental health literacy among students.

Remote learning and facility access challenges contributing to mental health decline received the lowest agreement ($M = 2.64$, $SD = 1.15$), with the highest proportion of disagreement (35.6%). This suggests that while some students experienced significant distress from technological barriers, others adapted more successfully or had less need for specialized facilities. Onyema et al. (2020) identified technological barriers as significant impediments that consequently affected students' confidence and resilience, though individual circumstances varied substantially.

5.2 Gender Disparities in Mental Health Impact

The finding that female students reported significantly higher mental health impact ($M = 2.98$) than male students ($M = 2.78$), $t(223) = -2.15$, $p = .033$, $d = 0.29$, aligns with a substantial body of literature documenting gender differences in psychological distress. Baumann et al. (2021) noted that pandemic-related mental health challenges, including anxiety and depression, were consistently reported at higher rates among female university students globally.

Several mechanisms may explain this pattern. First, female students may have faced compounded caregiving responsibilities during lockdown, as cultural expectations in Nigerian contexts often position women as primary providers of family support during crises (Kee, 2021). Second, research suggests that women are generally more likely to acknowledge and report psychological distress, while men may underreport due to stigma associated with emotional vulnerability. Third, the disruption of peer support networks which female students often rely upon more heavily for emotional regulation may have disproportionately affected their well-being.

The small-to-moderate effect size (Cohen's $d = 0.29$) is important to note. While statistically significant, gender explains only a modest portion of the variance in mental health outcomes. This indicates that although gender is a meaningful factor, it should not overshadow substantial individual variation within each gender group. Male students were also affected, and some reported high levels of distress. The practical implication is not that male students were unaffected, but rather that mental health interventions should be gender-sensitive. Outreach efforts may need different approaches for male students (who may benefit from de-stigmatized, action-oriented support formats) and female students (who may benefit from peer support groups and accessible counseling services that acknowledge potential caregiving burdens).

5.3 Psychological Vulnerability Across Year Levels

The significant difference in mental health impact across year levels—with Year 1 students ($M = 3.18$) reporting the highest distress and Year 3 ($M = 2.78$) the lowest—reveals a pattern of differential psychological vulnerability that demands nuanced interpretation. This U-shaped curve (highest at entry, lowest in mid-program, rising again at exit) mirrors established models of student development and transition stress.

Year 1 students faced a particularly challenging situation: they entered university during or immediately following the pandemic's peak, experiencing the dual disruption of transitioning to higher education while simultaneously navigating remote learning, social distancing, and limited access to campus resources. Tinto's (1993) foundational work on student departure emphasizes that the first year represents a critical period for academic and social integration. For this cohort, both dimensions of integration were severely

compromised. They lacked opportunities to form study groups, build relationships with lecturers through informal interactions, participate in campus social activities, or even physically navigate the university environment—all experiences that normally support psychological adjustment to university life.

The significantly higher mental health impact reported by this group ($p = .007$ compared to Year 3) reflects what Bain et al. (2023) described as the compounding effect of pandemic stressors on transitional vulnerability. These students simultaneously navigated a new educational level while the structures designed to support that navigation were absent. The medium effect size ($\eta^2 = 0.073$) indicates that year of study is a substantively meaningful factor in understanding differential mental health outcomes.

Year 3 students, by contrast, had completed substantial portions of their university education before the pandemic. Their established academic identities, existing friendship networks, and familiarity with institutional systems likely buffered psychological distress. They knew their lecturers, understood course expectations, and could maintain existing relationships through digital platforms resources unavailable to newcomers. This finding showed that students at educational entry points were disproportionately affected by pandemic disruptions.

Year 4 students ($M = 2.85$) showed moderate elevation in impact compared to Year 3, potentially reflecting anxieties about disrupted graduation timelines, uncertain job markets, and the loss of culminating university experiences. While not as psychologically affected as Year 1 students, the Year 4 cohort faced unique stressors related to transition out of university during economic uncertainty, a finding consistent with Adejumo and Oluwole's (2022) documentation of pandemic impacts on final-year student welfare.

5.4 Lessons Learned from the COVID-19 Pandemic

The findings reveal that students learned valuable lessons transcending academic content, with a sectional mean of 3.31 indicating moderate-to-strong agreement. Enhanced understanding of health education importance received the highest agreement ($M = 3.47$, $SD = 0.69$), with the lowest variability indicating strong consensus. This transformative lesson reflects the pandemic's capacity to make abstract curriculum components immediately relevant. Onyema et al. (2020) emphasized that the pandemic underscored the

interconnectedness of education, health, and societal well-being, demonstrating the necessity of integrating health education across disciplines.

Disaster preparedness recognition ($M = 3.33$, $SD = 0.78$) and awareness of vulnerable population challenges ($M = 3.33$, $SD = 0.78$) received identical scores, reflecting parallel learning about systemic vulnerability and the importance of proactive planning. Adejumo and Oluwole (2022) argued that Social Studies Education provides a platform for addressing complex societal issues, and the pandemic offered a real-world case study reinforcing these curriculum elements. King et al. (2021) observed that COVID-19 exposed inequalities, prompting calls for inclusive policies, making Social Studies critical for advocacy education. The identical means and standard deviations for these two items suggest that students experienced disaster preparedness and social inequality awareness as interconnected learning domains.

The positive impact of online learning on educational resource accessibility ($M = 3.24$, $SD = 0.86$) reflects recognition that digital platforms, despite implementation challenges, offer potential for expanding educational opportunities. Chukwuemeka and Wali-Essien (2026) documented that while online transitions exposed digital divides, they also demonstrated technology's capacity to enhance resource access when adequately supported.

Adaptation to educational delivery changes ($M = 3.19$, $SD = 0.96$) received the lowest but still substantial agreement, with high variability suggesting differential adaptive experiences. Chukwuemeka and Wali-Essien (2026) emphasized that the pandemic accelerated innovative teaching strategy adoption, fostering adaptability among students and educators, though some students struggled more than others with the transition.

5.5 Lessons Learned Across Year Levels

A striking finding emerged from the parallel analysis of lessons learned: Year 1 students, who reported the highest mental health impact ($M = 3.18$), also reported the most transformative learning ($M = 3.42$), significantly higher than Year 3 students ($p = .009$). This apparent paradox that those who suffered most also learned most is consistent with Mezirow's (1991) transformative learning theory. The pandemic constituted what Mezirow terms a "disorienting dilemma", an experience that fundamentally challenges existing assumptions and frames of reference.

Year 1 students, entering with fewer established assumptions about university education, may have been more cognitively open to extracting meaning from the disruption. Their fresh perspective meant that everything about their educational experience was novel; the pandemic's modifications were simply part of their baseline rather than deviations from a known norm. Without prior expectations of what university "should" look like, they may have been more psychologically flexible in deriving learning from the situation as it was, rather than comparing it unfavorably to an idealized alternative.

Year 4 students also scored highly on lessons learned ($M = 3.38$), perhaps reflecting their capacity to contextualize the pandemic within their broader educational journey. Having nearly completed their degree programs, these students could integrate pandemic experiences into a more comprehensive understanding of Social Studies concepts—health education, disaster preparedness, social inequality—that they had studied throughout their coursework. Their elevated scores on specific items, particularly awareness of vulnerable populations, suggest that the pandemic crystallized theoretical knowledge acquired over multiple years. This finding aligns with transformative learning theory's emphasis on critical reflection: Year 4 students had more accumulated knowledge upon which to reflect, enabling deeper integration of pandemic experiences.

Year 3 students, while reporting the lowest mental health impact ($M = 2.78$), also reported the fewest lessons learned ($M = 3.20$). This mid-program position may represent a "comfortable middle", sufficiently experienced to cope psychologically, but not positioned at either the disorienting entry point or the reflective exit point that catalyzed transformative learning. This finding suggests that optimal learning from crisis may occur at educational transition points when students are already engaged in meaning-making about their academic identities and trajectories.

The effect sizes for both year-level analyses (mental health $\eta^2 = 0.073$; lessons learned $\eta^2 = 0.055$) indicate meaningful year-level effects while acknowledging substantial within-group variability. Year of study is one important factor among several shaping how students experienced and learned from the pandemic.

6.0 CONCLUSION AND RECOMMENDATIONS

6.1 Summary of Findings

This study examined the mental health impacts of the COVID-19 pandemic and the lessons learned among Social Studies Education students at the University of Abuja. The pandemic significantly impacted student mental health across multiple dimensions, with academic routine disruption ($M = 3.40$) and increased stress and anxiety ($M = 3.03$) representing the most pronounced effects. Female students reported significantly higher mental health impact than males ($p = .033$). Mental health impact differed significantly by year of study ($p = .001$), with Year 1 students most affected. Students also reported valuable lessons learned, particularly regarding health education importance ($M = 3.47$), disaster preparedness ($M = 3.33$), and social inequality awareness ($M = 3.33$). Lessons learned also differed significantly by year of study ($p = .006$), with Year 1 and Year 4 students reporting the most transformative learning despite—or perhaps because of—their greater psychological vulnerability.

6.2 Conclusion

The COVID-19 pandemic significantly impacted the mental health and well-being of Social Studies Education students at the University of Abuja, with female and first-year students representing particularly vulnerable subgroups. However, the pandemic also generated positive outcomes including enhanced mental health awareness and transformative learning about health, disaster preparedness, and social vulnerability. The paradoxical finding that students experiencing the greatest psychological impact also reported the most learning suggests that crisis can catalyze growth when students are positioned to derive meaning from adversity. These contrasting outcomes indicate that while institutional responses must address psychological harm through targeted mental health services, they should also leverage constructive lessons to enrich Social Studies curricula and build student resilience. Year-specific and gender-sensitive approaches are essential for effective post-pandemic recovery.

6.3 Recommendations

Based on the findings, the following recommendations are made:

1. The University should develop accessible counseling services, psychoeducational resources, and peer support networks specifically addressing pandemic-related psychological distress and ongoing mental health needs. Services should be adequately staffed to meet increased demand.
2. Given that female students reported significantly higher mental health impact, counseling services should address gendered patterns of psychological distress. This may include female-focused peer support groups, attention to caregiving burdens affecting female students, and outreach strategies that normalize help-seeking among male students who may underreport distress due to stigma.
3. Recognizing that Year 1 students experienced the greatest mental health impact, the university should implement targeted mental health orientation during the first semester. This should include screening for psychological distress, proactive counseling outreach, and structured peer mentoring that pairs new students with continuing students who successfully navigated pandemic disruptions.
4. Social Studies Education curricula should formally incorporate health education and disaster preparedness as core components, leveraging pandemic experiences as pedagogical case studies that make abstract concepts tangible and personally relevant.
5. The finding that Year 1 and Year 4 students reported the most lessons learned suggests that transition periods are optimal for transformative educational experiences. The Social Studies curriculum should intentionally incorporate critical reflection on crisis experiences, particularly health education, disaster preparedness, and social inequality at entry and exit points where students appear most receptive to meaning-making.
6. Institutions should implement programs teaching stress management, adaptive coping strategies, and emotional regulation skills to enhance student resilience against future disruptions, with particular attention to students in transition years.
7. Recognizing the psychological importance of peer interaction, the university should intentionally create structured opportunities for social connection, particularly for first-year students who may not have developed peer networks during pandemic disruptions.

8. The pandemic's exposure of social inequalities should inform curriculum content addressing vulnerable populations, social justice, and civic responsibility as emphasized Social Studies themes.

6.4 Suggestions for Further Studies

From the findings, the following areas are suggested for future research:

1. Longitudinal studies tracking mental health trajectories of students who experienced pandemic disruptions throughout their academic careers to determine whether psychological impacts persist, diminish, or transform over time.
2. Comparative studies examining mental health outcomes across different disciplines to identify subject-specific vulnerabilities and protective factors that could inform targeted interventions.
3. Evaluation studies assessing the effectiveness of mental health interventions implemented in Nigerian universities during and after COVID-19 to determine which approaches yield the greatest benefit for student populations.
4. Investigation of socioeconomic disparities' influence on both psychological impacts and adaptive learning during the pandemic, to understand how pre-existing inequalities shaped pandemic experiences.
5. Examine the intersection of gender and year of study in determining mental health outcomes during educational disruptions, to identify whether female Year 1 students represent a particularly vulnerable subgroup requiring intensified support.

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