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ASSESSING THE UNDERGRADUATE STUDENT ENGAGEMENT, CAREER CHOICE, AND ACHIEVEMENT IN UNIVERSITY EDUCATION

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Abstract

This study investigates the correlations among academic performance, career choices, and undergraduate engagement at the Faculty of Education, University of Ibadan, Nigeria. A descriptive survey design was used in the study. About 287 second-year undergraduates were selected at random. The data were analysed statistically using a two-way ANOVA and a Pearson product-moment correlation coefficient at a significance level of 0.05. The findings showed a statistically significant (r = 0.57) moderately positive correlation between students' academic engagement and their choice of profession. However, there was a weak positive correlation (r = 0.11) between academic achievement and career choice and a non-significant, weak negative correlation (r = -0.04) between academic engagement and academic achievement. Career choice and level of engagement enhance students' academic performance. Prospective students and other educational stakeholders should carefully consider these factors to achieve a successful university education.

Keywords: Undergraduates' academic achievement in CEF 102, Career Choice, Student Engagement, University education

1. Introduction

Academic pursuits, administrative tasks, and interpersonal relationships are few out of the activities that make up the university education experiences. The main contributor to these educational activity components is the student. Students can continue their education at a university after passing various assessments in basic and secondary school. Getting into a university is one of the key goals for young people today. Incoming university students' foremost objective is to successfully finish their coursework and realise their career goals while remaining initiative-taking and satisfied in their chosen field. The level of professional competence and enthusiasm for learning among students is intricately linked to their capacity to fulfil their expectations as well as desired ambition. Academic engagement and career adaptability are crucial components of higher education (Oliveira & Marques, 2024). Anyone who wishes to go to higher institution should stay motivated and have high optimisms for future careers. This kind of attitude will also help them reach desired aims. The Nigerian government has put strict rules in place, but it seems that even with these rules and plans to keep educational standards high, students who have passed through the examinations barrier still do not meet expectations. As the performance of students is still worrisome and this queries how they get into university. It may seem odd, but even though more people than ever want to go to university in Nigeria, the quality of the students and graduates produced by Nigerian universities has dropped significantly (Okocha et al. 2025).

Choosing a career is an important part of moving from junior level of education to higher level or a job. The last few years of university are particularly important because they provide young people with the chance to investigate different job opportunities, weigh their options, and finally decide about their future (Savickas and Porfeli, 2012). An individual's preferences regarding their selected profession are pivotal during career development. Furthermore, a person's job goals, attitude, willpower, and mental response to the future are all critical. Job decisiveness is how sure and pleased a person is with the career path they have chosen (Miller, 2011). The degree of interest students possess in selecting a vocation is a significant factor influencing the emotional and attitudinal dimensions of a child's life. When students are interested in a career, they pay more attention to their schoolwork and other things they must do. Interest is a motivating factor and an emotionally driven trait that

influences students' cognitive abilities in addressing educational tasks. Okoro (2011) says that what students are interested in can change how they see the value of an activity. The author contends that interest stimulates students to engage in critical thinking and maintain their efforts. A high level of interest has a positive effect on students' success, and in turn, strong success can lead to interest, which could affect their career choices. Korkmaz (2015) asserts that both extrinsic and intrinsic factors, individually or collectively, significantly affect individuals' career decisions.

On the other hand, low levels of interest make it harder to learn and cause deficient performance. If a student is not interested in a subject, he/she might not engage and pass well in the subject. Usually, students can switch from studying science to taking art. It also helps students learn more quickly and easily, which could lead to better grades and more achievements. Many things can affect a student's choice of school, such as the desire to learn the skills and knowledge they need to obtain a job and be a successful citizen. Schools assign young people the job of preparing them to be useful members of society who can make important contributions for several reasons. Schools must effectively engage students in their academic and personal development to attain this goal.

Engagement is a measure of how focused and involved students are in learning activities, such as going to class, doing their assigment, and paying attention to what their professors say (Hu & Ching, 2003). Academic engagement levels serve as a dependable metric for assessing student learning and personal development (Carini, Kuh, and Klein, 2004). Likewise, an empirical study by Wang and Eccles (2012a) has investigated the patterns of behavioural, emotional, and cognitive dimensions of engagement, along with their correlations with students' academic achievement. It has long been known that student engagement is a key factor in determining how well students do in school and how long they stay there. Engaged students exhibit increased motivation, improved self-regulation, and enhanced learning effectiveness. Recent empirical evidence further substantiates this relationship. Tannoubi et al. (2023) discovered that academic engagement and students' study processes were significant predictors of academic achievement among university students, underscoring engagement as a critical factor influencing academic performance.

Academic engagement is the level of commitment and participation that students show in their learning, both in the classroom and in other school activities. These qualities by looking at how resolute and invested students are in their education. Different studies, like the ones done by Ahlfeldt, Mehta, and Sellnow (2007) and Alrashidi, Phan, and Ngu (2016), have investigated students' academic engagement. These studies found that students were more engaged in higher-level and smaller class sizes.

Reeve and Lee (2014) executed a study involving 313 secondary school students. During the semester, the researchers gathered information three times and discovered that variations in students' academic engagement, sometimes encompassing shifts in their emotional, behavioural, cognitive, and agentic participation and served as a reliable predictor of their performance with evidenced by a correlation coefficient of .22 and a p-value of .05. Teachers need to know how engaged their students are in their schoolwork so they can help them with any problems they might be having (Olson and Peterson, 2015). Fredricks, Blumenfeld, and Paris (2004) found that a student's consistent participation in the learning process is a strong predictor of academic success at all levels of education. Therefore, it is vital to encourage students to be more involved in the learning process at all stages. Sengsouliya and his colleagues (2015) stressed the need to address low motivation and engagement, as these elements present numerous challenges for educators. Jennings and Angelo (2006) contend that attention levels and academic engagement are both variable and subject to modification. Thus, educators must tailor their instructional methods to align with the distinct needs of their students. Nonetheless, it is prudent to evaluate academic engagement by utilising multiple assessment instruments (Fredricks, Blumenfeld, & Paris, 2004).

Academic achievement means that a student can understand and remember information and communicate what they know well, whether it is in writing or speaking, even during a test. Okocha et al. (2025) reported that academic achievement is a frequently employed term in higher education research and evaluation which serves as a metric for assessing students' learning outcomes across cognitive, emotional, and psychomotor domains. Nonetheless, individuals have offered diverse explanations regarding the factors that influence students' academic success in higher education (Sikhwari et al., 2019; Alfifi & Abed, 2017; Negash et al., 2022). The exact factors that affect students' academic performance in high institution are still not clear and may involve more than one. These factors may include students' views on education, their desire to learn, how they study, explain their performance, confidence in their abilities, level of intelligence, and the drive to succeed.

Consequently, one or two variables cannot comprehensively elucidate the academic success of students; instead, a plethora of factors contribute to it. You can help students do better in school by figuring out what factors affect their academic success and then taking steps to manage them. This study concentrated on ascertaining the real magnitude of the correlation between specific psychological factors (student career choice and academic

engagement) and academic success. It also determined how these psychological factors correlate significantly with students' academic achievement based on undergraduate student's gender.

Research Questions

This study provided answers to two research questions as follows:

i. Is there any significant relationship existing between students' career choices, students' academic engagement and academic achievement in CEF 102?

ii. Is there any significant difference between the level of student achievement in CEF 102 based on the student's course of study and gender?

2. Method

The study employed a correlational descriptive survey research design. The researchers employed a purposive sampling technique to choose all ten departments that offer the CEF 102 course in the Faculty of Education at the University of Ibadan. We randomly selected a total of 287 second-year undergraduates from the following departments: Science and Technology Education (26), Educational Management (28), Human Kinetics (30), Counselling and Human Development (30), Adult Education (26), Special Education (30), Early Childhood Education (29), Arts and Social Science (30), LARIS (30), and Health Education (28). The student and the course coordinator were visited to seek their informed consent to participate in the study, and after one week, the instruments were administered in pencil and paper format. The data collection tools utilised were the undergraduates' career choices (with an estimated correlation coefficient of 0.82) and the undergraduates' student academic engagement (with a correlation coefficient of 0.83). These instruments were administered to students in paper-and-pen format. The second-year undergraduates' scores in CEF 102 were also retrieved from the Academic Records Office for research purposes only. The data were analysed using a two-way ANOVA and the Pearson product-moment correlation coefficient at a significant level of 0.05.

3. Findings

Research Question One: Is there any significant relationship between students' career choices, student academic engagement, and academics?

Table 1: Correlational Analysis of Students' Career Choice, Academic Engagement, and Academic Achievement

Variables	Test Score	Student Academic Engagement	Career Choice
Test Score	1		
Student Academic Engagement	-0.039	1	
Career Choice	0.109	0.574**	1
N	287	287	287
Mean	54.18	64.16	84.32
Std. Deviation	12.25	10.25	12.07

** Correlation is significant at $p<0.05$

The analysis revealed that there is a moderate, positive, and statistically significant correlation ($r = 0.574$) between students' career choice and level of academic engagement. However, a non-significant, weak negative correlation ($r = -0.039$) exists between academic engagement and academic achievement. There is also a weak positive correlation ($r = 0.109$) between career choice and academic success among the students. This finding revealed that student carrer choice has a good relationship with the level of academic achievement while engaged undergraduate students achieve lower academic performance. We can infer that students' degree of academic engagement shapes the career trajectory the student chooses.

Research Question Two: Is there any significant difference between the level of student achievement in CEF 102 based on students' course of study and gender?

To address this question, two-way ANOVA was conducted and presented in Table 2.

Table 2*: Two-Way ANOVA of the Difference between the Level of Student Achievement in CEF 102 Based on Students' Course of Study and Gender,*

Source	Type III Sum of Squares	df	Mean Square	F	p-value	Partial Eta Squared
Corrected Model	2373.182a	19	124.904	0.822	0.680	0.055
Intercept	725704.874	1	725704.874	4774.521	0	0.947
Course of study	1788.941	9	198.771	1.308	0.233	0.042
Gender	57.35	1	57.35	0.377	0.54	0.001
Department * Gender	578.217	9	64.246	0.423	0.922	0.014
Error	40582.756	267	151.995			
Total	**885365**	**287**				
Corrected Total	**42955.937**	**286**				

R-squared = .055 (Adjusted R-squared = -.012)

The two-way ANOVA analysis indicates that there were big differences in how well students did in CEF 102 based on their department and gender. The results revealed that the course of study does not influence how well students perform in CEF 102 ($F = 1.308$, $p = 0.233$). This shows that the disparities in academic performance among students across different fields of study may be due to random events or external factors not considered in this research. The study also found that gender did not influence on how well students did in CEF 102 ($F = 0.377$, $p = 0.545$). Therefore, the gender of the student is not a valid explanation for the observed disparity in the students' scores. The interaction effect between the course of the study and gender was shown to be statistically insignificant ($F = 0.423$, $p = 0.922$). This suggests that there was no substantial variation in student performance between different courses of study based on gender. The course of study has a small effect size (4.2%), gender has a negligible effect size (0.1%), and the interaction between the course of study and gender has a small effect size (1.4% of variance).

Discussion

The relationship between students' career choices, academic engagement, and their academic performance has been the subject of earlier research, providing valuable knowledge about this field. Numerous studies have found a positive correlation between career choice and academic engagement, consistent with the present study's findings. The results of this study align with previous research that has demonstrated a direct relationship between students' career choices and their degree of academic engagement. These results suggest that while the selection of profession choice may influence students' degree of engagement, it may not directly lead to enhanced academic achievement. Mettol and Kisilu (2016) conducted a study corroborating earlier research by illustrating that students achieved greater success in fields they were enthusiastic about, rather than pursuing careers solely for financial gain. The subsequent study by Karen, Tamara, Frederic, and Phillip (2018) corroborated the earlier findings. Ketonen, Haarala-Muhonen, Hirsto, Hänninen, Wähälä, and Lonka (2016) similarly found that students who are actively engaged in their studies tend to attain superior academic outcomes, evidenced by elevated GPAs and an increased number of course credits, relative to their disinterested peers. Furthermore, it revealed that students who were actively engaged in their studies showed greater confidence in their selected career paths, while those who were disengaged displayed disinterest or uncertainty about their professional trajectories. It is important to contemplate these factors when individuals are on the brink of beginning higher education. Future research should prioritise the examination of the complex interplay among career choice, academic engagement, and academic achievement to cultivate a comprehensive understanding of these relationships.

However, many studies have examined the influence of academic discipline and gender on student performance, yielding results that align with the findings of the present study. Geddes, Murrell & Bauguss (2010), Newton & Mwisukha (2009), and Ak & Sayil (2006) showed a significant correlation between attitudes towards education and learning and academic achievement, suggesting that both factors are interrelated with academic performance. Moreover, the present findings support the research conducted by Gonçalves et al. (2025), which demonstrated that mentorship programmes positively influence students' engagement, well-being, and academic performance. Furthermore, previous research shows that nature and degree of involvement in higher education

substantially influence academic achievement. Zhang et al. (2024) underscore that student engagement includes behavioural, emotional, and cognitive dimensions, all of which enhance learning outcomes when helped by suitable pedagogical strategies and digital technologies.

Candeias, Rebelo, and Oliveira (2010) assert that students demonstrating subpar academic performance exhibit a more pessimistic disposition towards learning and believe that education will not aid in their future success. This research illustrates that students' perceptions of their field of study substantially affect their academic involvement and success. The students' attitude towards their courses promotes academic engagement, which has a substantial effect on their academic progress. Likewise, research examining the influence of gender on student achievement has consistently revealed no significant primary effects. In a meta-analysis study, Else-Quest, Hyde, and Linn (2010) found no gender differences in the results of standardised mathematics tests. Ajai and Imoko (2015) similarly found that male and female students showed no significant differences in their achievement and retention scores in mathematics. These data show that gender is not the sole factor affecting disparities in student performance, thereby requiring the examination of supplementary variables. This meta-analysis of the research by Voyer and Voyer (2014) showed that girls always do better in school, and it also found some key factors that help explain this advantage. Boys and girls show similar levels of academic ability. Nevertheless, males often select more prestigious academic paths, which are characterised by an increased emphasis on mathematics and science (Buser, Niederle, & Oosterbeek, 2014). It is therefore imperative to analyse gender, academic engagement, and students' career choices when tackling issues related to student success within the university system.

Conclusions

This study enhances the comprehension of the correlation among undergraduate students' engagement, career choice, and academic achievement in university education. The findings highlight the significance of choosing a professional path and actively taking part in academic endeavours to improve academic success. The study revealed potential disparities between academic engagement and academic achievement correlated with gender. The findings illuminate the correlation among undergraduate students' participation, their career choice, and academic success at the university level. The results show minor disparities in academic achievement between males and girls, which may have a negligible impact in real life. Moreover, the academic programme and gender of the students do not substantially influence their success in CEF 102. When studying scientific disciplines such as chemistry, one should consider these factors.

Considering the findings, the following recommendations are proposed: Educational institutions must provide extensive career guidance and counselling services to aid students in making informed decisions on their professional paths. Further study should examine the factors behind gender disparities in academic achievement and propose solutions to address the identified issues. Educational institutions ought to foster intellectual engagement among students, irrespective of their vocational aspirations since it is essential for their growth. Future studies may explore more variables, such as student motivation, self-efficacy, and learning practices, to improve the understanding of the factors influencing academic performance in higher education.

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