

Organizational Commitment and Academic Satisfaction as Predictors of Academic Performance of Mechanical Technology Education Students and Lecturers in South-Eastern Universities, Nigeria

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Abstract

The study was carried out to determine organizational commitment and students' academic satisfaction as predictors of academic performance of mechanical technology education students and lecturers (MTEs) in Southeast Nigeria. Three research questions were answered while three null hypotheses formulated were tested at .05 level of significance. The study adopted correlational research design. The population for the study was made up of 81 mechanical technology education students (MTEs) and 34 mechanical technology education lecturers (MTEs) from five universities in Southeast Nigeria. The Organizational Commitment Scale and the Academic Major Satisfaction Scale were adapted and administered to the respondents, while academic performance of the students was measured using the average scores from two mechanical technology education courses. The instruments for data collection were face validated by three experts in the Department of Industrial Technical Education, University of Nigeria, Nsukka. Cronbach alpha reliability technique was used to determine the internal consistency of the instruments. A reliability coefficient value of 0.90 was obtained for Organizational Commitment Scale and 0.92 for Academic Major Satisfaction Scale. A reliability coefficient of 0.94 was obtained as the overall reliability coefficient value. The statistics used to analyze the data for the study were Pearson Correlations and Regression analyses. The findings of the study revealed that: (i) a moderate and positive correlation exists between organizational commitment of lecturers and academic performance of MTEs (ii) organizational commitment of lecturers was a significant predictor of academic performance of students, (iii) students' academic satisfaction was also a significant predictor of their academic performance. It was then recommended among others that Universities should try to improve the organizational commitment of lecturers through rewards and benefit schemes. Workshops and intervention programme should be organized for MTEs by the university administration or department on how they can improve their performance and satisfaction.

Keywords: Organizational commitment; Academic satisfaction, Academic performance; Mechanical technology

Introduction

At the University level, technical and vocational education is made up of different programmes like Agriculture education,

Business education, Computer education and Industrial technical education. These programmes have various areas of specialization, students in Industrial technical

education for example specializes in Building technology, Woodwork technology, Electrical/electronic technology and Metalwork technology, Automobile technology among others. However, the area of Industrial technical education that this study focused on is mechanical technology education. Mechanical technology in this study is the combination of Metalwork technology and Automobile technology education. Mechanical technology comprises of both theory and practical that leads to the production of goods and services by the use of tools, equipment and metal materials (National Board for Technical Education, 2004). At the University level, mechanical technology includes components such as metalwork and automobile technology. Students who are studying mechanical technology are called mechanical technology undergraduates. Mechanical technology programme helps to create jobs and reduce unemployment, underdevelopment and misemployment, it gives adequate training and education to the youths and adults and enables them to acquire skills necessary for success in a chosen career (Oguejiofor & Ezeama, 2019). Mechanical technology education is designed to equip students with practical and entrepreneurship skills which will enable them, go into self-employment, wealth and job creations. In the context of this study mechanical technology education is a programme that provides undergraduates with skills to service and maintain automobiles, it also equips them with skills needed in production of metalwork products. The students of mechanical technology education are expected to gain employment or go into successful self-employment on graduation because they have passed through formal education and have acquired theoretical knowledge and skills needed for the job. To achieve this, the students of mechanical technology must have good academic performance in the programme.

The aim of every student in the University is to have a good academic performance and acquire relevant skills which will assist them to be gainfully employed and help them contribute positively to the society. According to Ganyaupfu (2013), academic performance is the extent to which a student has achieved their short or long-term educational goals. This performance can be measured by many tools such as Cumulative Grade Point Average (CGPA) and skills possessed (Omran and Saleh, 2019). Students' academic performance can be explained in terms of grades, obtained from tests or examinations on courses taken. It is the learning outcomes of students which include knowledge and skills acquired in a given field of study such as mechanical technology education (Maganga, 2016). Academic performance according to Okoro (2013) is the scholastic standing of a student at a given moment. Iteghie (2014) also described academic performance in the Nigerian context as how much students at specific level of school have acquired in knowledge and skill defined for that level within the curriculum. The academic achievement of undergraduate students is an important aspect of tertiary education. Research has shown that poor academic achievement of students in Universities in Nigeria is a serious problem which needs to be looked into because it has negative effects on students and the nation as a whole (Olatunji, Aghimien, Oke & Olushola, 2016). However, research conducted by Nghambia (2014) stated that poor academic performance of students can be related with other concepts which is different from teaching methods, it observed that students' academic performance is associated with poor working environment for teachers, poor supply of teaching and learning materials. Research carried out by Omran, Idris, and Hussin, (2015) observed that students' academic performance is affected by numerous factors including gender, age, teaching faculty, students schooling,

father/guardian, social-economic status, residential area of students, medium of instructions in schools, tuition trend, daily study hour and accommodation. These studies have shown that there are other variables apart from teacher related variables like teaching methods that can affect the academic performance of students, it is possible that teaching methods are not the only cause of poor academic performance, therefore it is important to explore the influence of students' variables like student academic satisfaction on mechanical technology students' academic performance.

The role of academic satisfaction in education has been a source of research for decades. Academic satisfaction has taken a place of priority in education (Urquijo, & Extremera, 2017). Student academic satisfaction according to Naeem, Aparicio-Ting, and Dyjur (2020) can be defined as the perception of contentment with school experiences, and the extent to which students feel their expectations for their learning are met while at an academic institution. Al-Sheeb, Hamouda and Abdella (2018) defined student academic satisfaction as student happiness or contentment with their overall college experience. Furthermore, student satisfaction can be defined as a function of relative level of experiences and perceived performance about educational service during the study period, (Mukhtar, Anwar, Ahmed, and Baloch, 2015). Student academic satisfaction is related to students' experiences during the course, constituting an important factor in their permanence and in creating a positive image of the institution. Students' academic satisfaction has been observed to be related to academic performance. However, it was observed that some students in mechanical technology education might be experiencing low academic satisfaction, this might be caused by various reasons such as the relationship with lecturers, quality of teaching, management of the university and its

facilities and resources and the organizational commitment of lecturers.

Organizational commitment according to Ebuenga-Amora (2016), is a working attitude of employees who have a sense of identification to accomplish organizational goals and wish to maintain good relationship with members within the organization. Scales (2018) defined organizational commitment as an individual's psychological attachment to the organization. Organizational commitment is important to an organization's success. Organizational commitment may influence whether an employee leaves the organization or works toward the vision, mission, and goals of the organization (Phillips, Phillips, and Zuniga, 2013). In education, organizational commitment is important for enhancing quality of education, it provides a suitable background and is a vital factor in schools. Mayer and Allen (1997) developed a model for organizational commitment that consists of three dimensions: affective, continuance, and normative organizational commitment. These three dimensions were adopted in this study.

A number of studies have examined the causal relations between academic satisfaction and academic performance (Naeem, Aparicio-Ting, & Dyjur, 2020), as well as student engagement and academic performance (Abid and Akhtar, 2020). However, to the best of the researchers' knowledge, no research has been carried out on the combined relationship between organizational commitment, academic satisfaction and academic performance of mechanical technology students. Hence this study was aimed at providing information on the possible correlations between the variables.

Statement of the Problem

Mechanical technology education programme in Nigeria universities is aimed at equipping individuals with knowledge and practical skills with a view to empowering the individual for self-employment and nation building, students of mechanical technology

ideally are expected to have good academic performance in their programme of study. However, the mechanical technology education programme does not seem to be adequately achieving this objective, as a major problem affecting the programme is the poor performance of students studying mechanical technology education. Many students perceive mechanical technology to be difficult and complicated due to the complex nature of the components embedded in the programme. Some students underachieve academically for various reasons, which some of them are student related variables. Some of these students related variables include students' academic satisfaction. It is possible that the low performance that is been experienced by mechanical technology education students is as a result of these variables, if the student engagement is low, it is likely that their academic satisfaction and their performance will also be low, in the same context low academic satisfaction can also result in poor academic performance, equally the organizational commitment of lecturers can also influence their academic performance. However, little is known about the correlation between organizational commitment and academic satisfaction and their academic experience. Therefore, the problem of this study posed as a question is: organizational commitment and students' academic satisfaction as predictors of performance of mechanical technology education students in south-east Nigeria.

Purpose of the Study

The general purpose of this study was to investigate the organizational commitment of lecturers and students' academic satisfaction as predictors of performance of mechanical technology education students in south-eastern Universities in Nigeria. Specifically the study sought to determine the:

1. relationship between the organizational commitment of lecturers and academic

satisfaction of mechanical technology education students in south-eastern universities in Nigeria.

2. relationship between the organizational commitment of lecturers and academic performance of mechanical technology education students in south-eastern universities in Nigeria.
3. relationship between academic satisfaction and academic performance of mechanical technology education students in south-eastern universities in Nigeria.

Research Questions

The following research questions guided the study:

1. What is the relationship between the organizational commitment of lecturers and academic satisfaction of mechanical technology education students in south-eastern universities in Nigeria?
2. What is the relationship between the organizational commitment of lecturers and academic performance of mechanical technology education students in south-eastern universities in Nigeria?
3. What is the relationship between academic satisfaction and academic performance of mechanical technology education students in south-eastern universities in Nigeria?

Hypotheses

The following null hypotheses were tested at 0.05 level of significance:

1. Organizational commitment of lecturers is not a significant predictor of academic satisfaction of mechanical technology education students in south-eastern universities in Nigeria.
2. Organizational commitment of lecturers is not a significant predictor of academic performance of mechanical technology education

students in south-eastern universities in Nigeria.

3. Academic satisfaction is not a significant predictor of academic performance of mechanical technology education students in south-eastern universities in Nigeria.

Methodology

The study adopted a correlational design. A correlational design seeks to establish the degree of relationship that exists between two or more variables. The study was carried out in the south eastern Universities, Nigeria. The States that make up the south eastern Nigeria are: Anambra, Ebonyi, Enugu, Imo and Abia. There are five Federal Universities, six State Universities and 15 Private Universities in the South-east of Nigeria though only five of them offer mechanical technology education, they are; University of Nigeria, Nsukka, Enugu State University of Science and Technology, Ebonyi State University, Nnamdi Azikwe University, Awka and Michael Okpara University of Agriculture, Umudike.

The population for the study was 81 mechanical technology education students, which are made of 300 level and 400 level mechanical technology education students. The population also contains 34 mechanical technology education lecturers from five universities in South-East Nigeria. This comprised of all students in 2021/2022 offering mechanical technology education. Since the numbers of students and lecturers were not too large, the entire population was used because it was manageable for the study. Two structured questionnaire titled Organizational Commitment Scale and The Academic Major Satisfaction Scale were adapted by the researchers for the study. The instrument was developed by Allen and Meyer (1996). The instrument had a reliability coefficient value of 0.94. The questionnaire was divided into two sections, Sections A and B. Section A contained items that seek

demographic information from the students and lecturers. Section B consisted two clusters; cluster A has 18 items that sought to assess lecturer's level of organizational commitment in mechanical technology education, cluster B has 6 items that sought to assess student's level of academic major satisfaction in mechanical technology education. The items were based on a five-point Likert scale of Strongly Agree (SA), Agree (A), Undecided (U), Disagree (D), and Strongly Disagree (SD) with corresponding values of 5, 4, 3, 2, and 1 respectively. The academic performance of the students was measured using the average scores from two mechanical technology education courses, which are general studies course for all 300 and 400 Level students in mechanical education technology.

The instruments were validated by three experts in the Department of Industrial Technical Education, University of Nigeria, Nsukka. The Expert made some inputs that were integrated to improve the final copy of the instrument. The reliability of the instruments was determined using Cronbach Alpha reliability method. The instruments were trial tested on 15 mechanical education technology students from the University of Benin. The data was collected by administering the questionnaire directly to the respondents by the researcher and two research assistants. Pearson product moment correlation method was used to answer the research questions while, linear regression was used to test the hypothesis at a 0.05 level of significance. For the test of significance, the probability (p) value was used in comparison with the alpha value of 0.05 and at other relevant levels. If any item has a probability value greater than 0.05 ($P > 0.05$), it will be concluded that there is no significant difference.

Results

Research Question 1

What is the relationship between the organizational commitment of lecturers and academic satisfaction of mechanical technology education students in south-eastern universities in Nigeria?

Table 1: Correlation between organizational commitment and academic satisfaction

Variables	AC	CC	NC	OC	AS
Affective Commitment (AC)	1				
Continuance Commitment (CC)	.262	1			
Normative Commitment (NC)	.507**	.250	1		
Overall Organizational Commitment (OC)	.718**	.705**	.808**	1	
Academic Satisfaction (AS)	-.177	-.300	-.252	.510**	1

The result in Table 1 shows the relationship between organizational commitment and academic satisfaction. The table revealed a positive correlation between organizational commitment of lecturers and academic satisfaction of mechanical technology education students in south-eastern universities in Nigeria, however the value (.510) shows that the correlation between organizational commitment and academic

satisfaction of mechanical technology education students is moderate. The positive correlation depicts the direction of the relationship.

Research Question 2

What is the relationship between the organizational commitment of lecturers and academic performance of mechanical technology education students in south-eastern universities in Nigeria?

Table 2: Correlation between organizational commitment and academic performance

Variables	AC	CC	NC	OC	AP
Affective Commitment (AC)	1				
Continuance Commitment (CC)	.851**	1			
Normative Commitment (NC)	.765**	.702**	1		
Overall Organizational Commitment (OC)	-.174	-.068	-.040	1	
Academic Performance (AP)	-.278*	-.196	-.306**	.687**	1

The result in Table 2 shows the relationship between organizational commitment and academic performance. The table revealed a positive correlation between organizational commitment of lecturers and academic performance of mechanical technology education students in south-eastern universities in Nigeria, however the value (.687) shows that the correlation between organizational commitment and academic

performance of mechanical technology education students is strong. The positive correlation depicts the direction of the relationship, this implies that the variables move in the same direction to each other.

Research Question 3

What is the relationship between academic satisfaction and academic performance of mechanical technology education students in south-eastern universities in Nigeria?

Table 3: Correlation between academic satisfaction and academic performance

Variables	AS	AP
1. Academic Satisfaction (AS)	1	
2. Academic Performance (AP)	.543**	1

The result in Table 3 shows the relationship between students' academic satisfaction and academic performance. The table revealed a positive correlation between academic satisfaction and academic performance of mechanical technology education students in south-eastern universities in Nigeria, however the value (.543) shows that the correlation between academic satisfaction and academic performance of mechanical technology

education students is moderate. The positive correlation depicts the direction of the relationship, this implies that the variables move in the same direction to each other.

Hypotheses 1

Organizational commitment of lecturers is not a significant predictor of academic satisfaction of mechanical technology education students in south-eastern universities in Nigeria.

Table 4: Model Summary of Regression Analysis between organizational commitment and academic satisfaction

Unstandardized Coefficients		Standardized Coefficients	T	Sig.	R	R ²
B	Std. Error	Beta				
-1.861	5.521		-.337		.510	.260
.575	.109	.510	5.267	.000		

Table 4 highlights the model summary of Regression analysis between organizational commitment of lecturers and academic satisfaction of mechanical technology education students. The value of R^2 is .260 which means that 26% variation in the academic satisfaction of mechanical technology education students is explained by organizational commitment of lecturers. The Table also provides details of model's parameters (Beta values) and significance of these values. The unstandardized Beta coefficient gives measures of the contribution of each variable to the model. It is clear from the table that the value of unstandardized Beta is .575 which represents the gradient of regression line. Therefore, if the value of predictor variable (organizational

commitment) is increased by one unit, there is .575 unit increase in the outcome variable (academic satisfaction). This impact is statistically significant because sig. value $p < .000$ which is less than .05 (95% confidence interval). Therefore, the null hypothesis is rejected. It may be concluded that organizational commitment of lecturers is a significant predictor of academic satisfaction of mechanical technology education students in south-eastern universities in Nigeria.

Hypotheses 2

Organizational commitment of lecturers is not a significant predictor of academic performance of mechanical technology education students in south-eastern universities in Nigeria.

Table 5: Model Summary of Regression Analysis between organizational commitment and academic performance

Unstandardized Coefficients		Standardized Coefficients	T	Sig.	R	R ²
B	Std. Error	Beta				
12.401	4.546		2.728	.008	.687	.471
.754	.090	.687	8.395	.000		

Table 5 highlights the model summary of Regression analysis between organizational commitment of lecturers and academic performance of mechanical technology education students. The value of R² is .471 which means that 47.1% variation in the academic performance of mechanical technology education students is explained by organizational commitment of lecturers. The Table also provides details of model's parameters (Beta values) and significance of these values. The unstandardized Beta coefficient gives measures of the contribution of each variable to the model. It is clear from the table that the value of unstandardized Beta is .754 which represents the gradient of regression line. Therefore, if the value of

predictor variable (organizational commitment) is increased by one unit, there is .754 unit increase in the outcome variable (academic performance). This impact is statistically significant because sig. value $p < .000$ which is less than .05 (95% confidence interval). Therefore, the null hypothesis is rejected. It may be concluded that organizational commitment of lecturers is a significant predictor of academic performance of mechanical technology education students in south-eastern universities in Nigeria.

Hypotheses 3

Academic satisfaction is not a significant predictor of academic performance of mechanical technology education students in south-eastern universities in Nigeria.

Table 6: Model Summary of Regression Analysis between academic satisfaction and academic performance

Unstandardized Coefficients		Standardized Coefficients	T	Sig.	R	R ²
B	Std. Error	Beta				
35.534	2.720		13.063	.000	.543	.295
.530	.092	.543	5.753	.000		

Table 6 highlights the model summary of Regression analysis between academic satisfaction and academic performance of mechanical technology education students. The value of R² is .295 which means that 29.5% variation in the academic performance of mechanical technology education students is explained by academic satisfaction. The Table also provides details of model's parameters (Beta values) and significance of these values. The unstandardized Beta coefficient gives measures of the contribution of each variable to the model. It is clear from the table that the value of unstandardized Beta

is .530 which represents the gradient of regression line. Therefore, if the value of predictor variable (academic satisfaction) is increased by one unit, there is .530 unit increase in the outcome variable (academic performance). This impact is statistically significant because sig. value $p < .000$ which is less than .05 (95% confidence interval). Therefore, the null hypothesis is rejected. It may be concluded that academic satisfaction is a significant predictor of academic performance of mechanical technology education students in south-eastern universities in Nigeria.

Discussion

The impact of lecturers on students' academic satisfaction and performance cannot be undermined, therefore any variables that relate to lecturers such as the organizational commitment of lecturers is very important for their academic satisfaction and performance. The findings of this study revealed that a relationship exists between organizational commitment and academic satisfaction, also the findings of this study show the importance of lecturers' organizational commitment on the academic performance of students. This study concurs with Haftkhavania, Faghiharamb, Araghieh, (2012) who conducted a study on organizational Commitment and Academic Performance, they observed a positive relation between organizational commitment, and educational performance for students. The study is also in support of Cichy, Cha, Kim (2009) and Nazem and Shad (2008), they observed that when teachers feel committed to the school and their staying at school is some kind of moral thing and a must to them, their normative commitment will become strong and this kind of commitment will have a direct and positive effect on the students mean of scores and their academic performance. The study also concurs with Otara and Omolo (2020), they stated that organization commitment contributed differently to predicting students' academic performance. Ebuenga-Amora (2016) who conducted a study on the interrelationship of teachers' organizational commitment, teaching efficacy belief, performance level and their

pupils' attitudes towards Mathematics, discovered that organizational commitment relates to pupils' attitudes and performance in Mathematics. Thus, this study has shown that organizational commitment variable is important because it influences students' academic satisfaction and performance. However, it was observed by the researcher that there is a paucity of literature regarding organizational commitment of teachers in relation to students' academic performance.

Conclusion

Based on the findings of this study, it could be concluded that organizational commitment and students' academic satisfaction are related performance. This would, no doubt, result to positive academic performance. It was noted that there was a positive relationship between organizational commitment and academic satisfaction on academic performance of mechanical technology education students in south-eastern universities in Nigeria. A good academic performance by mechanical technology education undergraduates is very important to produce mechanical technology education graduates who are self-reliant, but literature and observation revealed that poor organizational commitment and academic satisfaction in mechanical technology education students may indeed lead to negative academic performance. This study was then carried out in order to generate data to justify acclaimed situation among mechanical technology education students.

REFERENCES

- Abid, N. & Akhtar, M. (2020). Relationship between Academic Engagement and Academic Achievement: An Empirical Evidence of Secondary School Students. *Journal of Educational Research*, 23 (1) 48-61
- Cichy, R. F., Cha, J. & Kim, S. (2009). The relationship between organizational commitment and contextual performance among private club leaders. *International Journal of Hospitality Management*, 28(1), 53-62
- Ebuenga-Amora, M. (2016). Teachers' Organizational Commitment, Teaching Efficacy Belief and Level of Performance In Relation To Their Pupils' attitudes towards Mathematics.

- Second Asia Pacific Conference on Advanced Research (APCAR, Melbourne, February, 2016)
- Ganyaupfu, E. M. (2013). Factors Influencing Academic Achievement in Quantitative Courses among Business Students of Private Higher Education Institutions. *Journal of Education and Practice*, 4(15), 57-66.
- Haftkhavania, Z. G., Faghiharamb, B., & Araghieh, A. (2012). Organizational Commitment and Academic Performance (Case study: students at secondary schools for girls). *Procedia - Social and Behavioral Sciences* 69 (2012) 1529 – 1538.
- Iteghie, R. (2014). *Self-instruction and multi-modal therapies in enhancement of self-esteem and academic achievement of academically under achieving students in senior secondary schools in Ibadan*. (Unpublished doctoral dissertation). University of Ibadan, Nigeria.
- Maganga, J. H. (2016). *Factors Affecting Students' Academic Performance: A Case Study of Puplic Secondary Schools in Ilala District, Dar-Es-Salaam, Tanzania*, (Unpublished Master's Thesis), The Open University Of Tanzania.
- Meyer J. P., & Allen, N. J. (1997). *Commitment in the workplace: Theory, research, and application*. Thousand Oaks, CA: Sage.
- Naeem, I., Aparicio-Ting, F.&Dyjur, P. (2020). Student Stress and Academic Satisfaction: A Mixed Methods Exploratory Study. *International Journal of Innovative Business Strategies*, 6(1), 388-395.
- Naeem, I., Aparicio-Ting, F.&Dyjur, P. (2020). Student Stress and Academic Satisfaction: A Mixed Methods Exploratory Study. *International Journal of Innovative Business Strategies*, 6(1), 388-395.
- National Board for Technical Education (2004). *National technical certificate examination (craft level) syllabus for engineering trades based on the NBTE curriculum*, Kaduna: NBTE.
- Nghambia, G. H. (2014). *Factors Contributing To Poor Academic Performance In Certificate Of Secondary Education Examination For Community Secondary Schools In Urambo District, Tabora, Tanzania*. (Unpublished Master dissertation). University of Tanzania.
- Oguejiofor, V. I., & Ezeama, A. O. (2019). Potentials Possessed by Mechanical Technology Education Final Year Undergraduate Students of Universities for Self-Employment. *Journal of Education and Practice* 10 (36) 73-78.
- Okoro, R.C. (2013). *Effect of project-based learning on junior secondary school students' academic achievement, interest and retention in home economics*. (Unpublished M.Ed Thesis), University of Nigeria, Nsukka.
- Omran, A. & Saleh, M.S. (2019). Factors affecting the academic performance of students at academic institution. *IJRRAS* 40 (1) 1-8.
- Omran, A., Idris, S., & Hussin, A. (2015). Determining the factors affecting the academic performance of international students enrolled within project management programs in the malaysian public universities. *International Journal of Academic Research*, 7 (3) 539-543.
- Phillips, P. P., Phillips, J. J., & Zuniga, L. (2013). *Measuring the success of organization development: A step-by-step guide for measuring impact and*

- calculating ROI*. Alexandria, VA: ASTD.
- Scales, A. (2018). *The Effects of Organizational Commitment and Harmonious Passion on Voluntary Turnover among Social Workers: A Mixed Methods Study*. (Unpublished Doctoral dissertation). University of Southern Mississippi.
- Urquijo, I. & Extremera, N. (2017). Academic satisfaction at university: the relationship between emotional intelligence and academic engagement. *Electronic Journal of Research in Educational Psychology*, 15(3), 553-573.