



**ANALYSIS OF AGE AND LEVEL OF STUDY
AS FACTORS IN ACADEMIC STRESS EXPERIENCED
AMONG UNDERGRADUATES OF PUBLIC UNIVERSITIES
IN EDO STATE, NIGERIA**

**Onolemhenhen, P. E.ⁱ,
Abel, Ebiega Enokela**

Department of Guidance and Counselling,
Faculty of Education,
Ambrose Alli University,
Ekpoma, Edo State,
Nigeria

Abstract:

The study examined whether age and level of study differences exist in academic stress experienced among undergraduate students of public universities in Edo State. The descriptive research design using the survey was adopted in the study. The population of covered all the 53,588 regular undergraduate students in public universities in Edo State in the 2018/2019 session. A sample size of 536 students was selected for the study. The proportional random sampling technique was used to select 2% of the total number of students across each of the faculties in the institution. The instrument used for the collection of data was a questionnaire titled: "Academic Stress Questionnaire - ASQ". The test-retest reliability coefficient of 0.88 was obtained to show that the instrument is reliable. The t-test statistics for two independent samples and analysis of variance (ANOVA) were used to test the hypotheses at 0.05 alpha level. The result showed that the academic stress experienced among undergraduate students of Public universities in Edo State differed with respect to their age and level of study. In addition, academic stress was found to decline with increasing age of students while academic stress rises for undergraduates in their first year, declines in the second and third year but rises again in the final year. It was recommended that guidance and counselling units should be well established in every department in the university to support lecturers on the area of course advising students to reduce lecturer-related, examination-related and school-relationship stress that students may be confronted with.

Keywords: age and level of study, academic stress, undergraduates of public universities

ⁱ Correspondence: email onolemhenmhenpe@gmail.com

1. Introduction

Every establishment or institution are established to meet some needs or attain some goals. For a learner and academic staff in an academic institution, such goal is expected to be learning and teaching for improved capacities and competencies. However, the nature of most learning institutions particularly higher institutions in Edo State is one that characterized by various factors that could disrupt teaching and learning. Some of these factors include: academic dishonesty, student riot, strike actions by tertiary institution staff (academic and non-academic) and even the recent corona virus (COVID-19) pandemic which has led to the closure of all school institutions; making many undergraduates to forcefully observe an indefinite “stay home,” “stay safe” directive of the federal government. All of these has been observed to constitute some academic stress to students.

Academic stress describes all possible challenges that constitute strain, worry on their study programmne and that could also impinge on students’ realization of their academic goals when not handled properly. The researcher identifies four categories of academic stress as follows: a) financial related issues such as tuition fee, buying of textbooks, payments of dues among others. b) lecture-related issues, such as the coping with the problem of time sharing between attendance of lectures, taking of notes and other academic engagements; c) examination related issues such as challenges of sorting missing results and school-relationship issues such as managing various relationship issues among students, lecturers, and other school staff. Some include: how to know their faculty, department, meet their course mates, where, what and how to register their courses, and even hostel accommodation problems among many others.

In addition to this is the fact that public universities are largely made up of staff with varying degrees of passion for their jobs. Among the academic staff are those who exhibit greed for money, live above their income and lack the commitment and dedication needed to bring about quality education delivery. Ikhariale (2003) observed that Nigerian universities are currently harboring misfits within their belly and that there are those who call themselves teachers but who, due to their intellectual and ethical weakness, ought not to be associated with the ivory tower. Pressures from parents and students as well as the corruption in the society are certainly yielding undesirable fruits in the universities. These illicit behaviours constitute stress among many undergraduate and make them unable to concentrate fully on their studies (Achibong, 2012). The foregoing raises the question as to whether academic stress differs with respect to age and level of study of student

Age is usually described in terms of number of years of an individual such as a student. Sanni and Mohammad (2015) asserted that the academic stress experienced and their reactions to the same by learners could be viewed different with respect to age of learners as a result of their exposure. They argued that academic stress is an integral part of every academic institution and therefore increases with age of learners and their level of study. On the other hand, level of study refers to the years a student has stayed on a

course of study in an academic institution. Similarly, Sanni and Mohammad (2015), submitted that academic stress remains an inevitable and non-negotiable experience in the everyday school life of a student. This is because as students go up in the academic ladder of their study programme; more responsibilities are required of them and these responsibilities many somewhat constitute stress and sometimes become unbearable.

Nigerian public universities are made up of individuals with varying degrees of passion for their jobs. Among the academic staff are those who exhibit greed for money, live above their income and lack the commitment and dedication needed to bring about quality education delivery. Ikhariale (2003) observed that Nigerian universities are currently harboring misfits within their belly and that there are those who call themselves teachers but who, due to their intellectual and ethical weakness, ought not to be associated with the ivory tower. Pressures from parents and students as well as the corruption in the society are certainly yielding undesirable fruits in the universities. These illicit behaviours constitute stress among many undergraduate and make them unable to concentrate fully on their studies.

Academic stress is a mental distress with respect to some anticipated frustration associated with academic failure or even awareness of the possibility of such failure (Omomia, Omomia, Chimezie & Akinwale, 2017). Academic stress pervades the life of students, and tends to impact adversely their mental and physical health and their ability to perform schoolwork effectively (Busari, 2014). Stress has been seen tightening its grip on the students, as they have to compete at every step of their academic career in this fast-moving world. This shadow of academic stress all the more darkens for the students of high and intermediate schools as they have to enter into the world of competition for choosing their respective careers.

Academic stress does not necessarily begin in college. The nervous breakdowns, panic attacks, burnouts and depressions are also common among many young students. The situation does not remain the same for everybody, and everyone do not experience the same feelings or gloomy thoughts when they are under stress. At this point of time, a part from dealing with the physical and socio- emotional changes, the adolescents have to fulfill the expectation their of parents, build their career and complete school, in which they might fail and thereby have a negative impact on himself. Family is considered to be the first school for the child and is a source of expectations whereby the parents' play a vital role in their children's academic achievements (Chellamuthu, 2017).

Several studies have been conducted on age differences in academic stress experienced among students in recent times. Azila-Gbettor, Atatsi, Danku and Soglo (2016) assessed age differences and their effects on academic stress experience among Business student in Ho Polytechnic, Ghana. A cross sectional research design was employed in conducting the study. In all, 275 students were sampled through the use of multistage sampling procedure. Burge's (2009) modified five-point Likert stress scale was used to solicit for the requisite data for the study. Descriptive statistics such as mean scores and standard deviations were used to determine the most dominant sources of stress. Non-parametric inferential statistics was used to assess the significance differences

in stress level by demographic variables. Finally, Spearman's correlation coefficient was used to determine the effects of stress on students' academic performance. The study among other things found the most dominant stress for each stressor category examined. However, the two most dominant stress categories are "TECATS" and "TACS". The level of stress was found to be significant for all demographic variables evaluated. However, the causal factors for stress categories have been mixed. The result further showed that no significant effects were found between age differences and academic stress experience among students.

Akande, Olowonirejuaro and Okwara-Kalu (2016) investigated level and sources of stress among secondary school students in the Federal Capital Territory (FCT) Abuja. The study was a descriptive survey and the population comprised all senior secondary school students in the FCT. A sample of 18 secondary schools out of the 59 public senior secondary schools in the FCT was involved in the study with a total of 540 respondents made up of male and female students. A questionnaire was designed by the researchers and validated through expert judgment to collect relevant data. The data collected were analyzed using percentage, statistical weighted mean and standard deviations for the research questions while t-test was used to test the hypotheses. The results indicated that secondary school students had a medium level of stress and some of the significant sources of stress include: academic, intra-personal and environmental. There was a significant gender difference in the level of stress and also some sources of stress among secondary school students.

Olaitan, Oyerinde, Obiyemi and Kayode (2016).determined the job stress among primary school students in South-west, Nigeria. A total of 624 teachers were chosen as subjects using a multistage sampling technique, and a structure questionnaire was used to gather information from the subjects. Research hypotheses were formulated and inferential statistics of test and analysis of variance ANOVA were employed to analyze significant differences at $\alpha = 0.05$ level. The result showed that the differences were significant only for age.

Studies on level of study differences in academic stress experienced among students have been carried out by several scholars in recent times Aam, Safiyanu and Adamu (2017) examined the relationship between level of study differences and Academic Stress among secondary school students in Bauchi – Nigeria. Correlational design was used. The population of the study constituted 193 (115 Males and 78 Females) secondary school students. Proportionate Stratified Random sampling techniques was employed in selecting a sample of 108 students as sample participants in this study based on sample size table by Research Advisors. Three self-designed instruments titled Study Hours and Academic Stress Questionnaire (SHASQA), Assignment and Academic Stress Questionnaire (AASQ) and Workload and Academic Stress Questionnaire (WASQ) were used respectively for data collection in this study. The questionnaires have coefficient reliability index of 0.85, 0.83 and 0.93 respectively using Cronbach alpha. Hypotheses were formulated and tested at $\alpha 0.05$ level of significance. The data were analysed using mean, standard deviation and Pearson Product Moment Correlation Coefficient

(PPMCC). Findings from the study showed that there is a significant relationship between level of study and academic stress among secondary students in Bauchi – Nigeria.

Shiferaw, Anand, and Nemera (2015) examined exploring the perceived stress level differences, academic stress among students in Jimma Zone, Ethiopia. A cross-sectional questionnaire-based survey design of 193 students, who were selected by a proportionate stratified random sampling, was selected for the study. A questionnaire was prepared as the data gathering tool. The data were analyzed using descriptive statistics which included frequencies, percentages and means Results showed that the prevalence of perceived stress level among students of Jimma was 47.7%. Result further shows that academic stress differed by level of study as students in higher classes had more academic responsibility than those in lower classes.

Gebrekirostos (2015) examined level of study stress among secondary school students and their academic performance: The Case of Central Zone of Tigray Region. This study employed a cross-sectional survey method which intended at inspecting the current level of stress, possible contributing factors in central zone secondary school students of Tigray region. The study areas consist of 1139 secondary school students and out of them 321 participants were taken for this study. Again, to select the sample schools, cluster random sampling and then lottery method of simple random sampling techniques were used. To collect data for the study, level of study stress inventory questionnaire was used. To analyze the collected data, both descriptive and inferential statistics were applied. Accordingly, the result showed that, all the secondary school students in higher classes experienced higher level of academic stress than those in lower classes.

Although, many of these studies are recent, many of them were carried out beyond Edo State. Furthermore, many of the studies such as that of Sanni and Mohammad (2015) only investigated the forms, causes and effect of academic stress among students but did not attempt to investigate the influence of personal qualities on academic stress experienced among students. Hence, a knowledge gap exists. To fill this gap, it is pertinent to examine academic stress experienced among undergraduate students of public universities in Edo State, Edo State.

2. Hypotheses

The research hypotheses formulated for this study are given below:

- a) There is no significant difference in the level of academic stress experienced among undergraduate students of Public universities in Edo State according to age.
- b) There is no significant difference in the level of academic stress experienced among undergraduate students of Public universities in Edo State according to level of study.

3. Method

The descriptive research design using the survey method was adopted for study. The population of the study covered all the 53,588 regular undergraduate students in the three public universities in Edo State (University of Benin, Ambrose Alli University and Edo University in Benin City, Ekpoma and Iyamho respectively). A sample size of 536 students representing 1 percent of the population was drawn by accidental sampling technique.

The instrument used for the collection of data was a researcher developed questionnaire titled: "Academic Stress Questionnaire - ASQ". The questionnaire contained 16-items developed to measure various academic stresses. The questionnaire (ASQ) was divided into Sections A and B. Section A contains personal information of students' such as sex, age and level of study. Section B was used to collect information about the academic stress experienced by undergraduates in the institution. Section B contained 16 items statements on academic stress. The academic stresses cover four (4) dimensions namely: financial related issues such as tuition fee, buying of textbooks, payments of dues among others (items 1-4); lecture-related issues such as the coping with the problem of time sharing between attendance of lectures, taking of notes and other academic engagements (items 5-8); examination related issues such as challenges of sorting missing results (items 9-12) and school-relationship issues such as managing various relationship issues among students, lecturers, and other school staff (items 13-16).

The sixteen (16) items in Section B were rated on a four point Likert scale of: Strongly Agree (SA) - 4, Agree (A), -3, Disagree (D) - 2; and Strongly Disagree (SD) -1. The content validity of this instrument (ASQ) was ensured by two experts in Guidance and Counselling. A draft copy of the questionnaire was given to them to read through and make corrections. Their corrections were integrated into the final draft copy of the questionnaire before final administration of the instrument. The test-retest reliability coefficient yielded an r-value of 0.88 which showed that the instrument is reliable. The researchers personally administered the questionnaires to students with the assistance of departmental executives (excos) in various faculties of the institution. A cover letter (letter to respondents) was attached to the questionnaire to explain the purpose of the research exercise to the student. Few minutes was given to volunteers to fill to questionnaire after which the instrument was collected immediately. This was to ensure that a sufficient amount of time was given to fill them and to enhance the return rate. The t-test statistics for two independent samples was used to test hypothesis 1 while the analysis of variance (ANOVA) and Least Square Difference (LSD) post hoc test were used to test hypotheses 2. Both hypotheses were tested at 0.05 level of significance using the Statistical Package for Social Science (SPSS® 23).

4. Results

The result of the test of hypotheses are presented:

Hypothesis 1: There is no significant difference in the level of academic stress experienced among undergraduate students of Public universities in Edo State according to age.

Table 1: Analysis of Academic Stress Experienced among Undergraduate Students of Public Universities with Respect to their Age

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4.693	4	2.347	11.198	.000
Within Groups	56.163	532	.210		
Total	60.856	536			
a. Dependent Variable: Academic Stress					
b. Predictor: Age					
p< 0.05					

Data in Table 1 showed that the F-value of 11.198 is statistically significant ($p < 0.05$). Hence, the null hypothesis was rejected while the alternate was accepted. This indicated the level of academic stress experienced among undergraduate students of Public universities in Edo State, Edo State differed significantly according to their age. Determining the age category that holds a significantly different towards their level of academic stress is pertinent. Therefore, a post-hoc test was conducted on the omnibus test of variance (ANOVA). The result of the analysis is presented in Table 2.

Table 2: Post-Hoc Test Analysis on Academic Stress in Relation to Age of Undergraduates

(I) Age	(J) Age	Mean Difference (I-J)	Std. Error	Sig.
Below 21yrs	21-23yrs	.056	.097	.566
	24yrs & above	.312*	.098	.002
21-23yrs	below 21yrs	-.056	.097	.566
	24yrs & above	.256*	.059	.000
24yrs & above	below 21yrs	-.312*	.098	.002
	21-23yrs	-.256*	.059	.000

Result in Table 2 above showed that the mean differences of the (age) are: .056 for below 21years, .312 for 21-23years, .256 for 24years and above, -.312. The mean difference rating shows that the level of academic stress experience among undergraduate students with students in 21-24years is highest with a mean difference score of -.312 and lowest at among students within 21-23years with a mean difference of .256.

Hypothesis 2: There is no significant difference in the level of academic stress experienced among undergraduate students of Public universities in Edo State according to level of study.

Table 3: Analysis on Academic Stress Experienced among Undergraduate Students of Public Universities with Respect to Level of Study

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	7.464	4	1.866	9.297	.000
Within Groups	53.392	532	.201		
Total	60.856	536			

Data in Table 3 showed that the F-value of 9.297 is statistically significant ($p < 0.01$). Hence, the null hypothesis was rejected while the alternate was accepted. This indicated the level of academic stress experienced among undergraduate students of Public universities in Edo State, Edo State differed significantly according to their level of study. Determining the level of study category that holds a significantly different towards their level of academic stress is pertinent. Therefore, a post-hoc test was conducted on the omnibus test of variance (ANOVA). The result of the analysis is presented in Table 4.

Table 4: Post-Hoc Test Analysis on Academic Stress in Relation to Level of Study of Undergraduates

(I) Level of study	(J) Level of study	Mean Difference (I-J)	Std. Error	Sig.
100level	200level	-.158	.083	.059
	300level	.157*	.077	.042
	400level	.324*	.084	.000
	Other levels	.098	.124	.427
200level	100level	.158	.083	.059
	300level	.315*	.077	.000
	400level	.482*	.084	.000
	Other levels	.256*	.124	.039
300level	100level	-.157*	.077	.042
	200level	-.315*	.077	.000
	400level	.167*	.078	.033
	Other levels	-.059	.119	.623
400level	100level	-.324*	.084	.000
	200level	-.482*	.084	.000
	300level	-.167*	.078	.033
	Other levels	-.226	.124	.070
Other levels	100level	-.098	.124	.427
	200level	-.256*	.124	.039
	300level	.059	.119	.623
	400level	.226	.124	.070

Table 4 indicated that the mean difference among undergraduate in 100level (.157*, .324*), 200level (.315*, .482*, .256*), 300level (-.157*, -.315*, .167*), 400level (-.324*, -.482*, -.167*) and other level (-.256*) were all statistically significant ($p < 0.05$). This indicates that there were significant differences between students in 100level, 200level, 300level, 400level and other level. To determine the level of students on which is highest (peak) and lowest, the Tukey HSD Post-Hoc homogenous test was conducted.

5. Discussion

The result shows that there is a significant difference in the academic stress experienced among undergraduate students of Public universities in Edo State according to age. Academic stress was found to decline with increasing age of students while academic stress rises for undergraduates in their first year, declines in the second and third year but rises again in the final year. The result disagrees with that of Azila-Gbettor, Atatsi, Danku and Soglo (2016) who asserted that no significant effects were found between age differences and academic stress experience among students. The result agrees with that of Akande, Olowonirejuaro and Okwara-Kalu (2016) who found out that there was a significant gender difference in the level of stress and also some sources of stress among secondary school students. It also agrees with that of Olaitan, Oyerinde, Obiyemi and Kayode (2016) who found out that the differences were significant only for age.

The result shows that there is a significant difference in the level of academic stress experienced among undergraduate students of Public universities in Edo State according to level of study. The result agrees with that of Aam, Safiyanu and Adamu (2017) who found out that there is a significant relationship between level of study and academic stress among secondary students in Bauchi – Nigeria.

The result support that of Shiferaw, Anand, and Nemera (2015) who found out that academic stress differed by level of study as students in higher classes had more academic responsibility than those in lower classes. The result is in line with that of Gebrekirstos (2015) who found out that all the secondary school students in higher classes experienced higher level of academic stress than those in lower classes.

6. Conclusion

Academic stress is not only a day-to-day challenge that constitutes strain and worry to an average undergraduate student on their study programme but also one that could impinge on students' realization of their academic goals when not handled properly. Based on findings, it can be concluded that academic stress experienced among undergraduate students of Public universities in Edo State differed according to their age and level of study. Academic stress was found to decline with increasing age of learners but rises for undergraduates in their first year, declines in the second and third year but rises again in the final year.

6.1 Recommendations

Arising from the findings, are the following recommendations:

- 1) Guidance and counselling units should be well established in every department in the university to support lecturers on the area of course advising students to reduce lecturer-related, examination-related and school-relationship stress that students may be confronted with.

- 2) Stress management programmes should be initiated by counsellors in the institutions to assist undergraduate manage their financial related stress that may be emanating from lack of adequate resources to purchase necessary materials needed for their studies in the semester or session.
- 3) Parents/sponsors/guardian should endeavour to give their children/wards some moral supports by sending messages or calling them to know about their welfare from time to time. This could go a long way in relieving them of possible academic stress or worries.

Conflict of Interest

We hereby declare that there was no conflict of interest as at the time of writing this article.

About the Authors

Onolemhenhen, P. E. is a senior lecturer in the Department of Guidance and Counselling of Ambrose Alli University, Ekpoma, Edo State, Nigeria. She is a professionally trained counsellor that has several scholarly international and local publications to her credit. Her research interest centres around learners' achievement, emotional behaviour, career development and patients' treatment with therapies.

Abel, Ebiega Enokela is a student in the Department of Guidance and Counselling of Ambrose Alli University, Ekpoma, Edo State, Nigeria. With deep interest for counselling and social works, Abel, E. E. has co-authored and published some research articles in contribution to the field of guidance and counselling.

References

- Aam, M., Safiyanu S. S. & Adamu, T. B. (2017). Correlates of level of study and Academic Stress among secondary school students at Abubakar Tafawa Balewa University, Bauchi – Nigeria. *International Journal of Education and Evaluation*. 3(9), 12-16.
- Akande, J. A., Olowonirejuaro, A. O. & Okwara-Kalu, C. E. (2016). A Study of Level and Sources of Stress among Secondary School Students. *IOSR Journal of Research & Method in Education (IOSR-JRME)*. 4(5), 32-36.
- Azila-Gbettor, E. M., Atatsi, E. A., Danku, L. S., & Soglo, N. Y. (2016). Stress and academic achievement: empirical evidence of business students in a Ghanaian Polytechnic. *International Journal of Research in Business Studies and Management* 2(4),78- 98.
- Baraza, O. T., Simatwa, E. M. W. & Gogo, J. O. (2016). Levels of Stress among Secondary School Teachers and its Implication on Students' Academic Performance in Kenya: A Case Study of Kakamega North Sub County. *Greener Journal of Educational Research*. 6 (2),052-066.

- Busari, A. O. (2014). The level of stress experience among undergraduate students of university of Ado Ekiti, Emmanuel Alayande Campus Oyo. *Mediterranean Journal of Social Sciences*. 5(27), 599- 609.
- Chellamuthu, S. (2017). Explored the gender differences and its relationship with academic stress experienced among high school students. *Article in Indian Journal of Applied Research* 2(1), 11.
- Ekundayo, H. T. & Kolawole, A. O. (2016). Stress Among Secondary School students in Ekiti State, Nigeria. *Journal of Educational and Social Research*. 3(2), 311-315.
- Nwimo, N. O. & Onwunaka, C. (2017). Stress among Secondary School Teachers and students in Ebonyi State, Nigeria: Suggested Interventions in the Worksite Milieu. *Journal of Education and Practice*. 6(26), 93- 98.
- Olaitan, O. L., Oyerinde, O. O., Obiyemi, O. & Kayode, O. O. (2016). Prevalence of school stress among primary school students in South-West, Nigeria. *African Journal of Microbiology Research*. 4 (5), 339-342
- Omomia, T. A., Omomia, O. A., Chimezie, C. U. & Akinwale, G. (2017). Perceived impact of stress on the academic achievements of Biology students in Education District IV of Lagos state. *Published in the Russian Federation European Journal of Psychological Studies*. 3(3), 85 – 96.
- Rogers, C. R. (2016). *On becoming a Person: A therapist's view of psychotherapy*. Boston: Houghton Mifflin.
- Rutter, M. (2014). Stress, coping and development: Some issues and some questions. In N. Garnezy, and M. Rutter (eds.). *Stress, coping, and development in child*. New-York: McGraw-Hill.
- Samuel, E. S. (2016). *Adolescent and adult health*. Nsukka: Afro- Orbis publications limited.
- Sarafino, E. P. (2014). *Health psychology: Bio-psychological interactions*. New York: John Wiley & Sons.
- Sedgeman, J. A. (2015). Health Realization/innate health: Can a quiet mind and a positive feeling state be accessible over the lifespan without stress – relief techniques? *Medical Science Monitor*, 11(12), 47-52.
- Segal, D. L., Hook, J. N., & Crolidge, F. L. (2001). Personality dysfunction, coping styles and clinical symptoms in younger and older adults. *Journal of Clinical Geropsychiatry*, 7, 201 – 212.
- Weiten, W. (2015). Pressure as a form of stress and its relationship to psychological symptomatology. *Journal of Social and Clinical Psychology*, 6 (1), 127.

Creative Commons licensing terms

Author(s) will retain the copyright of their published articles agreeing that a Creative Commons Attribution 4.0 International License (CC BY 4.0) terms will be applied to their work. Under the terms of this license, no permission is required from the author(s) or publisher for members of the community to copy, distribute, transmit or adapt the article content, providing a proper, prominent and unambiguous attribution to the authors in a manner that makes clear that the materials are being reused under permission of a Creative Commons License. Views, opinions and conclusions expressed in this research article are views, opinions and conclusions of the author(s). Open Access Publishing Group and European Journal of Education Studies shall not be responsible or answerable for any loss, damage or liability caused in relation to/arising out of conflicts of interest, copyright violations and inappropriate or inaccurate use of any kind content related or integrated into the research work. All the published works are meeting the Open Access Publishing requirements and can be freely accessed, shared, modified, distributed and used in educational, commercial and non-commercial purposes under a [Creative Commons Attribution 4.0 International License \(CC BY 4.0\)](https://creativecommons.org/licenses/by/4.0/).