



Publisher: KAD International, Ghana
Co-publisher: Cherkas Global University, USA
Has been issued since 2014
E-ISSN 2508-1055
2021. 8(3): 95-107

DOI: 10.13187/jare.2021.3.95

Journal homepage:
<http://kadint.net/our-journal.html>



Sources of Academic Stress and Coping Strategies of Sandwich Students in a Nigerian University: A Quantitative Study of a Minority Student Population

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Abstract

Though lifelong education has been emphasised in current literature, studies focusing on the wellbeing of sandwich students in Nigeria have been scarce. Our study set out to identify sandwich students' academic stressors and how they cope with these stressors. The quantitative cross-sectional survey research design was applied in our study. Using a convenience sampling technique, 164 sandwich students participated in the study. Our findings showed, among others, that students perceived overcrowded hostels, congested lecture schedules, time pressure to cover the course before exams, and inconsistent lecturing timetables to be the most significant stressors of their programme. Students had higher mean scores in approach and social support coping strategies than in an avoidance coping strategy. Also, gender, year of study, and marital status were not significant factors in students' adoption of coping strategies except in social support coping, where marital status was a significant factor. Our findings show that sandwich students face some challenges that result in academic stress and are inclined to adopt mostly task-based strategies to cope with academic stress. Implications of the findings were highlighted.

Keywords: academic stress, approach coping, avoidance coping, minority, sandwich, social support coping.

1. Introduction

University education has been reported to be stressful (Ganesan et al., 2018; Pascoe et al., 2020). Moreover, the education of students who are enrolled as part-time students might be even more stressful given that they combine their studies with other responsibilities. Indeed, the combination of studies and other responsibilities, according to Kwaah and Essilfie (2017), may lead to extreme pressure, fatigue, and financial constraints. Nwosu et al. (2018) argue that part-time undergraduate students in education may be more stressed, which concurs with Deasy et al.'s (2014) finding that students who undergo training in courses that include practicums are more inclined to academic stress. Nwosu et al.'s (2018) argument is premised on the fact that sandwich students, who are part-timers in that they are likely to combine their studies with other responsibilities, also are involved in practicums.

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Students who are enrolled in sandwich programmes in Nigeria are students who are admitted to the Faculty of Education on a part-time basis. One should note that most of the students in these programmes are practising teachers who do not have a degree in education and want to scale up their qualifications and skills with in-service training (Victor, 2008). Others may be working in non-teaching fields but wish to acquire a degree in education. These students make up a minority student population in Nigerian universities. These programmes are offered during vacation periods when teachers are on holiday in Nigeria. Research has shown that most students enrol in a sandwich programme in Nigeria to improve their effectiveness in their job and earn a higher income (Victor, 2008). Agricultural students in sandwich programmes attest that these programmes enhance their social status, confidence, employment opportunities, and workplace relationships (Ikeoji et al., 2007). However, researchers have noted that observations by lecturers show that the way the sandwich programme is structured appears to be a stressor in itself (Apeh, Shamo, 2021).

Additionally, other researchers have found that problems such as poor accommodation, clashes in timetables, heavy workload, unstable electricity and transportation are encountered by students in sandwich programmes (Victor, 2008). In the study conducted by Ikeoji et al. (2007), sandwich agricultural students identified areas of deficiency in the programme to include inadequate facilities, time constraints, students not well integrated into the university social and academic life, and excessive workloads of teachers. These are likely to constitute stressors to students in the programme. However, some researchers believe that stress cannot be easily avoided in everyday life and without which individuals will become lethargic and indifferent to life activities (Amponsah et al., 2020). This may mean that there could be a form of stress that may not be harmful to an individual but could help in arousing the interest of an individual to engage in useful activities (Baqutayan, 2015). Obviously, this could be the reason behind the distinction by Ganesan et al. (2018) regarding the issue of positive and negative stress. They referred to positive stress as eustress, while negative stress is referred to as distress. Notwithstanding, stress has been seen “as an unpleasant state of emotional and physiological arousal that people experience in situations that they perceive as dangerous or threatening to their wellbeing” (Baqutayan, 2015: 479).

Nonetheless, increased levels of stress among students have been shown to be deleterious in ways that negatively impact students’ academic achievement and health [mental, physical and emotional] (Aafreen et al., 2018; Edjah et al., 2020; Elias et al., 2011; Pascoe et al., 2020), and satisfaction with school (Lovenjak, Peklaj, 2016). Students who study in part-time programmes are found to have high-stress levels (Gyambrah et al., 2017). Researchers have noted that in circumstances where there is stress, understanding how people cope with the stress becomes critical (Lembas et al., 2017). Consequently, how students cope with stress will have significant consequences on their mental health and academic success (Deasy et al., 2014). Recently, coping has been viewed as the “stabilisation viewpoint”, enabling an individual to overcome a stressful event (Amponsah, 2020: 2). An array of strategies exists, and individuals adopt these to overcome stressful events – some are productive while others are not (Amponsah et al., 2020; Baqutayan, 2015). In accordance with this, Sullivan (2010) refers to literature contending that different coping strategies fall within the problem-focused and avoidant coping strategy nomenclature. The problem-focused strategies are adopted to confront and change the perceived stressor. In contrast, the avoidant strategies are evasive and disengaging, including denial, distraction, drug use, and self-destructive behaviours (Sullivan, 2010).

To ensure the efficiency of sandwich programmes and student welfare, a need exists for stressors and how students cope in such programmes to be adequately identified and understood. Regardless of a renewed interest in stress-related studies reported in the literature and the apparent vulnerability of sandwich students in Nigeria to stress, little is needed to conduct an empirical study to explore their stressors and coping strategies. Sandwich students appear to be a minority in the student population in Nigerian universities; thus, understanding how they are stressed and cope with the stressors will ensure equity and address social justice issues. Therefore, our purpose was to identify the academic stressors and understand how the sandwich students cope with these stressors. We also examined how the gender and marital status of the students impact their coping strategies.

2. Methods and Materials

Research Design and Participants

We applied a cross-sectional survey design in conducting our research since our interest rests on understanding the behavioural characteristics prevalent among our respondents (Fraenkel, Wallen, 2000; Stockemer, 2019). Our study sample consisted of 164 sandwich students of Nnamdi Azikiwe University, Awka, during their 2018/2019 long vacation contact. We adopted the convenience sampling technique to sample our respondents. The researchers visited the venue of the programme and gave students copies of the questionnaire to fill in after their classes. We intended to sample more students but were constrained because a good number of students reported they had a lot to do that warranted them not giving their consent to fill in the questionnaire. After explaining the essence of the research to the students, those who gave their consent completed the questionnaire. We also informed our respondents of their rights to opt-out of the study when they feel so. Our data collection process followed the Helsinki Declaration on ethical standards by ensuring the confidentiality of personal information of our respondents, obtaining participants' consent, the provision of the opportunity to opt-out of the study if a respondent wishes to do so, and the explanation of the purpose of the research to respondents. We collected on the spot the filled-in copies of the questionnaire. Table 1 presents the demographics of our respondents.

Table 1. Characteristics of Respondents, N = 164

Variable	Characteristics	Number	Percentage (%)
Gender	Male	49	29.9
	Female	115	70.1
Year of Study	Year 1	31	18.9
	Year 2	33	20.1
	Year 3	46	28.0
	Year 4	39	23.8
	Above year 4	15	9.1
Marital Status	Single	84	51.2
	Married	79	48.2
	Divorced	0	00
	Missing value	1	0.6
Religion	Christian	160	97.6
	Muslim	3	1.8
	African traditionalist	1	0.6
Ethnic Group	Igbo	124	75.6
	Hausa	6	3.7
	Yoruba	12	7.3
	Others	22	13.4

The majority of the sandwich students were female students (70.1 %), and about 50 % were not married. Regarding their religion, almost all our respondents were Christians (97.6 %), and the majority were from the Igbo ethnic group (75.6 %).

Data Collection Instruments

Two instruments were used to collect the data. The first instrument is a 15-item questionnaire that was aimed at identifying the academic stressors sandwich students experience during their programme. The instrument was structured on a four-point scale (strongly agree= SA, agree=A, disagree= D, and strongly disagree = SD). It was a researcher-developed instrument constructed after an extensive literature search to ensure all possible causes of stress among these students have been considered. However, we restricted the items to use to those school-related and occur in the school environment. We did not regard this instrument from the standpoint of a construct with a strong theoretical backing because our list cannot be regarded as exhaustive; therefore, we did not explore the factors therein. However, the reliability index of .747 using the Cronbach Alpha shows that the instrument was reliable.

The second instrument – Academic Coping Strategies Scale (ACSS) – measured students' coping strategies. The ACSS used in this study contains 27 items. It was an adaptation of Sullivan's (2010) 33-item scale developed to measure students' academic coping strategies. The only change we made was on the response choice scale. We rescaled it to the strongly agree (SA) scale to strongly disagree (SD). Sullivan developed the scale to measure coping strategies to overcome specific academic stressors. The instrument contains three clusters of approach, avoidance, and social support strategies. The approach sub-scale measures students' efforts to change the problem or their emotional reactions to it, or their preparation to handle it. Also, the avoidance sub-scale measures "cognitive or behavioural attempts to escape or disengage from the stressful situation or environment, with no real attempt to solve the problem" (Sullivan, 2010: 120). Additionally, the social support sub-scale that measures the attempts by students to seek help from others in handling stressful situations contains eight items (Sullivan, 2010). Sullivan (2010) reported that the scale had Alpha coefficients for the factors ranging from .81 to .91. Sullivan (2010) reported that fit indices from the confirmatory factor analysis (CFA) were not perfect, and this instrument has not been confirmed in the Nigerian context. Thus, we decided to conduct an exploratory factor analysis (EFA) to understand the underlying structures of the 33 items and how the factors load.

The Kaiser-Meyer-Olkin (KMO) was .695. Furthermore, the Bartlett test of sphericity justified the running of an EFA given that it was significant at 0.000. This shows that the items correlated sufficiently. An initial extraction revealed an 11 factor-solution considering an eigenvalue greater than 1. However, factors were loaded with either one or two items. We, therefore, set the factors at 3 factors in accordance with Sullivan's (2010) factors. The initial communalities ranged between $\leq .2$ and $\geq .5$. Items loaded below 0.20 were deleted after the other, and the EFA was re-run. Six items had communalities values below 0.2, and one item cross-loaded and was deleted. Hence, 27 items met the criterion to be used for further analysis. Rotation showed 14.85 %, 12.31 % and 8.81 % of the variances for the first, second and third factors, respectively. The factor loadings ranged from 0.521 to 0.737. The approach coping strategies sub-scale is the factor 1, factor 2 is the avoidance coping strategy sub-scale, while factor 3 is the social support coping strategies sub-scale. The Cronbach Alpha reliability coefficients for the three factors are 0.799, 0.752, 0.638, respectively. Table 2 shows the factor loading and the communality values from principal component analysis (PCA), while Figure 1 shows the scree plot.

Table 2. PCA Factor Loadings for the Three Factors in the Scale

S/N	Item Description	EFA Factor loading of the Components			Communality values
		Approach	Avoidance	Social support	
12	Drawing on your past experiences to help you solve the problem	.433			.211
20	Thinking positively about the problem	.440			.236
21	Brainstorming a variety of possible solutions to the problem	.447			.221
22	Gathering additional information about the problem, finding out more about the problem	.481			.265
23	Trying to learn something from the experience	.576			.359
26	Trying to learn from your mistakes	.516			.355
36	Trying to think about the problem carefully before acting	.573			.401

40	Being persistent in trying to solve or fix the problem	.510			.356
41	Setting specific goals for solving the problem	.637			.440
45	Creating a specific plan of action for solving the problem	.624			.401
46	Working hard to solve the problem	.636			.450
47	Asking questions about the problem	.683			.480
16	Wishing you were more capable of dealing with the problem situation		.605		.440
17	Telling yourself the problem isn't that important		.696		.545
18	Ignoring the problem		.714		.521
24	Withdrawing from other people		.545		.323
32	Denying that the problem exists		.454		.207
38	Doing nothing about the problem		.564		.382
42	Hoping the problem will fix itself		.576		.350
43	Trying to avoid thinking about the problem		.574		.365
56	Accepting that you can't do anything about the problem		.384		.211
2	Talking to another student for emotional support			.558	.358
4	Getting other peoples' perspective of the problem			.602	.370
5	Talking to a friend from outside school, or a family member, for specific advice on how to solve the problem			.673	.485
19	Expressing your emotions to someone			.522	.322
30	Talking to a friend from outside school, or a family member, for emotional support			.567	.363
33	Expressing your emotions by crying			.496	.293

Notes.

**Items shown on the table made the .40 cut-off loading. Item numbers are the same as presented in the original Sullivan's (2010) scale after his CFA for easy reference. The wording of the items was retained as they were in the original instrument. ** Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. a. Rotation converged in 4 iterations.*

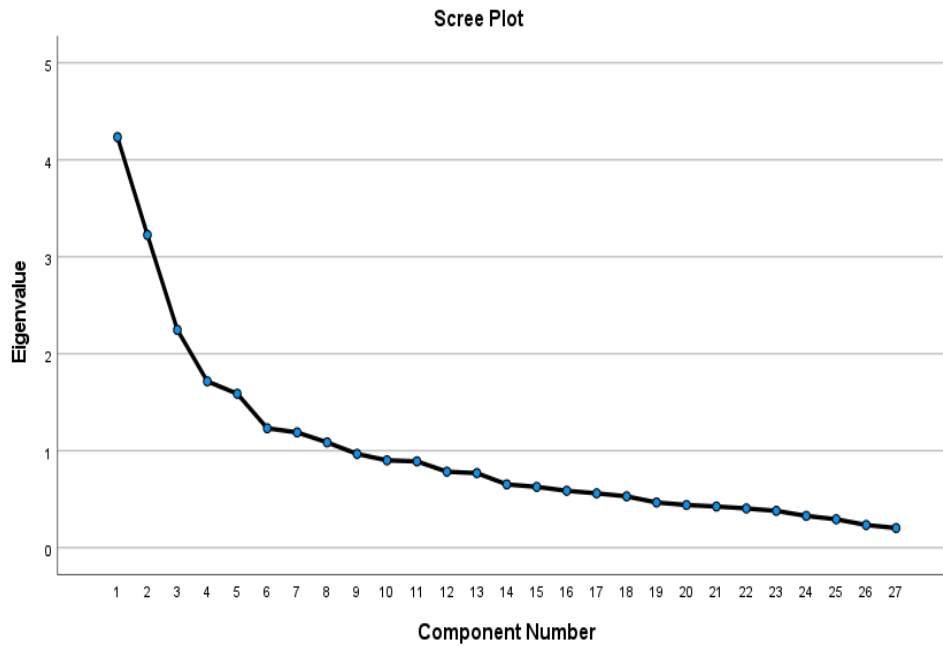


Fig. 1. Scree plot on factor number of ACSS.

Method of Data Analysis

We conducted the data analysis using SPSS version 27. Research questions were analysed using the mean, while the t-test and ANOVA statistics were used in testing the null hypotheses at a 0.05 level of significance. Before doing the actual analysis, we conducted a preliminary analysis in which we screened the data and checked for outliers. It was established that there was no significant outlier. We also conducted a test of normality. The Shapiro-Wilk test showed that approach, avoidance, and social support coping strategies were all significant, $p < .05$. However, Levene's test of equality of variances showed that distributions were not significant, $p > .05$. In the light of Levene's test being not significant and the current understanding that the violation of normality assumption, especially in distributions with large sample size, is incapable of distorting the results in t-test analysis (Rochon et al., 2012), we continued with our data analysis with the parametric statistics.

3. Results

Results in Table 3 show the mean responses of sandwich student participants on the listed academic stressors. All the items were rated above 2.5 mean score, showing that they perceived them as academic stressors. Students perceived overcrowded hostels, congested lecture schedules, time pressure to cover the course before exams and inconsistent lecture timetables as the greatest stressors during their programme.

Table 3. Students' Mean Responses on Sources of Academic Stress (N = 164)

S/N	Items	Min.	Max.	Mean	Std. Deviation
1	Overcrowded hostels	2.00	4.00	3.56	.61
2	Distance from the hostel to some classes	1.00	4.00	3.04	1.02
3	Overcrowded classrooms	1.00	4.00	3.13	.89
4	Poorly ventilated classrooms	1.00	4.00	3.14	.91
5	Congested lecture schedule	1.00	4.00	3.50	.67
6	Aggression/hostility from lecturers	1.00	4.00	3.23	.76
7	Aggression/hostility from fellow students	1.00	4.00	3.01	.84

8	Quarrelsome roommates	1.00	4.00	2.92	.89
9	Nagging colleagues	1.00	4.00	2.93	.86
10	Time pressure to cover the course content before exams	1.00	4.00	3.49	.66
11	Delayed release of examination result	1.00	4.00	3.45	.69
12	Inconsistent lecture timetable	1.00	4.00	3.48	.66
13	Inadequate learning facilities	1.00	4.00	3.24	.74
14	Unsupportive lecturers	1.00	4.00	3.30	.71
15	Failure in examination	1.00	4.00	3.29	.74

Table 4 revealed that the difference in the mean score of male students ($M = 3.37$, $SD = .31$) and that of female students ($M = 3.19$, $SD = .37$) in perceived academic stressors, were statistically significant, $t(162) = 2.958$, $p < .05$; single (unmarried) students ($M = 3.29$, $SD = .35$) had a non-significant higher mean score in approach to academic stressors than their married counterparts ($M = 3.20$, $SD = .38$), $t(161) = 1.627$, $p > .05$.

Table 4. t-test of Mean Differences on Students' Stressors Based on Gender and Marital Status

	Gender/ marital Status	N	Mean	Std. Dev	t	df	Sig. (2- tailed)	Effect size (Cohen's D)
Stressors	Male	49	3.3728	.30578	2.958	162	.004	.505
	Female	11	3.1913	.37996				
	Single	84	3.2944	.34960	1.627	161	.106	-
	Married	79	3.2017	.37833				

ANOVA as given in Table 5, shows a non-significant main effect of students' year of study (year 1, $M = 3.17$, $SD = .37$; year 2, $M = 3.37$, $SD = .33$; year 3, $M = 3.26$, $SD = .38$; year 4, $M = 3.21$, $SD = .38$; above year 4, $M = 3.17$, $SD = .33$) on their perceived academic stress, $F(3, 159) = 1.488$, $p > .05$.

Table 5. ANOVA Test on Students' Perceived Academic Stressors and Year of Study

Categories	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	796	4	.199	1.488	.208
Within Groups	21.281	159	.134		
Total	22.078	163			

Results in Table 6 show that students had higher mean scores in Approach and Social Support Coping strategies than in Avoidance Coping strategies. The highest mean score occurred in the Approach Coping strategy, indicating that students may use this strategy more than any other strategy.

Table 6. Mean Responses of Sandwich Students on their Coping Strategies, N = 164

Coping Strategies	Mean	Std. Deviation	Skewness		Kurtosis	
			Statistics	std. error	statistics	std. error
Avoidance	2.2012	.55706	.387	.190	-.342	.377
Approach	3.1819	.37905	.011	.190	.150	.377
Social Support	2.9248	.49272	-.078	.190	-.179	.377

Results depicted in Table 7 show that the difference in the mean score of male students ($M = 3.17, SD = .33$) and that of female students ($M = 3.19, SD = .40$), in approach coping strategies, was not statistical significant $t(162) = -.260, p > .05$; male students' mean score ($M = 2.25, SD = .64$), was also not significant in avoidance coping strategy from that of female students ($M = 2.18, SD = .52$), $t(162) = .450, p > .05$; male students ($M = 2.98, SD = .51$), as well as non-significant higher mean scores in social support coping strategy than the female students ($M = 2.90, SD = .51$), $t(162) = .325, p > .05$.

Results provided in this table further indicate that single (unmarried) students' mean score ($M = 3.22, SD = .39$) was not significantly different in approach coping strategies from that of married sandwich students ($M = 3.14, SD = .37$), $t(161) = 1.310, p > .05$; single (unmarried) students ($M = 2.18, SD = .55$), had lower mean score in avoidance coping strategies that was not significant from that of married students ($M = 2.23, SD = .57$), $t(161) = -.593, p > .05$; single (unmarried) students ($M = 3.02, SD = .49$), and had a significant higher mean score in social support coping strategies than the married students ($M = 2.81, SD = .48$), $t(161) = 2.800, p < .05, \eta p^2 = .439$.

Table 7. t-test Statistics on Coping Strategies Mean Differences as a Result of Gender and Marital Status

Coping Strategies	Gender	N	Mean	SD	t	df	Sig. (2-tailed)	Effect size (Cohen's D)
Approach	Male	49	3.17	.33	-.260	162	.795	-
	Female	115	3.19	.40				
Avoidance	Male	49	2.25	.64	.757	162	.450	-
	Female	115	2.18	.52				
Social support	Male	49	2.98	.44	.987	162	.325	-
	Female	115	2.90	.51				
	Marital Status							
Approach	Single	84	3.22	.39	1.310	161	.192	-
	Married	79	3.14	.37				
Avoidance	Single	84	2.18	.55	-.593	161	.554	-
	Married	79	2.23	.57				
Social support	Single	84	3.02	.49	2.800	161	.006	.439
	Married	79	2.81	.48				

The ANOVA in Table 8 shows a non-significant main effect of students' year of study (year 1, $M = 3.19, SD = .37$; year 2, $M = 3.16, SD = .38$; year 3, $M = 3.10, SD = .39$; year 4, $M = 3.25, SD = .36$; above year 4, $M = 3.28, SD = .40$) on their approach coping strategy, $F(3, 159) = 1.106, p > .05$; a non-significant main effect of students' year of study (year 1, $M = 2.39, SD = .59$; year 2, $M = 2.14, SD = .57$; year 3, $M = 2.21, SD = .58$; year 4, $M = 2.10, SD = .48$; above year 4, $M = 2.19, SD = .55$) on their avoidance coping strategies, $F(3, 159) = 1.32, p > .05$; a non-significant main effect of students' year of study (year 1, $M = 2.98, SD = .49$; year 2, $M = 3.10, SD = .42$; year 3, $M = 2.86, SD = .43$; year 4, $M = 2.84, SD = .53$; above year 4, $M = 2.82, SD = .63$) on their social support coping strategies, $F(3, 585) = 1.823, p > .05$.

Table 8. ANOVA Test on Student Coping Strategies and Year of Study

Coping Categories		Sum of Squares	df	Mean Square	F	Sig.
Approach	Between Groups	.634	4	.158	1.106	.356
	Within Groups	22.786	159	.143		

	Total	23.420	163			
Avoidance	Between Groups	1.626	4	.406	1.320	.265
	Within Groups	48.956	159	.308		
	Total	50.582	163			
Social support	Between Groups	1.738	4	.435	1.826	.126
	Within Groups	37.834	159	.238		
	Total	39.572	163			

4. Discussion

Our study attempted to identify the academic stressors among sandwich students and their strategies to cope with the stressors. This is very important due to the nature of these programmes and the impact the findings may have on university policymakers and student affairs divisions. It is even more significant that our study is the first attempt to understand the stress and coping dynamics of this minority student population in Nigeria. Findings show that all the listed items constituted stressors to students in their programmes. Students perceive issues as the most significant sources of stress were issues that had a bearing on inadequate facilities, learning pressures, and inconsistencies in teaching and learning planning. Furthermore, unhealthy relationships between students and lecturers were perceived as stressors. Similarly, Ikeoji et al. (2007) and Victor (2008) have shown that inadequate accommodation, inadequate facilities, and time constraints are challenges that can result in stress among sandwich students. Research reported similar findings among other part-time students (Kwaah, Essilfie, 2017).

Our findings show that male students had a significantly higher mean score in perceived academic stressors than their female counterparts, indicating that male students might be more stressed than their female counterparts. Over the years, researchers have tried to understand how students differ in their perception of stressors based on gender (Adasi et al., 2020; Calaguas, 2011; Chemutai, Mulambula, 2020). The finding of this study that male students have a significantly higher mean score in perceived sources of academic stress contradicts the findings of Calaguas (2011) and Chemutai and Mulambula (2020). They found that female students were more prone to stressors. However, these researchers adopted different measures to investigate the issue, and none of these studies focused on sandwich students. There is a likelihood that the source of variation might be due to different instruments that were used.

Our finding also indicated that single (unmarried) students had a non-significant higher mean score in perceived sources of academic stress than their married counterparts. This means that students who are not married may perceive these sources as stressors more than their married counterparts, though not in a significant way. This finding contradicts expectations in the sense that people who are married are expected to be more stressed than those who are not. However, there is the likelihood that the companionship in marriage could mediate the way individuals could see situations as stressors. Though carried out among a different cohort of students, Ghafoor et al. (2020) found that single students, out of a list of six listed stressors, scored higher in their mean perception of four of those items than their married counterparts. This could imply that unmarried students may be more stressed in the programme than married students. Researchers have found that companionship, especially within the family structure, could buffer life stress (Rodriguez et al., 2019). It is possible that married students may have their spouses readily available to encourage them during challenging moments.

Furthermore, the student's year of study did not significantly affect how students perceived the listed items as sources of academic stress. But an interesting finding emerged from the mean differences. First-year and fourth-year students and those above year four scored lower than those in their second and third years. It seems that first-year students might not have been used to the university, and the vigour with which they entered the university might have influenced the way they perceived these sources of academic stress. Proceeding to years two and three, students showed higher mean scores on sources of academic stress, indicating that they might be more

stressed than those in year one. However, those in year four and above had lower mean scores, suggesting that they might have gained skills to handle some of the situations. Indeed, Suleyiman and Zewdu (2018), who studied students' stress levels based on their year of study, found significant differences in the highest mean stress scores among fresh students, which contradicts our present findings. Though our research inferred students' stress through the perceptions of the sources of academic stress, there is the likelihood that those who have higher stress levels are likely to report more stressors than others.

Our findings concerning students' coping strategies showed that the most used strategy is the approach coping strategy. The least used coping strategy is the avoidance coping strategy. This may indicate that students are more likely to use strategies to tackle the situation at hand head-on and alter the situation rather than any other coping mechanism (Struthers et al., 2000). Our finding concurs with Kuncharin (2016), who found that students applied the approach coping strategy more often to solve their academic problems. Moreover, even without using the same nomenclature in describing the patterns of students' coping mechanisms, researchers (Majumdar, Ray, 2010; Kwaah, Essielfie, 2017; Nwosu et al., 2018) report that students more often adopt strategies aimed at changing the situation at hand. Our findings also show that students seek support from significant others to cope with stressful situations. Companionship has been demonstrated to be most relevant in overcoming stress (Rodriguez et al., 2019). The strategy adopted by students least of all is the avoidance strategy. This might be due to some students using a strategy of emotional/mental escape from the problem.

Furthermore, our findings showed that the gender of the students was not a significant factor in any of the sub-clusters of the ACSS. However, male students scored higher in social support and avoidance scales, while female students scored higher in the approach sub-scale. This finding contradicts the findings of Guskowska et al. (2016), which showed that male students were inclined to use task-based coping strategies while female students preferred emotion-focused strategies. In addition, marital status also was not a significant factor in approach and avoidance coping strategies but was significant in the social support coping strategy. Unmarried students scored significantly higher than their married counterparts in social support coping strategies, indicating that they sought support when stressed. It might be that they have a wider circle of friends compared to their married counterparts. The married students possibly are restricted to a smaller circle of friends.

Our findings also showed no significant differences in the mean scores of the students on the three sub-clusters of the ACSS based on their year of study. However, the mean scores indicate that students from year four and above have higher mean scores in the approach cluster than those in years two and three. This indicates that they have a stronger inclination to adopt task-based strategies. In avoidance coping, the freshmen were inclined to use more avoidance strategies than any other group of students. This is not a very productive way of tackling stressful situations. Those in year two had the highest mean score in groups in the social support coping cluster. After their first-year experience in university, they may be that they are likely to use means of consultation with others as a coping strategy.

5. Conclusion and Implications

Our study has made a significant contribution to stress and coping strategy literature in several ways. First, it was the first study in Nigeria to examine the coping strategies of sandwich students and the impact of their gender, marital status, and year of study on their coping mechanisms. This study has revealed to stakeholders such as educational psychologists, guidance counsellors, staff of the divisions of student affairs in universities, and those interested in sustainable education and lifelong education the patterns of coping strategies of these students and what they consider as the sources of academic stress. These stakeholders can fashion out intervention strategies aimed at improving students' capacity to cope with stress during their studies. Second, this study also has contributed to our understanding of the coping strategy pattern of a minority student population group in higher education. Oftentimes, researchers focus on regular students at the neglect of minority students. This study, in a way, will ensure equity and fairness in higher education if our findings could arouse the interest of stakeholders to plan for better learning environments for the students. This is based on the findings of researchers

indicating discrimination against sandwich students in comparison to students in regular programmes at the university (Manu et al., 2020).

Notwithstanding these contributions, our study was limited by a few factors. First, is the use of one university in carrying out the study. This could limit the generalisation of the findings of this study. Also, the use of only questionnaires to collect data may have limited the robustness of the findings. Triangulation of findings may arm researchers with more robust findings. It is, therefore, suggested that further research in this field should involve the sampling of more universities and a combination of a questionnaire and an interview be used to collect data. We have found that sandwich students perceived inadequacies and inconsistencies in the higher education system as stressors through this study. Unhealthy relationships between these students and their colleagues/lecturers were mentioned as sources of academic stress, with gender as a significant factor. We also found a pattern of coping strategies, which shows that sandwich students adopted more approach coping strategies than any other, indicating their inclination towards a task-based coping strategy. Also, marital status significantly impacts the social support coping strategy. It can be concluded from our findings that sandwich students face a number of challenges that result in academic stress, and they adopt several strategies to cope with the stress emanating from these challenges.

6. Acknowledgements

We sincerely thank our respondents for their cooperation and diligence in filling in the questionnaire.

7. Declaration of Competing Interest

The authors of the manuscript declare that there is no interest in conflict, and all reference materials were dully acknowledged.

8. Funding

None.

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