Relationship between Academic Stress and Thesis Completion among University Postgraduate Students

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Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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ABSTRACT

The study examined the association between academic stress and thesis completion among the University of Cape Coast postgraduate students. The correlational research design was employed for the study. A sample of 294 postgraduate students who completed their postgraduate studies between 2018 and 2020 was purposively selected for the study. Means and standard deviations, Pearson's Moment Correlation, and independent sample t-tests were used to answer the research questions and test the hypotheses. The findings revealed that the major factors causing academic stress were that, lecturers made too many extra demands on students, poor interest in some courses, eleventh-hour preparation for examinations, worry about examination results, and monotonous teaching style by some lecturers among others. The study also found a statistically significant relationship between academic stress and thesis completion among postgraduate students. It was therefore, recommended that the University of Cape Coast's management in collaboration with all its academic departments, should take the challenge of academic stress more seriously by ensuring that all postgraduate students seek professional counselling services available at the university to enable them to cope with the ever-increasing academic demands on them.

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1. INTRODUCTION

Pursuing postgraduate degrees and successfully completing them at the university level is an exciting achievement. However, it can be devastating because, in spite of the fact that many experiences such as learning, and increasing prospects of academic excellence and success available in the university environment, many of them also create unwholesome stress levels that have the potency of hindering students' ability to socialize freely and achieve their goal of thesis completion and reducing stress levels [1]. It is imperative to note that the causes of stress differ although similar stress reactions are stimulated by the body [2]. A number of sources of stress have been proposed by some psychologists to include: workload, crowding, unfavorable conditions of work, role conflicts, pressure, life event, and daily hassles. Others are; role ambiguity, unpleasant social relationships, personality type, career prospects, social support, and responsibilities [3].

In a similar vein, academic stressors are triggered by numerous assignments, competition with colleagues, and strained relationships with colleagues or lecturers. Others include the atmosphere in the lecture rooms, unlimited time to relax the body, death or illness of family relatives, many hours of studies, fear of failing courses, change in eating/sleeping habits, difficulty in learning, increased lecture workload, physical health, roommate conflict, lack of confidence, several tests or assignments due on the same day, combining a job with assignments and/or studies [4,5]. Similarly, students who are incapable of maintaining equilibrium between their academic activities, family life, and friends, and insufficient funding are said to experience high levels of academic stress [6,7].

Sometimes, academic stress that affects the Master of Philosophy (MPhil) students is related to certain specific situations such as parent-supervisor expectations and forces within peer cycles which affect them significantly. In the context of the aforementioned, Lin et al. [8] revealed a delay in thesis completion-related stress emanating from parents, supervisor and sponsor organizational expectations which in turn affects personal expectations of students thereby dictating their management of time and social relationships in general. Peer-related stress such as group reports, competition in academic work completion and instabilities from colleagues as causes of academic stress among students in colleges and universities.

In related revelation by Nakalema and Ssenyonga [1] found some 196 undergraduates be stressed by day-to-day academic difficulties, personal problems, financial problems, academic burdens, as well as social expectations. Adding to the expectation factor, Sinha, Sharma and Nepal [9] indicated that in any academic setting, pressure to meet high expectations is precipitated by overload in information, the pressure involved in academic work, impracticable ambitions, inadequate opportunities, and high competitiveness which have the potency of creating pressure, panic, and anxiety among students. Some students also reported that the obligation of meeting assessment timelines was a major cause of stress for them [10] (Misra, McKean, West, & Russo, 2000). Students when exposed to these stressors, become confused, and disorientated and have a difficult time coping [11].

In relation to thesis writing and completion among some distance graduate students, Silinda and Brubacher [12] found that doubt about the research or the writing processes alongside inadequate assistance from supervisors, as well as problems with time management as the main causes of academic stress among 748 students. Moreover, other specific factors that cause academic stress include difficulties in managing finances, changes in living environment, and challenges in the management of both personal and academic life, among others [13-16]. It was further indicated by Bang [17] that when students have inadequate personal resources such as financial assistance to manage stressful events, they may be prone to experiencing intensified stress which badly affects thesis completion among distance education postgraduates.

In relation to academic stress levels, Prakasha [18] found that expectations from the parents, methods of teaching and learning, narrowly conceived curriculum, unattainable goals, less motivation, and feeling unworthy and unappreciated were the factors that influence academic stress levels among postgraduate students.

1.1 The Relationship between Academic Stress and Postgraduate Students' Thesis Completion

There is limited research in the literature on the relationship between academic stress and thesis completion. Those that existed focused on the association between stress and academic performance. For example, Giacobbi, et al. [19], established that stress-linked events of life were not a substantial supposition of performance in academics among college student-athletes, while Sandler [20] found that stress was not a predictor of the intention of adult college students to remain enrolled in school. Similarly, Felsten and Wilcox, [21] also revealed an inverse association between individual-reported stress levels and academic performance. Nevertheless, the findings of Dumitrescu [22] which focused on dissertations revealed a positive correlation between perceived stress and dissertation completion.

Similarly, some researchers investigated the link between key periods of stress and the Doctor of Philosophy Degree (PhD) completion in educational programmes [23]. In general, critical periods of stress were linked to non-completion, with non-completers reporting more critical periods of stress that resulted in withdrawal from PhD studies than those who completed them. Academic pressures, work pressures and mandatory examinations are the sources of crucial stress that differentiated completers from non-completers who reported more crucial occasions due to general discouragement, family problems, and financial issues [23]. Cornér, et al. [24] also found a significant link between extreme academic stress and postgraduate students' desire to complete their programmes.

1.2 Gender Differences in Thesis Completion

In terms of gender, previous studies indicated that gender plays a role in thesis completion among postgraduate students [25]. Though females make up a significant portion of doctoral students (53% to 57%) in the humanities and social sciences, they did not graduate at the same rates as their male peers [26,25]. This may be partly due to the lack of female faculty mentors. Males are more likely than females to report having developed stronger relationships with and engaged in more social interactions with faculty [27,28]. Females are also more likely than

males to experience gender discrimination by faculty members, advisors, and other students in the programme [27]. Contrary to the findings aforementioned, [29] found that female doctoral students had more likelihood of working with faculty advisors who were females, thus had more likelihood of completing their doctoral degrees in a shorter duration of time than their male counterparts who were advised by male faculty members. Main further revealed that psychosocial supports and role models were important in the persistence of female doctoral students to complete their theses. According to Main, when looking specifically at graduation rates between male and female doctoral students, 81 % of female students and 83 % of male students completed their doctorate degree. Similarly, the time of completing a degree among female students was 7.8 years, and 7.5 years for male students.

Furthermore, Arulampalam, et ai. [30] found that male students have more likelihood of dropping out of their programme while other studies recounted greater rate of completion among male students [31], yet others are unable to identify any differences in doctoral completion in terms of gender [32,33]. A study conducted by Triventi et al. [34] revealed that there is no relationship between completion rate and being a married female at the time they enrolled on the PhD programme. It was also revealed that PhD and Mphil students who were parents before enrolling on their programmes completed their theses at a higher rate than their colleagues who were not parents. Again, those who took leave in any form during their period completed their programme at a lesser rate as compared to those who did not. Finally, those with advanced ages (above 30 years) have a lesser success rate in thesis completion than those aged 25 or even younger [35].

1.3 Problem Statement

In Ghana, the ability to acquire any postgraduate qualification and credential that will enable one to secure a new job or gain promotion at the workplace is tied to the successful completion of one's dissertation or thesis. Every tertiary institution in Ghana including the Cape Coast University has a stipulated duration within which postgraduate students must complete their theses in order to graduate. Postgraduate students who are unable to complete their theses within the time duration are not just required to enter another year but also, required to pay

additional tuition fees for that ensuing academic year. Therefore, unsuccessful timely completion of a programme increases the cost of pursuing it. For example, students are charged extension fees, and university resources like libraries and research supervisors are overburdened as a result of the backlog of students who must be cleared before graduation [36,37].

Additionally, some of these postgraduate students are presumably mature people who might have been working to end a living while at the same time pursuing their programmes. Some of them perform key roles at their workplaces that require more time, expertise, and physical availability to execute successfully. Aside from the responsibilities at the workplace, some of them are married and therefore, are required to fulfil their family responsibilities such as taking care of children, providing for their nuclear families, and also meeting the demands of their extended families. Most importantly, postgraduate students also have to meet their academic demands such as achieving high academic performance in their course works including theses writing. These demands and many other roles exert a lot of pressure on them which may lead to stress and subsequently affect their chances of completing their theses on time. Some postgraduate students who could not withstand this psychological pressure ended up dropping out of their programmes.

Spronken-Smith, Cameron and Quigg's [38] investigation on factors responsible for more doctoral completion levels revealed that the gender of the students has an influence on the rate of thesis completion. The females completed at a 10% rate higher than their male counterparts. Some previous research investigations on the impact of gender on thesis completion have revealed diverse findings. While some, such as that of Seagram, Gould and Pyke [33]; Wao and Onwuegbuzie [39]; Wright and Cochrane [40] indicated gender had no impact, other studies revealed that females (20%) had lesser percentages of completing their theses compared to their male counterparts (50%) [41,42]. Some studies revealed that academic overload, limited time to meet coursework demands, high family expectations, low motivation levels, financial difficulties, and absence of time management skills, build up stress on students [43,25]. In Ghana, some research works have been done to focus on the effect of stress on Physicians/Doctors and nurses [44,45,46]. It appears that no scientific research has been carried out on the stress phenomenon to include how it relates to postgraduate students' thesis completion. The current study, therefore, was designed to fill this gap.

1.4 Research Questions

1. What are the factors that contribute to academic stress among the University of Cape Coast postgraduate students?
2. What is the association between academic stress and thesis completion among the University of Cape Coast postgraduate students?

1.5 Research Hypotheses

Ho^1: There is no statistically significant gender difference in thesis completion among postgraduate students.

Ho^2: No statistically significant difference exists in thesis completion among postgraduate students with reference to marital status.

Ho^3: No statistically significant difference exists in thesis completion among postgraduate students with reference to employment status.

2. METHODOLOGY

2.1 Design Population and Sampling Procedure

The descriptive design was adopted to guide the data collection and analysis, and discussion of the result of the study. The target population for the study was all MPhil candidates who completed their theses from 2018 to 2020. The accessible population was 294 students [47]. All 294 respondents made up of 166 males and 128 females irrespective of programmes studied were selected by the census method for the study.

2.2 Data Collection Instrument

Data collection was done using a questionnaire. The instrument contained structured and close-ended items. The Academic Stress Scale (ASS) developed by Kim [as cited in Phillips et al., 48] was adapted to measure the factors that might have caused academic stress among postgraduate students. The original scale comprises 40 items with each item having five different statements of response as: "No Stress

(NS)", "Slightly Stress (SS)", "Moderate Stress (MS)", "Highly Stress (HS)" and "Extremely High Stress (ES)". The adapted version used for this study was made up of 20 items with a Cronbach alpha of .97 representing a high internal consistency of the items. Twenty (20) items were deleted because they were irrelevant to the current study. The items had been grouped into four sub-categories; students-associated stress, course-associated stress, examination-associated stress, and lecturer-associated stress.

Finally, the Thesis Completion instrument developed by Rauf [49] was adapted to measure the thesis completion variable of the study. The original instrument was made up of 31 items with six sub-scales. The adapted version used in this research work was made up of 20 items with Cronbach alpha of .83.

2.3 Data Collection Procedure

Data collection lasted for eight weeks. The questionnaires were sent to the respondents via mobile phone text messages, emails, and WhatsApp' platforms and returned through the same media. A total of 163 out of the 294 responses representing a 57.2% return rate was obtained from the respondents.

2.4 Data Processing and Analysis

Research question one was answered using means and standard deviations. Research question two was analysed using Pearson's Correlation Coefficient and the hypotheses were tested using the independent sample t-test.

3. RESULTS AND DISCUSSION

Research Question 1: What are the factors that contribute to academic stress among the University of Cape Coast postgraduate students?

The main objective of this research question aimed at identifying the major and minor factors that cause academic stress among postgraduate students while writing their theses. The results were discussed using means and standard deviation. A mean of 1.6 and above indicates major factors while a mean below 1.6 indicates

minor factors. The results are presented in Table 1.

From Table 1, the responses range from one to five. A minimum of '1' implies 'Slightly Stress (SS)' while a maximum of '4' implies 'Extreme Stress (ES)'. From Table 1, the following items: a lack of interest in particular courses, a lack of attention during study hours, trouble speaking in front of a group, incomplete and confusing material, and lack of opportunity to meet lecturers, among others are equal or greater than the average mean of 1.6. They were therefore deemed as major factors causing academic stress among postgraduate students. On the other hand, items like the absence of self-confidence, feelings of inferiority, lack of assertiveness in the lectures, conflict with friends or university authorities, lack of communication between lecturers and students, inability to grasp the subject matter, and not knowing how to prepare for examination fell below the average mean of 1.6. They were, therefore, deemed as minor factors causing postgraduate students' academic stress. The major factors are presented in Table 2.

From Table 2, the first major factor causing academic stress was lecturers making too many extra demands on students (M= 1.8075, SD= .97157). The next major was poor interest in some courses (M= 1.7764, SD= .81375). The third major factor causing academic stress is eleventh-hour preparation for examinations (M= 1.7516; SD= .96197). Worry about examination results (M= 1.7516; SD= .90851) is the fourth major factor. The fifth major factor was the monotonous teaching style of some lecturers (M= 1.7391; SD= .90500). Following this was worrying over examination (M= 1.7081; SD= .89191). Lack of concentration during study hours (M= 1.6957; SD= .77495) is the next major factor causing academic stress. Others are; lack of opportunity to meet lecturers (M= 1.6957; SD= 1.003) lecturers lacking interest in students (M= 1.6646; SD= .89404), difficulty in public speaking (M= 1.6273; SD= .88614) incomplete and confusing material (M= 1.6273; SD= .83531). Examination papers being difficult and not valued well (M= 1.6025; SD= .83126). Finally, the last major factor causing academic stress in the University of Cape Coast's postgraduate students was difficulty in remembering all that was studied (M= 1.6025; SD= .80062).

Table 1. Factors that contribute to academic stress among University of Cape Coast postgraduate students

	N	Minimum	Maximum	Mean	SD. Deviation
Poor interest in some courses	161	1.00	4.00	1.7764	.81375
Lack of concentration during study hours	161	1.00	4.00	1.6957	.77495
Lack of self-confidence	161	1.00	4.00	1.4472	.74078
Feeling of inferiority	161	1.00	4.00	1.4907	.83754
Difficulty in public speaking	161	1.00	4.00	1.6273	.88614
Lack of assertiveness (confidence) in the lectures	161	1.00	4.00	1.5652	.74819
Conflict with friends/university authorities	161	1.00	4.00	1.4037	.81685
Not able to grasp the subject matter	161	1.00	4.00	1.4472	.74078
Incomplete and confusing study material	161	1.00	4.00	1.6273	.83531
Difficulty in remembering all that was studied	161	1.00	4.00	1.6025	.80062
Not knowing how to prepare for the examination	161	1.00	4.00	1.4534	.79805
Eleventh-hour preparation for the examination	161	1.00	4.00	1.7516	.96197
Worrying about the examination	161	1.00	4.00	1.7081	.89191
Worry about examination results	161	1.00	4.00	1.7516	.90851
Exam papers are difficult and undervalued.	161	1.00	4.00	1.6025	.83126
Lack of communication between lecturers and students.	161	1.00	4.00	1.5839	.84083
Lecturers place excessive demands on students.	161	1.00	4.00	1.8075	.97157
Lecturer's monotonous (boring or tedious) teaching style.	161	1.00	4.00	1.7391	.90500
Lecturers lacking interest in students	161	1.00	4.00	1.6646	.89404
Lack of opportunity to meet lecturers	161	1.00	4.00	1.6957	1.00027
Valid N	161				

Source: Field Data, (2022)

Research Question 2: What is the association between academic stress and thesis completion among the University of Cape Coast postgraduate students?

The major goal of this research question was to look at the association between academic stress and thesis completion among postgraduate students while writing their theses. The results were analysed using Pearson's Moment Correlation Coefficient and presented in Table 3.

At the 0.01 level, correlation is significant (two-tailed)

Table 3 demonstrates that the Pearson's correlation coefficient for academic stress and thesis completion was 0.46 at a 0.000 sig value. This meant that academic stress and thesis completion among postgraduate students had a statistically significant and moderately positive association. This further means that the higher the scores of academic stresses, the higher the scores of thesis completion.

Table 2. Ranking of major factors causing academic stress among University of Cape Coast postgraduate students

Major Factors Causing Academic Stress	Mean	Standard Deviation
Lecturers making too many extra demands on students	1.8075	.97157
Poor interest in some courses	1.7764	.81375
Eleventh hour preparation for examinations	1.7516	.96197
Worry about examination results	1.7516	.90851
Monotonous teaching style by the lecturer	1.7391	.90500
Worrying over examination	1.7081	.89191
Lack of concentration during study hours	1.6957	.77495
Lack of opportunity to meet lecturers	1.6957	1.0003
Lecturers lacking interest in students	1.6646	.89404
Difficulty in public speaking	1.6273	.88614
Incomplete and confusing material	1.6273	.83531
Examination papers being tough and not valued well	1.6025	.83126
Difficulty in remembering all that was studied	1.6025	.80062

Source: Field Data, (2022)

Table 3. Association between academic stress and thesis completion among University of Cape Coast postgraduate students

	Coefficient	
Variables	Pearson's Correlation	Sig (2 tailed)
Academic stress and Thesis Completion	0.46	.000

Source: Field Data, (2021)

Table 4. The result of the first hypothesis tested using independent sample t-test

			Group Statistics		
	Gender	N	Mean	Std. Deviation	Std. Error Mean
TC	Male	98	37.1122	10.31952	1.04243
	Female	63	37.5079	11.11795	1.40073

Independent Samples Test									
		Levene's Test for Equality of Variances		t-test for Equality of Means					
		F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
TC	Equal variances assumed	.124	.726	-.230	159	.818	-.39569	1.71786	-3.78847	2.99709
	Equal variances not assumed			-.227	125.156	.821	-.39569	1.74605	-3.85131	3.05992

Source: Field Data, (2021)

Hypothesis 1: There is no statistically significant gender difference in thesis completion among postgraduate students.

Table 4 shows that equal variances are assumed because the sig value (0.726) is greater than p= 0.05, hence the top df was used. Therefore, there was no statistically significant difference between males (*M*= 37.11, *SD*= 10.32) and females (*M*= 37.51, *SD*= 11.12); t(159)= -0.230, p= 0.818, (two-tailed) when it comes to thesis completion among postgraduate students. We, therefore, failed to reject the null hypothesis.

Hypothesis 2: There is no statistically significant difference in thesis completion among postgraduate students with reference to marital status.

Table 5 presented the results of the second hypothesis. Prior to testing, all conditions underlying ANOVA had been met. That is, the independent variable consists of three categorical independent groups (married, not married, and divorced). Again, the dependent variable (thesis completion) is measured on an interval scale. The results show that there is no

statistically significant difference in thesis completion among postgraduate students who were married (*M*= 36.98, *SD*= 10.97), those who were not married (*M*= 37.47, *SD*= 10.35), and those who were divorced (*M*= 42.00, *SD*= 1.41); f(2, 158)= 0.243, p= 0.785, (two tailed). The null hypothesis, therefore, was not rejected

Hypothesis 3: There is no statistically significant difference in thesis completion among postgraduate students with reference to employment status.

Table 6 shows that equal variances are assumed because the sig value (0.406) is greater than p= 0.05, hence the top df was used. Therefore, given that the level of significance is α = 0.05, the critical region is α < 0.05, the p-value from the table is 0.838, the null hypothesis is not rejected because the sig value (2-tailed); p=0.838 is greater than 0.05. Therefore, there is no statistically significant difference in thesis completion among postgraduate students who were working (*M*= 37.35, *SD*= 10.51) and those who were not working (*M*= 36.90, *SD*= 11.25); t(159)= 0.205, p= 0.838, (two-tailed).

Table 5. One-way analysis of variance (ANOVA)

	N	Mean	Std. Deviation	Std. Error
Married	85	36.9765	10.97397	1.19029
Not Married	74	37.4730	10.35430	1.20366
Divorced	2	42.0000	1.41421	1.00000
Total	161	37.2671	10.60646	.83591

Test of Homogeneity of Variances			
Thesis Completion			
Levene Statistic	df1	df2	Sig.
1.529	2	158	.220

ANOVA					
Thesis Completion					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	55.117	2	27.558	.243	.785
Within Groups	17944.399	158	113.572		
Total	17999.516	160			

Source: Field Data, (2022)

Table 6. The results of the third hypothesis tested using independent sample t-test

Group Statistics					
	Employment Status	N	Mean	Std. Deviation	Std. Error Mean
TC	Working	133	37.3459	10.50905	.91125
	Not working	28	36.8929	11.24916	2.12589

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference		
									Lower	Upper
TC	Equal variances assumed	.695	.406	.205	159	.838	.45301	2.21199	-3.91566	4.82167
	Equal variances not assumed			.196	37.574	.846	.45301	2.31296	-4.23108	5.13710

Independent Samples Test

Source: Field Data, (2021)

4. DISCUSSIONS

The first research question was to determine the elements that contributed to postgraduate students' academic stress. The findings of this analysis indicated that the first major factor that caused the postgraduate students' academic stress in the course of writing their theses was the fact that lecturers made too many extra demands on them. The results on conflict with friends or university authorities, and the fact that lecturers and students do not communicate well, support the findings of Fairbrother and Warn [4] who revealed that too many tasks, competition with other students, failures, and poor relationships with other students or lecturers contribute to academic stress. Again, the findings on students' inability to understand some concepts in certain courses were in line with that of Carveth, Gessse, and Moss [50] whose revelation indicates that one of the reasons for academic stress is students' perceptions of the broad knowledge base necessary and the belief of insufficient time to build it.

Furthermore, the result of eleventh-hour preparation for examinations was in line with the findings of Misra et al. [10] who pointed out that studying for and taking tests, grade competitiveness, and the massive quantity of knowledge to grasp in a restricted time frame are all sources of academic stress for students. These results implied that at the time the students were doing their course work, issues related to writing examinations and the expectations of examination results caused academic stress to them. Also, the results of worry about examination results, worrying over examinations, monotonous teaching style by some lecturers, as well as incomplete and confusing material confirmed the findings of Lin et al. [8]; Palacio [51]; Mani [29]; Phillips et al. [48] who revealed that the causes of academic stress include stress from test scores, courses materials, and teaching methods.

The findings of the study also revealed that one major factor that triggers academic stress among postgraduate students was the fact that they had a poor interest in some courses. Lack of concentration during study hours also accounted for a major factor causing academic stress. Additionally, lack of opportunity to meet lecturers, difficulty in public speaking, examination papers being tough and not valued well as well as difficulties recalling everything that was studied were other important variables creating academic

stress among postgraduate students. Similarly, the findings of the study revealed that the absence of self-confidence, feelings of inferiority, lack of confidence in the lectures, and not knowing how to prepare for examinations were all minor factors that cause academic stress among postgraduate students. The foregoing findings support the findings of Phillips et al. [48] who revealed that academic stress among tertiary students is caused by poor interest in subjects, a lack of concentration, a lack of self–confidence, examination anxiety, and teacher-pupil interaction.

The second research question sought to determine the association between academic stress and thesis completion among the University of Cape Coast postgraduate students. Academic stress and thesis completion had a Pearson's correlation coefficient of 0.46. This meant that academic stress and thesis completion among postgraduate students had a statistically significant and moderate positive relationship. This result further revealed that the more postgraduate students experienced academic stress, the more thesis completion was adversely affected. This result is in line with Dumitrescu's [22] findings, which indicated a favourable relationship between perceived stress and dissertation completion. The result is also in tandem with Mcdermott [23], who indicated that critical periods of stress were linked to non-completion, with non-completers reporting more critical periods of stress, Cornér et al. [24] who also found a link between extreme academic stress and postgraduate students' desire to complete their program and Silinda's [12] who also revealed that the moderation model was significant, implying that thesis writing moderates the association between stressor factors and stress experienced.

Finally, the hypothesis for the study sought to examine the differences in thesis completion among postgraduate students with regard to gender. The results support the null hypothesis that there was no statistically significant difference in thesis completion rates between male and female postgraduate students. This means that the postgraduate students, irrespective of their gender were all equally faced with the elements that affected thesis completion. The results of this current study contradicted the findings of Lovitts [27]; Millett and Nettles, [28] whose results indicated gender differences in thesis completion.

Hypothesis two sought to investigate the differences in thesis completion among postgraduate students with reference to marital status. The result confirmed the null hypothesis that there is no statistically significant difference in thesis completion in postgraduate students who were married, those who were not married, and those who were divorced. This means that all the postgraduate students were faced with similar factors affecting thesis completion irrespective of their marital status.

The third and final hypothesis sought to examine the differences in thesis completion among postgraduate students with reference to employment status. The result is in tandem with the null hypothesis that there was no statistically significant difference in thesis completion between postgraduate students who were working and those not working at the time of writing their theses. This implies that all the postgraduate students were faced with similar factors affecting thesis completion irrespective of their employment status.

5. CONCLUSIONS

According to the findings of the study, the major factors causing academic stress were: Lecturers making too many extra demands on students, poor interest in some courses, lack of attention during study hours, trouble in public speaking, incomplete and confusing information, difficulty in remembering everything that was learned, eleventh-hour preparation for examinations, worry about examination results, examination papers being tough and not valued well, lecturers making too many extra demands on students, monotonous teaching style by the lecturer, lecturers lacking interest in students, and lack of opportunity to meet lecturers. These factors may be largely due to the students' lack of complete involvement in the course work probably because some of them were married and working and at the same time pursuing their masters hence, they could not get ample time for their course and prepare for their examinations. The personality, availability, and teaching styles of lectures also account for these factors. The study therefore, concludes that the University of Cape Coast's management in together with the academic departments, should take the issue of academic stress of students very seriously by ensuring that all postgraduate students seek professional counselling services available at the university, and put measures in place to address all issues pertaining to thesis supervisor

unavailability due to responsibility overloads. By doing so, the students can be helped to cope with the ever-increasing academic demands of thesis writing and completion in the university

6. RECOMMENDATIONS

The following recommendations can be made based on the results of the study:

1. The University of Cape Coast's management in collaboration with all academic departments, should take the problem of academic stress more seriously by insisting on all postgraduate students seek professional counseling services available at the university. By doing so, the students can be helped to cope with the ever-increasing academic demands on campus.
2. The university's academic departments should organize a periodic workshop at least once every semester for all the postgraduates on how to study and prepare for examinations. This will help reduce the anxiety that accompanies examinations on campus.
3. Lecturers of the university should also make themselves available to the students and create an enabling environment where the students could have a professional relationship with them in order to address their academic needs.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Nakalema G, Ssenyonga J. Academic stress: its causes and results at a Ugandan University. Afr J Teach Educ. 2013;3(3):1-21.
DOI: 10.21083/ajote.v3i3.2762
2. Reddy KJ, Menon KR, Thattil A. Academic stress and its sources among university students. Biomed Pharmacol J. 2018;11(1):531-7.
3. Okai R. Stress in university libraries: A study of University of Professional Studies, Accra and Wisconsin International University College-Ghana; 2015 ([doctoral dissertation]. University of Ghana).
4. Fairbrother K, Warn J. Workplace dimensions stress and job satisfaction. J Manag Psychol. 2003;18(1):8-21.
DOI: 10.1108/02683940310459565

5. Dada JO, Babatunde SO, Adeleye RO. Assessment of academic stress and coping strategies among built environment undergraduate students in Nigerian higher education. J Appl Res Higher Educ. 2019; 11(3):367-78.
    DOI: 10.1108/JARHE-06-2018-0100

6. Porwal, K., Kumar, K. A Study of Academic Stress among Senior Secondary Students.International Journal of Indian Psychology. 2014;1(3).
    DOI: 10.25215/0103.017,
    DIP: 18.01.017/20140103.

7. Gillespie NA, Walsh MHWA, Winefield AH, Dua J, Stough C. Occupational stress in universities: staff perceptions of the causes, consequences and moderators of stress. Work Stress. 2001;15(1):53-72.
    DOI: 10.1080/02678370117944

8. Lin YM, Lin SC, Wang MY, Chen FS. What causes the academic stress suffered by students at universities and colleges of technology? World Trans Eng Technol Educ. 2009;7(1):77-81.

9. Sinha UK, Sharma V, Nepal MK. Development of a scale for assessing academic stress: A preliminary report. J Inst Med. 2001;23(2):96-102.

10. Misra, R., McKean, M., West, S., & Russo, T. Academic stress of college students: Comparison of student and faculty perceptions. College Student Journal. 2000;34(2):236–245.

11. Oduwaiye RO, Yahaya LA, Amadi EC, Tiamiyu KA. Stress level and academic performance of university students in Kwara State, Nigeria. Makerere J Higher Educ. 2017;9(1):103-12.
    DOI: 10.4314/majohe.v9i1.9

12. Silinda FT, Brubacher MR. Distance learning postgraduate student stress while writing a [dissertation] or thesis. International Journal of E-Learning & Distance Education. 2016;32(1):1-14.

13. Biron C, Brun JP, Ivers H. Extent and sources of occupational stress in university staff. Work. 2008;30(4):511-22.
    PMID 18725713.

14. Chernomas WM, Shapiro C. Stress, depression, and anxiety among undergraduate nursing students. Int J Nurs Educ Scholarsh. 2013;10(1):255-66.
    DOI: 10.1515/ijnes-2012-0032,
    PMID 24200536.

15. Jimenez C, Navia-Osorio PM, Diaz CV. Stress and health in novice and experienced nursing students. J Adv Nurs. 2010;66(2):442-55.
    DOI: 10.1111/j.1365-2648.2009.05183.x,
    PMID 20423427.

16. Moscaritolo LM. Interventional strategies to decrease nursing student anxiety in the clinical learning environment. J Nurs Educ. 2009;48(1):17-23.
    DOI:10.3928/01484834-20090101-08,
    PMID 19227751.

17. Bang EJ. The effects of gender, academic concerns, and social support on stress for international students [doctoral dissertation], University of Missouri--Columbia; 2009.

18. Prakasha K. Assessment of level of academic stress among postgraduate students of Himachal Pradesh University. An Int Multidiscip Peer Reviewed J. 2012; 1(1):37-41.

19. Giacobbi PR, Lynn TK, Wetherington JM, Jenkins J, Bodendorf M, Langley B. Stress and coping during the transition to university for first-year female athletes. Sport Psychol. 2004;18(1):1-20.
    DOI: 10.1123/tsp.18.1.1

20. Sandler ME. Career decision-making self-efficacy, perceived stress, and an integrated model of student performance: A structural model of finances, attitudes, behaviour, and career development. Res Higher Educ. 2000;41(5):537-80.
    DOI: 10.1023/A:1007032525530

21. Felsten G, Wilcox K. Influences of stress and situation-specific mastery beliefs and satisfaction with social support on well-being and academic performance. Psychol Rep. 1992;70(1):291-303.
    DOI: 10.2466/pr0.1992.70.1.291, PMID 1565734.

22. Dumitrescu GA. Self-efficacy, locus of control, perceived stress and student satisfaction as correlates of dissertation completion; 2016. ([doctoral dissertation]. Andrews University).

23. McDermott BJ. The utility of perceived stress, locus of control, and type A behaviour pattern as predictors of doctoral degree completion in a nontraditional Ed. D. program. West Virginia University; 2002.

24. Cornér S, Löfström E, Pyhältö K. The relationships between doctoral students' perceptions of supervision and burnout. Int J Doct Stud. 2017;12(1):91-106.
    DOI: 10.28945/3754

25. Jain G, Singhai M. Academic stress amongst students: a review of literature. Prestige J Manag Res. 2017;4(2):2350-1316.

26. Bowen, WG, Rudenstine, NL. In pursuit of the PhD. Princeton, 1992, NJ: Princeton University Press.

27. L ovitts BE. Leaving the ivory tower: The causes and consequences of departure from doctoral study. Rowman & Littlefield Publishing Group Publishers; 2002.

28. Skopek J, Triventi M, Blossfeld H-P. How do institutional factors shape PhD completion rates? An analysis of long-term changes in a European doctoral program. Stud Higher Educ. 2022;47(2): 318-37.
    DOI: 10.1080/03075079.2020.1744125

29. Millett CM, Nettles MT. Three ways of winning doctoral education: Rate of progress, degree completion, and time to degree. In: CHERI Conference: Doctoral Education and the Faculty of the Future; 2006.

30. Main, V. Students' perception of the impact of course work on exam stress. International Journal of Arts and Sciences, 2010;3(17), 104-110.

31. Arulampalam W, Naylor R, Smith J. Factors affecting the probability of first year medical student dropout in the UK: a logistic analysis for the intake cohorts of 1980–Medical Education, 2004;38(5):492-503.

32. Booth AL, Satchell SE. The hazards of doing a PhD: An analysis of completion and withdrawal rates of British PhD students in the 1980s. J R Stat Soc A. 1995;158(2):297-318.
    DOI: 10.2307/2983293

33. Millett, Catherine M, Michael T. Nettles. Developing High-Potential Youth Program: A Return on Investment Study for US Programs. Educational Testing Service; 2009.

34. Seagram BC, Gould J, Pyke SW. An investigation of gender and other variables on time to completion of doctoral degrees. Res Higher Educ. 1998;39(3):319-35.

35. Triventi M, Skopek J, Kulic N, Buchholz S, Blossfeld HP. Advantage 'finds its way': How privileged families exploit opportunities in different systems of secondary education. Sociology. 2020; 54(2):237-257.

36. Eyangu S, Bagire V, Kibrai M. An examination of the completion rate of masters programs at Makerere University Business School. Creat Educ. 2014; 05(22):1913-20.
    DOI: 10.4236/ce.2014.522214

37. Wamala R, Ocaya B, Oonyu JC. Extended candidature and Non- Completion of a Ph.D. at Makerere University, Uganda. Contemp Issues Educ Res. 2012;5(3):175-84.

38. Spronken-Smith R, Cameron C, Quigg R. Factors contributing to high PhD completion rates: A case study in a Research-Intensive University in New Zealand. Assess Eval Higher Educ. 2018; 43(1):94-109.
    DOI: 10.1080/02602938.2017.1298717

39. Wao HO, Onwuegbuzie AJ. A mixed research investigation of factors related to time to the doctorate in education. Int J Doct Stud. 2011;6(9):115-34.

40. Wright T, Cochrane R. Factors influencing successful submission of PhD theses. Stud Higher Educ. 2000;25(2):181-95.
    DOI: 10.1080/713696139

41. Jiranek V. Potential predictors of timely completion among dissertation research students at an Australian faculty of sciences. Int J Doct Stud. 2010;5(1):1-13.
    DOI: 10.28945/709

42. Shery O, Renato LB. Factors associated in students' completion in the degree master and doctor of philosophy in educational planning and management. International Journal of Research Publications. 2021; 91(1):272-87.

43. Bataineh MZ. Academic stress among undergraduate students: The case of education faculty at King Saud University. Int Interdiscip J Educ. 2013;1(1033):1-7.

44. Deckard G, Meterko M, Field D. Physician burnout: an examination of personal, professional, and organizational relationships. Med Care. 1994;32(7):745-54.
    DOI:10.1097/00005650-199407000-00007, PMID 8028408

45. Stacey AP, Chris S. The effect of resident physician stress, burnout, and empathy on patient-centered communication during the long-call shift. Health Communication. 2012;27(5):449-456.

46. Huseini H. Assessing the level of job satisfaction and burnout amongst registered nurses in the tamale teaching hospital and Tamale West Hospital in the Northern Region [dissertation]. University of Ghana; 2018.

47. School of Graduate Studies, University of Cape Coast. Graduation list, 2018-2020; 2018. graduate- studies-congregation-2018-and-provisional-pass-list. Available:https://www.ucc.edu.gh/campus-announcements/school-.

48. Phillips SC, Halder DP, Hasib W. Academic stress among tertiary level students: A categorical analysis of academic stress scale in the context of Bangladesh. Asian J Adv Res Rep. 2020; 1(1):1-16.
DOI: 10.9734/ajarr/2020/v8i430203

49. Rauf FA. Challenges of thesis work: towards minimizing the non- completion rate in the postgraduate degree programme. Eur J Bus Manag Concern. 2016;8(7):113-24.

50. Carveth JA, Gesse T, Moss N. Survival strategies for nurse midwifery students. J Nurse Midwifery. 1996;41(1):50-4.
DOI: 10.1016/0091-2182(95)00072-0,
PMID 8820759.

51. Palacio OM. Academic stress: causes and consequences. Multimed. 2013;17(2): 1-15.

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