Asian Journal of Education and Social Studies



6(3): 25-37, 2020; Article no.AJESS.54369 ISSN: 2581-6268

Exploring Undergraduate Students' Views on Factors Influencing Academic Performance in Construction Related Disciplines in Bells University of Technology, Ota, Nigeria

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Authors' contributions

This work was carried out in collaboration among all authors. Author ICO designed the study, performed the statistical analysis, wrote the protocol and wrote the first draft of the manuscript. Authors ICO and AAO managed the analyses of the study. Author BOSE managed the literature searches. All authors read and approved the final manuscript.

Article Information

DOI: 10.9734/AJESS/2020/v6i330177 <u>Editor(s):</u> (1) Dr. Nasser Mustapha, Senior Lecturer, Department of Behavioural Sciences, University of the West Indies, St. Augustine, Trinidad and Tobago. <u>Reviewers:</u> (1) B. Razia, Aligarh Muslim University, Aligarh. (2) Peter Paul Kithae, University of Africa, Kenya. (3) R. Parameswari, India. Complete Peer review History: <u>http://www.sdiarticle4.com/review-history/54369</u>

Original Research Article

Received 01 February 2020 Accepted 09 February 2020 Published 15 February 2020

ABSTRACT

Aims: There is usually dissimilarity in achievement as a result of several factors that influence the academic performance of students in universities. Therefore, this study aims to explore and investigate problem factors affecting the academic performance of undergraduate students in construction related disciplines in Bells University of Technology Ota, with a view to providing understanding on the major problem factors affecting their academic performance. **Study Design:** Survey research design.

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Place and Duration of Study: Department of Building Technology, Bells University of Technology Ota, Ogun State, Nigeria, between May 2019 and January 2020.

Methodology: The research employed a survey method with questionnaires distributed to undergraduate students in construction related disciplines in Bells University of Technology Ota. Data collected were analyzed using frequency, percentage, mean, rank and Kendall's coefficient of concordance test.

Results: Out of 172 questionnaires administered, 105 were sufficiently filled and returned, representing 61% of response rate. The results show that maturity, study strategies, interest in course, fear and stress and training and teaching style are the top five factors affecting academic performance of undergraduate students in construction related disciplines in Bells University of Technology Ota, Nigeria. Secondly, using SPSS (23), Kendall's (W^a) value was found to be 0.036 at 0.000 significance level, therefore the study concluded that, there is statistically significant degree of agreement between different departments of the participants concerning their responses to factors that affect academic performance in construction related disciplines in Bells University of Technology, Ota, Nigeria.

Conclusion: The study recommends that skipping of classes by students during early education should be discouraged so as to allow students attain maturity level for higher education. Secondly, universities should organize fear and stress management seminars and workshops for undergraduate students in addition to guidance and counseling sessions with a view to addressing psychological issues that may hinder their academic performance.

Keywords: Academic performance; Bells University of Technology; construction related disciplines; Nigeria; undergraduate students.

1. INTRODUCTION

Education is the first step for every person in this age of computer. Education plays an important part in the growth of human capital, linked with an individual's well-being, helped in personality building and opportunities for better living [1]. According to Fajar, et al. [2], students are the main source of any educational set up. Mushtaq and Khan [3] Noted that students are the key assets for any educational setup such as universities and those educational institutions have no value without student.

University is a place where a scientifically familiarized and organized education is obtainable. It is through such prearranged conduct that the desired attitude, skill and knowledge of the learner develop, but in a certain class, dissimilarity in achievement exist a result of several factors that influence the academic performance of students [1]. Bells University of Technology Ota, was established in 2005. The University was the first private university of technology in Nigeria, located at Ota, Ogun State southern part of Nigeria. Universities are expected to produce quality graduates that will later be the nation's workforce in the future [4].

Construction related disciplines are programmes or courses taught in the higher institutions that are related to construction profession which includes but not limited to Architecture, Building Technology, Surveying, Quantity Surveying, Urban and Regional Planning, Estate Management, Civil Engineering and Mechanical Engineering among others.

According to Osuizugbo [5], the aim of any undergraduate student in attaining academic excellence begins in the examination preparation and higher institutions with good and competent teachers are often in a better opportunity in helping students to attain this academic excellence. Undergraduate students in construction related disciplines in Bells University of Technology Ota, are the major target of this study. Therefore, an undergraduate student that desired to achieve academic excellence should knowledgeable about the factors that be influence academic performance and make adequate provisions in managing those factors. According to Rai and Kaur [6], the academic performance of students is an area of greatest concern which plays an important role in making students becoming more competent, intelligent and intellectual professionals and even when these professionals move higher in their life, their academic performance still remains the criterion for deciding and measuring their professional skills.

Generally, academic performance is commonly defined in relation to examination performance.

The economic and social growth of a country is directly connected with student academic performance [5]. Academic performance in this research was characterized by performance in course work, examinations and test of undergraduate students. Student's academic performance and graduation rates have been the focus of interest for universities and other higher institutions, thus study of factors influencing the performance undergraduate academic of students turn out to be a topic of rising interest in higher institutions [7]. Academic achievement of student is referred to as the capability of the student to learn, retain facts and being capable to communicate information in written form or orally even in an examination setting [8]. According to Osuizugbo [5], academic performance represents three things; first, the capability to learn and retain facts, that is being capable to study or learn effectively and understand how information fit collectively and form better model of knowledge; second, being capable to think for yourself in relative to information; and thirdly, being capable to communicate your knowledge in written form or verbally.

According to Sibanda, et al. [9], universities need to be convincingly sure that students registered for academic programmes will be able to complete the programme they register and probabilities are high that pass rates would considerably improve if universities admitted only students who have the capability to succeed. Academic performance at graduation level predicts the future performance of the students for higher education [6]. Various ways of measuring students' academic performance include but not limited to continuous assessment (CA), graduation and retention rate, examination and grade point average (GPA) [10]. Examination is a planned activity that aimed to determine the cumulative or wide knowledge in a students' educational growth [10]. Olusola, et al. [10] Further explained that, examinations have been generally used to assess student's performance and to determine the honesty of the certificate or degree awarded by any university. Grade point average is a generally used indicator for evaluating academic performance progression in academic environment [5]. Most offerina construction universities related disciplines set a minimum requirement of GPA that should be obtained to facilitate continuation in higher degree such as M.Sc. and Ph.D. degrees. According to Alos, et al. [11], the measurement of students' past GPA are the

most significant indicators of students' future attainment and this implies that the higher the past GPA records, the better will the student's academic performance in future endeavours be.

According to Alos, et al. [11], the students' academic performance plays a vital role in producing quality graduates who will turn out to be great leaders for the country. A high GPA even as in construction related disciplines may not be the only factor related with later career success. Qualities like social skills. understanding, communication skills, leadership, cooperation. conflict management, team capabilities, and collaboration are as well vital in the construction related disciplines and students who have these qualities are capable to work efficiently and effectively with other industries [5]. Academic attainment is among the key factors considered by companies in employing workers particularly fresh graduates, however, students have to pay more attention in their study in order achieve good grades and equip themselves for future opportunities [11].

There are many factors that can influence undergraduate students from achieving and sustaining a high GPA that reveals their general academic performance throughout their stay in university which results to poor academic performance. High failure rates or poor academic performance may lead to higher cost of education, reduction in number of graduate, intolerable levels of attrition and this equally reduces admission chances for tertiary students requesting for higher degrees [12]. Thus, students' academic performance cannot be over emphasized and has been a topic of interest for instructors.

The interest and performance of undergraduate students have to be elevated. The professional bodies, parents and government have tried to do this. However, past records in the construction related disciplines in Bells University of Technology have shown that manv undergraduate students academic performance is not encouraging. Fajar, et al. [2] Reported that students' academic performance is not good, and there are many factors responsible for that. Bells University of Technology Ota, is not an exception in this regard. The study of Fajar, et al. [2] revealed that factors such as teacher related factor, school related factor, and home related factor affects the academic performance of students. There is still a need for thorough research on factors influencing academic

performance in making sure that the universities produce the best human capital [4]. It is for this reasons that this study aims at exploring factors influencing academic performance of undergraduate students in construction related disciplines in Bells University of Technology Ota with a view to providing understanding on factors influencing their academic performance.

This research is very important because it explores the factors that affect academic performance of undergraduate students thereby increasing the probability of adding to the existing knowledge of factors that influences students' academic performance. It is essential to identify the factors which cause poor academic performance of undergraduate students in construction related disciplines. This will enable an undergraduate student to understand the factors that influences academic performance, attain excellent academic performance and provides basis for developing appropriate management of time and ways by which construction related disciplines can be followed and handled by the student. If these factors are not well-known to the undergraduate students, the problem of poor academic performance may continue. The study is also important because it reveals the impact of graduates in construction related disciplines in the construction sector of This will determine whether the Nigeria. University's aims and objectives of these construction related courses are being achieved.

2. METHODOLOGY

The main objective of this study is to identify and determine the key factor(s) that influences academic performance of undergraduate students in construction related disciplines in the study area. A wide-ranging literature review and survey design was adopted in this research to attain the aforementioned research objective and aim. A cross-sectional research design was specifically used and samples were drawn from the population of the study. A validated structured questionnaire was used to collect data from undergraduate students in construction related disciplines. A literature review was carried out to identify and produce a comprehensive list of 28 factors that influence students' academic performance. The problem factors were grouped into four (4) major groups based on how they affect academic performance (that is, student related factors, home related factors, lecturer related factors and school related factors). These groups were used to draw up a questionnaire to elicit the opinion of the participants on the factors affecting academic performance of undergraduate students in construction related disciplines in Bells University of Technology, Ota, Ogun state Nigeria. Undergraduate students present in the 2018/2019 academic second semester were the participants of the study. The major limitation of this research is that it focused on the construction related disciplines under the college of environmental sciences in Bells University of Technology Ota which includes the following six departments: Architecture, Quantity Surveying, Building Technology, Estate Management, Urban and Regional Planning and Surveying and Geoinformatics. Likert scale was employed to assess the strength of the responses to the factors affecting academic performance with the following scales: strongly disagree = 1, disagree = 2, neutral = 3, agree = 4 and strongly agree = $\frac{1}{2}$ 5. In this study, samples were selected from the six departments in college of environmental sciences in Bells University of Technology. The sample size for the research is computed using equation (1).

$$n = \frac{N}{1 + Ne^2}$$
(1)

Where n = Sample size; N = Total population of the survey participants; e = Probability of error, where the level of error was ±10%. Table 1 shows the population and sample size of the study from each group of respondents.

Department	Population	Sample size		
Architecture	216	68		
Building Technology	17	14		
Quantity Surveying	22	18		
Estate Management	31	24		
Surveying and Geoinformatics	57	36		
Urban and Regional Planning	14	12		
Total	357	172		

Table 1. Sample size of students in each department

Table 1 shows that architecture department has the highest sample size (68) with a population of 216 students at the time of this study. This number of admission may be due to the fact that, in 2019 Nigerian Institute of Architecture (NIA) announces Bells University of Technology Ota to be the best university in Nigeria to study architecture. Whereas, department of urban and regional planning has the least sample size (12) with a population of 14 students at the time of this studv. Out of 172 questionnaires administered, 105 were sufficiently filled and returned, representing 61% of response rate.

2.1 Method of Data Analysis

The data for this research were analysed using frequency, percentage, mean, rank and Kendall's coefficient of concordance test. These tools made it doable for the researchers to make appropriate analysis of the data which were retrieved during the period of the study. Statistical Package for Social Sciences (SPSS) version 23 was used.

3. RESULTS

In this section, the study presents the results and analysis of problem factors that affect academic performance of undergraduate students in the study area. The background information of the participants is also presented.

3.1 Participant's Background Information

Most of the participants were male representing about 64% of the research participants as shown in Table 2. The results in Table 3 show that most of the participants fall into the age bracket of 14 to 20 years (60%). Age bracket of 21 to 25 years represent 37.14% of the participants, whereas the remaining 2.86% of the respondents fall into 26 to 30 years. This shows that, most of the participants are young. And at this age, it is very important to inform the students about factors that are likely to affect their academic performance so as to avoid or manage them effectively. Table 4 revealed that most of the survey participants are from the department of architecture (46 students) representing 43.8% of the survey participants. Department of Urban and Regional Planning recorded the least participants with (5 students) 4.8%. It was revealed in Table 5 that most of the undergraduates students sampled are from 200-Level (year 2) with 36% while the 500-Level (year 5) students were the least represented with 8%. Most of the

participants have the intention to continue to higher degree level represents 83% of the survey participants in Table 6.

Table 2. Respondents' sex

Sex	Frequency	%
Male	67	63.8
Female	38	36.2
Total	105	100

Table 3. Respondents' age bracket

Age bracket	Frequency	%
14 – 20 years	63	60.00
21 – 25 years	39	37.14
26 – 30 years	3	2.86
31 – 35 years	-	-
36 years and above	-	-
Total	105	100

Table 4. Respondents' department

Department	Frequency	%
Architecture	46	43.81
Building Technology	13	12.38
Quantity Surveying	9	8.57
Estate Management	17	16.19
Surveying and	15	14.29
Geoinformatics		
Urban and Regional	5	4.76
Planning		
Total	105	100

Table 5. Class level of study of respondents

Class level of study	Frequency	%
100 Level (year 1) students	21	20
200 Level (year 2) students	38	36
300 Level (year 3) students	26	25
400 Level (year 4) students	12	11
500 Level (year 5) students	8	8
Total	105	100

Table 6. Intention to continue to higher degree level

Intention	Frequency	%
Yes	87	83
No	18	17
Total	105	100

3.2 Factors Influencing Academic Performance

This subsection examines the undergraduate students' perception of the factors influencing

academic performance of construction related disciplines in Bells University of Technology. The problem factors identified from literature and undergraduate confirmed by students in construction related disciplines in Bells University of Technology in Nigeria were ranked according to their mean scores. 28 factors that influence students' academic performance were identified and grouped into four (4) major groups based on how they affect academic performance (that is, student related factors, home related factors, lecturer related factors and school related factors).

The results in Table 7 shows that, among the student related factors affecting academic performance, 'maturity' was ranked the undergraduate students first bv in construction related disciplines in Bells University of Technology as the most factor affecting their academic performance. 'Study strategies' was ranked second and 'interest in a course' third, while 'academic competence' was ranked the least among the student related problem factors.

The results in Table 8 shows that, among the home related factors affecting academic performance, 'religion' was ranked first by the undergraduate students in construction related disciplines in Bells University of Technology as the most factor affecting their academic performance. 'Family background' was ranked second and 'home problems' third, while 'financial problem' was ranked the least among the home related problem factors.

The results in Table 9 shows that, among the lecturer related factors affecting academic performance, 'training and teaching style' was ranked first by the undergraduate students in construction related disciplines in Bells University of Technology as the most factor affecting their academic performance. 'Heavy course workload' was ranked second and 'mastery of the subject matter' third, while 'discussion of topics in a short period of time' was ranked the least among the lecturer related problem factors.

The results in Table 10 shows that, among the school related factors affecting academic performance, 'school time schedule and programmes' was ranked first by the undergraduate students in construction related disciplines in Bells University of Technology as

the most factor affecting their academic performance. 'Infrastructure/ environment for learning' was ranked second and 'availability of library references and text books' third, while 'classroom size' was ranked the least among the school related problem factors.

Major problem factors identified by the survey participants have been revealed and shown in Fig. 1. Results from the empirical analysis revealed that the five main factors influencing academic performance of undergraduate students in construction related disciplines in Bells University of Technology in Nigeria are maturity (mean = 3.96), study strategies (mean = 3.95), interest in course (mean = 3.66), fear and stress (mean = 3.62), and training and teaching style (mean = 3.57) as shown in Fig. 1. However, classroom size (mean = 2.72), academic competence (mean = 2.84) and anxiety (mean = 2.87) among others are the least in ranking with respect to the factors influencing academic performance of undergraduate students in construction related disciplines in Bells University of Technology Nigeria.

3.3 Test of Hypothesis

The study tested the following hypothesis:

Null hypothesis (H₀): There is no significant degree of agreement between the survey participants and factors affecting academic performance.

Alternative hypothesis (H₁): There is a significant degree of agreement between the survey participants and factors affecting academic performance.

A non-parametric statistics test of Kendall's coefficient of concordance was conducted to establish the degree of agreement or disagreement in response of the survey participants concerning the problem factors that influence academic performance. SPSS version 23 was used to run the test. Result obtained was significant as shown in Table 11.

The null hypothesis (H_0) was rejected. Thus, the study concludes that, there is statistically significant degree of agreement between different departments of the participants concerning their responses on factors affecting academic performance.

Problem factors	A	RC	В	DT	Q	TS	E	ST	S	GF	U	RP	Ave	rage
	Mean	Rank												
Anxiety	3.00	11	3.31	8	2.44	10	3.41	8	2.53	11	2.50	9	2.87	10
Academic competence	3.02	10	2.92	11	2.33	11	3.24	10	2.80	10	2.73	8	2.84	11
Time management	3.20	9	4.31	2	2.56	9	3.23	11	3.07	9	3.00	6	3.23	5
Study strategies	3.83	2	4.46	1	4.11	1	3.71	4	3.60	3	4.00	2	3.95	2
Project research deficiencies	3.43	8	3.03	10	2.89	6	3.47	7	3.33	6	3.20	5	3.23	5
Fear and stress	3.78	3	3.23	9	3.44	4	3.76	2	3.73	2	3.80	3	3.62	4
Peer group	3.50	5	3.59	6	2.88	7	3.88	1	3.27	7	2.20	10	3.22	8
Health and well being	3.49	6	3.65	4	2.78	8	3.60	5	3.13	8	2.75	7	3.23	5
Interest in a course	3.70	4	3.92	3	3.56	3	3.59	6	3.60	3	3.60	4	3.66	3
Procrastination	3.46	7	3.54	7	3.39	5	3.30	9	3.53	5	2.10	11	3.22	8
Maturity	3.87	1	3.62	5	4.11	1	3.76	2	4.20	1	4.20	1	3.96	1

Table 7. Student related factors influencing academic performance of undergraduate students

Note: ARC = Architecture students; BDT = Building Technology students; QTS = Quantity Surveying students; EST = Estate Management students; SGF = Surveying and Geoinformatics students; URP = Urban and Regional Planning students

Table 8. Home related factors influencing academic performance of undergraduate students

Problem factors	-	ARC	В	DT	C	NTS	E	ST	S	GF	U	RP	Av	erage
	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank
Family background	3.33	2	3.31	6	3.33	2	3.53	5	3.52	1	2.94	2	3.33	2
Religion	3.37	1	3.61	4	3.41	1	3.59	4	3.51	2	3.34	1	3.47	1
Home problems e.g. break ups of parent	3.17	6	3.85	1	2.86	4	3.68	1	3.20	4	2.70	3	3.24	3
Personal or family crisis	3.27	3	3.67	3	3.00	3	3.63	3	3.24	3	2.55	4	3.23	4
Financial problem	3.20	4	3.60	5	2.53	6	3.66	2	3.13	5	1.80	6	2.99	6
Pampering	3.00	5	3.69	2	2.83	5	3.33	6	3.06	6	2.40	5	3.05	5

Note: ARC = Architecture students; BDT = Building Technology students; QTS = Quantity Surveying students; EST = Estate Management students; SGF = Surveying and Geoinformatics students; URP = Urban and Regional Planning students

Table 9. Lecturer related factors influencing academic performance of undergraduate students

Problem factors	A	RC	В	DT	Q	TS	E	ST	S	GF	UI	RP	Ave	rage
	Mean	Rank												
Training and teaching style	3.42	2	3.53	1	3.89	1	3.20	4	3.80	1	3.60	1	3.57	1
Heavy course workload	3.52	1	3.37	4	3.35	3	3.69	1	3.49	2	3.24	3	3.46	2
Mastery of the subject matter	3.32	3	3.46	2	3.22	4	3.64	2	3.32	3	2.92	4	3.44	3
Discussion of topics in a short period of time	3.26	4	3.38	3	3.21	5	3.47	3	3.17	5	2.65	5	3.19	5
Frequently out/absent from class	3.22	5	3.08	5	3.78	2	3.18	5	3.30	4	3.38	2	3.32	4

Note: ARC = Architecture students; BDT = Building Technology students; QTS = Quantity Surveying students; EST = Estate Management students; SGF = Surveying and Geoinformatics students; URP = Urban and Regional Planning students

Problem factors	A	RC	В	DT	Q	TS	E	ST	S	GF	U	RP	Ave	rage
	Mean	Rank												
Infrastructure/environment for learning	3.30	4	3.51	2	3.51	2	3.35	5	3.40	3	3.40	1	3.41	2
Classroom size	2.80	5	2.82	6	2.75	5	3.15	6	2.70	6	2.12	6	2.72	6
Environmental condition (peace in the locality crisis e.tc)	278	6	2.85	5	3.33	3	3.49	4	3.47	2	2.85	4	3.13	5
Classrooms locations	3.65	2	3.24	4	2.67	6	3.65	3	3.29	4	3.18	2	3.28	4
Availability of library references and text books	3.48	3	4.31	1	2.80	4	3.82	1	3.03	5	2.80	5	3.37	3
School time schedule and programmes	3.76	1	3.46	3	3.54	1	3.74	2	3.73	1	2.97	3	3.53	1

Table 10. School related factors influencing academic performance of undergraduate students

Note: ARC = Architecture students; BDT = Building Technology students; QTS = Quantity Surveying students; EST = Estate Management students; SGF = Surveying and Geoinformatics students; URP = Urban and Regional Planning students

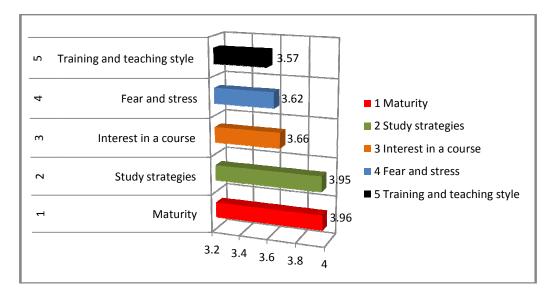


Fig. 1. Top five ranked problem factors affecting academic performance of undergraduate students in construction related disciplines in Bells University of Technology, Nigeria

Table 1	11.	Test	statistics	s for	Kendall's
		С	oefficien	t	

Number	105
Kendall's	0.036
Chi-Square	100.750
Degrees of Freedom	27
Significance Level	0.000

4. DISCUSSION OF FINDINGS

An examination of Tables 7.8,9 and 10 shows problem factors of academic that the performance were grouped into four, namely; student related factors, home related factors, lecturer related factors and school related factors. Secondly, the Fig. 1 shows that the top five factors affecting academic performance of undergraduate students in construction related disciplines in Bells University of Technology are: (i) maturity, (ii) study strategies, (iii) interest in course, (iv) fear and stress and (v) training and teaching style. To build on the findings and to utilise the literature effectively, the top five factors performance academic affecting of undergraduate students in construction related disciplines will be discussed individually rather than the four above-mentioned groups.

4.1 Maturity

The problem factor "maturity", was ranked first overall by the survey participants (mean = 3.96). This shows that, maturity is a key factor that

influences the academic performance of undergraduate students' in construction related disciplines in Bells University of Technology, Ota, Nigeria. A close examination of Table 3 shows that most of the survey participants were young with age bracket between 14 to 20 years. Is likely that most of the undergraduate students that participated in this survey jump classes during their primary and secondary schools. The findings of Momanyi, et al. [13] are in support that students' age has an important impact on the student's academic performance. Hence students should be allowed to pass through all the necessary level classes during primary and secondary schools so as to be equipped for higher education.

4.2 Study Strategies

The problem factor "study strategies", was ranked second overall by the survey participants (mean = 3.95). This shows that, study strategies is a factor that influences the academic performance of undergraduate students' in construction related disciplines in Bells University of Technology, Ota, Nigeria. To help improve students' academic performance, lecturers in the Universities should encourage and advise undergraduate students on how to study on their own and in group. This will certainly improve their academic performance. This finding is in support of the following researchers; [14-18], that study strategies influences the academic performance of students.

4.3 Interest in Course

The problem factor "interest in course", was ranked third overall by the survey participants (mean = 3.66). This shows that, interest in course is a factor that influences the academic performance of undergraduate students' in construction related disciplines in Bells University of Technology, Ota, Nigeria. It is important for parents and guidance to know the core area of interest of study of their beloved once rather than forcing them to do a course they do not have interest on. In other words, students' academic performances are improved when they have interest in courses they are studying. According to Kpolovie, et al. [8], attitude to school and development of students' interest in learning could contribute in improving their academic performance.

4.4 Fear and Stress

The problem factor "fear and stress", was ranked fourth overall by the survey participants (mean = 3.62). This shows that, fear and stress is a factor that influences the academic performance of undergraduate students' in construction related disciplines in Bells University of Technology, Ota, Nigeria. The study of Khan, et al. [19] found that academic stress is higher in younger students than older students. And it was revealed in this present study that most of the respondents are young. Therefore, it is important that the University put in place fear and stress management seminar and workshop for students. According to Aafreen, et al. [20], too stress can expose students much to psychological problems such as depression and anxiety resulting in a decreased performance in the academic activities and can affect both the mental and physical health of students. Kalli an Shehu [21] Noted that, effect of stress on students is negative. Several studies have divulged that stress influence academic performance of students [19,21-25].

4.5 Training and Teaching Style

The problem factor "training and teaching style", was ranked fifth overall by the survey participants (mean = 3.57). This shows that, training and teaching style is a factor that influences the academic performance of undergraduate students' in construction related disciplines in Bells University of Technology, Ota, Nigeria. It is important that lecturers in construction related disciplines in Bells University of Technology Ota

review their training and teaching style in a way student would understand the lectures very well. The study of Ling, et al. [26] found that sequential and visual learning has an important effect on academic performance. The study of Omran an Saleh [25] revealed that teaching style plays a significant role on the students' academic performance at College of Business, University Utara Malaysia. The study of Jones, et al. [27] shows that poor standards of teaching and lack of teaching resources affects academic performance of students. The studies of several authors [7,15,28,29] also supported that training and teaching style influences academic performance of students.

5. CONCLUSION AND RECOMMENDA-TION

There are many factors that affect academic performance of students. This study focused on problem factors which were grouped into student related factors, home related factors, lecturer related factors and school related factors that affect the undergraduate student's academic performance. In other to improve the academic performance of students, better understanding of factors affecting academic performance is of great important. This study set out to explore and investigate problem factors affecting the academic performance of undergraduate students in construction related disciplines in Bells University of Technology Ota with a view to providing understanding on the major problem factors affecting their academic performance. Based on the findings and discussion, it can be concluded that this investigation has indeed divulged data-based evidence that student related factors such as maturity, study strategies, interest in course, fear and stress and lecturer related factor such as training and teaching style to be top five factors affecting academic performance of undergraduate students in construction related disciplines in Bells University of Technology Ota, Nigeria. Secondly, data obtained in this study revealed that, there is statistically significant degree of agreement between different departments of the participants concerning their responses to factors that influence academic performance in construction related disciplines in Bells University of Technology, Ota, Nigeria.

Based on the findings from this study, the following recommendations were made: (i) skipping of classes by students during early education should be discouraged so as to allow

students attain maturity level for higher education (ii) students should be allowed to study courses where they have interest on and not to be forced to a particular course in university (iii) universities should organize fear and stress management seminars and workshops for undergraduate students in addition to guidance and counseling sessions with a view to addressing psychological issues that may hinder their academic performance (iv) lecturers should ensure that they adopt a friendly teaching style so as to boost students interest in their desired field of study in the university and topics thought by lecturers should be taught extensively with adequacy in order to facilitate proper understanding among undergraduate students.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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> Peer-review history: The peer review history for this paper can be accessed here: http://www.sdiarticle4.com/review-history/54369