UNDERGRADUATE STUDENTS' ENGAGEMENT AND CAREER CHOICE AS PREDICTIVE VALIDITY OF ACADEMIC ACHIEVEMENT

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Abstract

The quality of students admitted into Nigerian universities and graduates from these universities has declined significantly, and the academic performance of Nigerian students in higher education is substantially below the expected levels. There may be a connection between this phenomenon and the country's falling educational standards. This study's main goal was to determine the predictive validity of undergraduate student engagement, career aspiration, and academic achievement within the Faculty of Education at the University of Ibadan, Nigeria. The research design employed in this study was the descriptive survey design. A purposeful sampling technique was used to select all 10 departments in the University of Ibadan's Faculty of Education that offered CEF 102, and 287 second-year undergraduates were sampled. Undergraduate students' academic engagement ($r = 0.83$) and career goals ($r = 0.82$) were the instruments used to collect the data. The scores of the second-year undergraduate students in CEF 102 were obtained. Data were analysed using Multiple Regressionanalysis which demonstrated that students' career choice and engagement significantly predicted academic performance. Both variables had a meaningful impact on academic performance, although student engagement negatively predicted achievement when career choice was held constant, reducing achievement by approximately 0.15. The regression model accounted for 2.1% of the variance in academic performance, and the combined influence of career choice and academic engagement on academic performance was statistically significant.

Introduction

All students pursuing a university degree aspire to achieve academically, although they are motivated by varying factors and stimuli in the pursuit of this accomplishment. Students employ various strategies to achieve their desired level of academic performance. Certain students may exhibit deficiency in self-assurance, leading them to engage in examination malpractice to bolster their test scores. Also, some individuals demonstrate diligence in their academic endeavours yet fail to achieve satisfactory results. Furthermore, some students may experience examination phobia, potentially stemming from negative experiences during their formative years in school, subsequently resulting in a lack of enthusiasm towards their educational pursuits. While certain students ascribe their achievements and setbacks to external variables such as luck, professors, and other influential individuals, others assume complete accountability for their level of accomplishments and failings. This aligns with Rau and Gao (2008) study which indicated that excessive academic pressure hurts college students' learning.

Over time, an increasing number of individuals have expressed concerns regarding the declining educational standards and have raised inquiries on the calibre of graduates produced by Nigerian colleges and universities. Certain businesses have expressed dissatisfaction with the perceived inadequacy of graduates in meeting their organizational requirements, particularly about their skill sets and level of competence. In support of this argument, a research investigation funded by the National Universities Commission and Education Tax Fund (NUC, 2004) revealed a significant mismatch between the skill sets possessed by university graduates and the requirements of employers across different fields. According to Onah (2012) and Emaikwu (2012), there is widespread recognition and acknowledgement in Nigeria regarding the significant decline in academic performance among students across all levels of schooling. Adekunle (2012) highlights the state of university education, emphasizing that it is currently facing a critical juncture in Nigeria. Adekunle further notes that Nigerian universities do not rank among the top 30 institutions in Africa, nor do they feature among the top 1000 globally.

A career can be conceptualized as a professional trajectory that an individual undertakes and cultivates, primarily throughout the most productive years of their life. Typically, an individual's journey commences with formal education and persists until the culmination of their professional career. In this context, an individual's career encompasses not only their occupation, but also their educational pursuits aimed at fulfilling their aspirations, objectives, emotions, and preferences related to their assigned role in the teaching process and the professional environment. Consequently, this enables them to advance in terms of their knowledge, competencies, capabilities, and motivation to engage in work (Leung, 2008; Leung, Hou, & Li, 2011). The concept of a career pertains to an individual's commitment to a specific field of expertise or the progressive

advancement inside one's occupation, along with the level of accomplishment attained in one's personal and professional life (Stahl & Björkman, 2006).

The concept of "career choice," defined as an individual's level of certainty in choosing a specific career path (Restubog, Florentino, and Garcia, 2010), has gained significant significance in the employment and academic prospects of college students (Gordon, 1998; Restubog, Florentino, & Garcia, 2010). Research findings indicate that individuals who demonstrate a higher level of determination in making career selections are more inclined to secure work that is sustained over a longer period and offers significant prospects for advancement within their chosen professional domain (Hirschi, 2011). Restubog, Florentino, and Garcia (2010) discovered a positive correlation between students' robust career decisions, academic motivation, and their overall life satisfaction. Research has provided evidence that teenagers lacking job plans tend to anticipate an unfavourable future and exhibit a higher propensity for engaging in risky behaviours. Individuals who possess a heightened perception of self-efficacy may experience an enhanced ability to make healthy decisions and avoid engaging in harmful behaviours, even when confronted with peer influence (Aomo, Raburu, Aloka, & Agolla, 2018; Bandura, 1997). The current state of schools highlights the importance of focusing on students' career preparedness and aspirations since these factors can serve as driving force for individuals to strive for improved educational outcomes. As stated by Kisilu, Kimani, and Kombo (2012), career aspirations refer to the ambitions, aspirations, and contemplations towards one's professional trajectory that serve as a source of inspiration for the choice of academic pursuits and future employment. According to Nabil (2015), there is a positive correlation between the development of career goals at the school level and subsequent academic performance and achievement.

According to McDaniel (2016), adolescents in secondary schools find themselves in a critical phase of their life journey. This time is characterized by the development of career goals, which in turn influences their future educational endeavours and professional accomplishments in adulthood. The move from senior school to university presents a variety of problems for many first-year university students as many individuals frequently face substantial challenges when trying to assimilate into the higher education system. The task of choosing a career path has consistently been a formidable challenge, especially for young adults who have recently finished their secondary education, owing to its substantial influence on attaining a prosperous and satisfying existence. The process of choosing an appropriate occupation is a crucial determinant in attaining a successful life and requires thoughtful reflection, wisdom, and the capacity for focused attention.

The choice of a career trajectory has a substantial influence on student's academic achievements since it improves their chances of securing work in the job market. At the University of Uyo's Scientific Education Department, it is commonly recommended that a significant number of first-year students discontinue their studies after two sessions due to their inability to effectively manage the demanding academic requirements associated with their chosen career path. In certain cases, some students are granted probationary status, which permits them to undertake a reduced credit workload. However, a subset of

these students encounter difficulties in completing or enhancing their academic performance. This situation has raised concerns among both educators and students. The University of Uyo's Science Education Department offers a comprehensive five-unit program encompassing Integrated Science, Physics, Biology, Chemistry, and Mathematics. The primary objective of these science education courses is to provide students with the necessary skills and knowledge to pursue long-term career prospects. Additionally, these courses aim to cultivate graduate teachers who specialize in various science education disciplines, hence addressing the workforce requirements in Nigeria.

The level of success an individual attains in any given endeavour is contingent upon their acquisition of the necessary information about that endeavour, their comprehension and interpretation of this information, and, crucially, the effective utilization of their whole knowledge base about the endeavour. Usually, the acquisition of the information is subject to the quality of studying and engaging in the process of learning. However, the motivation to acquire knowledge may be influenced by the individual's level of interest in the endeavour. Determining one's motivation for studying materials about an activity and afterwards participating in said activity is the individual in question. The acquisition of knowledge may be contingent upon the level of success one attains in accomplishing a specific objective or goal. According to Isangedighi (1997), there exists a robust association between the inclination to acquire knowledge, study patterns, and scholastic performance within the population of secondary school students. The author also observed that the extent of a child's acquisition of knowledge is contingent upon the duration of time they are actively involved in the learning process. The allocation of time towards studying has been shown to enhance student's ability to retain learned knowledge, hence potentially improving their performance outcomes on tests or examinations. Individuals typically do not have a proclivity for dedicating extensive periods to studying items that fail to engage their interest and attention.

The academic achievement of a student refers to their capacity to acquire and retain information, as well as effectively convey their knowledge through oral or written means, particularly in the context of examinations. The role of secondary education is of paramount importance in establishing the fundamental basis for the subsequent educational pursuits of students. According to Kpolovie, Joe, and Okoto (2014), when students receive a solid educational foundation during their secondary school years, they are more equipped to navigate the various difficulties they may encounter in both their personal lives and professional careers. Academic success is a frequently employed concept in the realm of educational research and assessment, often erroneously conflated with the notion of academic performance. According to the research conducted by York, Gibson, and Rankin (2015), academic success encompasses various elements such as academic achievement, the fulfilment of learning objectives, the acquisition of desirable skills and competencies, satisfaction, persistence, and professional success. The findings of their study also suggest that grades and GPA are frequently employed as indicators of academic achievement; nevertheless, it is important to note that this assertion is not

accurate. Grades and GPAs serve as indicators of academic accomplishment rather than comprehensive measures of academic success.

Academic achievement refers to a student's capacity to acquire and retain factual information, as well as effectively convey their knowledge through oral or written means, particularly within the context of an examination setting. According to Udoh (2012), the academic achievement of students encompasses several educational, psychological, and sociological implications. Hence, the academic accomplishment of students cannot be fully attributed to a singular or limited set of variables, but rather it is influenced by a multitude of factors. However, the academic performance of undergraduate students is influenced by various factors, and it is possible to improve performance by recognising and modifying these factors individually. Possible factors that could be considered include students' attitudes towards school, level of interest in learning, study habits, attribution style, self-efficacy beliefs, IQ levels, and motivation levels.

It is based on these mentioned problems that this study examines two specific factors (career choice and student academic engagement) to determine their association and respective contributions in predicting undergraduate students' academic achievement in university education. To address the issue of academic achievement in university education, the undergraduate scores in CEF 102 were assessed.

Research Questions
The following research questions were addressed in this study:
1. What is the extent to which career choice and academic engagement relatively predict student's academic performance?
2. What is the extent to which career choice and academic engagement jointly predict student's academic performance?

Methodology
The descriptive survey research design of the correlational type was adopted. A multistage sampling procedure was used to select samples for the study. In the first stage, the sampling technique used was stratified random sampling, where students were first grouped by department, and then random samples were selected from each group. The rationale for this approach was to ensure that different departments within the faculty were equally represented. The purposeful sampling technique was used in the second stage to select all 10 departments in the Faculty of Education, University of Ibadan, offering CEF 102, while 287 second-year undergraduates were randomly selected across the ten departments (Science and Technology Education = 26, Educational Management = 28, Human Kinetics = 30, Counseling 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). Two instruments developed by the researchers were used for data collection: Questionnaire on Undergraduates Student Academic Engagement (QUSAE). It measures different dimensions such as cognitive engagement, behavioural engagement, and emotional engagement. The second

instrument was a Questionnaire on Undergraduates' Career Aspirations (QUCA) which focuses on the career aspirations of undergraduate students, capturing information related to their career goals, motivation, and preparedness for professional life. It contains 22 items, scored on a 4-point Likert scale ranging from "Never" to "Very Often". It covers aspects like students' participation in academic activities, attention to learning tasks, and interaction with lecturers. Also, QUCA consists of 27 items, also measured on a 4-point Likert scale ranging from "Very True of Me" to "Not at all true of me," assessing students' future career plans, the importance they place on their career, and factors influencing their career choices. The reliability coefficient for QUSAE is r = 0.83, which was calculated using Cronbach's alpha, indicating high internal consistency. The instrument was validated through an expert review, involving three education professionals who examined the content for relevance and clarity. Face validity was established based on the experts' feedback while the reliability coefficient for QUCA is r = 0.78, which is acceptable for social science research. Similar to QUSAE, the instrument was subjected to expert validation, ensuring that the items accurately reflect the constructs of career aspirations. The reliability statistics show that both instruments have strong internal consistency, making them suitable for this study.

Data were collected from second-year undergraduates in the Faculty of Education, University of Ibadan. The QUSAE and QUCA questionnaires were administered during a lecture period with the permission of the lecturer in charge. Before distribution, the purpose of the study was explained to the students, and their informed consent was obtained. The students were given 30 minutes to complete the questionnaires, and both instruments were collected immediately after completion to ensure high response rates and minimise external influence. Academic scores on CEF 102 were obtained from the faculty academic records with approval from the relevant authorities. This data was used as a dependent variable in the multiple regression analysis to investigate the relationship between academic engagement, career aspirations, and academic performance. The decision rule for the analysis was based on the p-value from the multiple regression analysis, which was set at $p < 0.05$. This threshold was chosen to determine statistical significance, meaning that if the p-value was less than 0.05, the null hypothesis would be rejected, and the alternative hypothesis would be accepted, indicating a significant relationship between the variables.

Results and Discussions
Research Question 1: What is the extent to which students' career choice and students' academic engagement relatively predict their academic performance?

Table 1.1: Relative Prediction of Students' Career Choice and Students' Academic Engagement in Academic Performance

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. E	Beta			Tolerance	VIF

(Constant)	49.06	5.429		9.03	0.00		
Student Engagement	-0.182	0.085	-0.152	-2.13	0.03	0.671	1.49
Career Choice	0.2	0.073	0.197	2.76	0.01	0.671	1.49

Significant at p<0.05

The analysis revealed that both students' career choice ($\beta = 0.197$, $p < 0.05$) and academic engagement ($\beta = -0.152$, $p < 0.05$) significantly predicted academic performance. The standardized beta coefficients suggest that both variables have a meaningful impact on academic performance. However, student engagement negatively predicts the achievement of students, which implies that when career choice is held constant, student engagement will reduce achievement by about 0.15.

To ensure the validity of the multiple regression analysis, collinearity diagnostics were conducted. The variance inflation factor (VIF) values for career choice (VIF = 1.491) and academic engagement (VIF = 1.491) fell below the conventional threshold of 2.5, indicating no substantial multicollinearity issues. Consequently, the estimates of the regression coefficients could be said to be reliable and interpretable.

Research Question 2: What is the extent to which students' career choice and students' academic engagement jointly predict academic performance?

Table 2: The extent to which students' career choice and students' academic engagement jointly predict their academic performance in the Faculty of Education, University of Ibadan

Table 2: ANOVA Summary of Students' Career Choice and Student Academic Engagement Jointly Predict Academic Performance

Model Summary	
R	0.166
R Square	0.028
Adjusted R Square	0.021
Std. Error of the Estimate	12.128

ANOVA

	Sum of Squares	df	Mean Square	F	p-value.
Regression	1183.09	2	591.545	4.022	0.02
Residual	41772.847	284	147.087		
Total	**42955.937**	**286**			

Significant at p<0.05

The findings of the multiple regression analysis were found to be statistically significant, suggesting that the combination of student's career choice and academic involvement is predictive of their academic achievement within the sample. The study gave an F-value

of 4.022 with 2 and 284 degrees of freedom, and the p-value was less than 0.05. The regression model explained 2.1% of the variability in academic achievement. Upon analysing the collective influence of career choice and academic involvement on academic achievement, the findings revealed a substantial combined impact ($\beta = 0.32$, $p < 0.01$). This discovery implies that the combined consideration of occupational choice and academic involvement yields a more robust forecast of academic achievement compared to analyzing each predictor in isolation. The F-statistic (F = [4.022], $p < 0.05$) suggests that the model exhibited a noteworthy overall fit. The R^2 value indicated that 21% of the variability in academic achievement could be explained by the joint impact of students' profession choice and academic involvement.

Discussion

Previous studies have examined the correlation between students' job selection, their level of academic involvement, and their academic achievements, yielding significant findings that contribute to our understanding of this domain. In alignment with the results obtained in the current investigation, numerous prior studies have established noteworthy associations among these variables. Also, past studies have demonstrated comparable findings concerning the influence of career selection on academic achievement. This finding is consistent with that of Ulas-Kilic, Peila-Shuster, Demirtas-Zorbaz, and Kizildag (2020) and Osuizugbo, Kukoyi, Abisuga, and Ibrahim (2022), who discovered a substantial relationship between academic satisfaction and students' career decisions. This research suggests that students make career decisions based on their performance or accomplishments in the classroom. The best measure of a person's potential for success in life is their academic performance, which reflects their talent. The competencies and learning experiences students acquire in school have a direct impact on their academic success. Students' performance in their future careers will be significantly influenced by the experiences they acquire (Hoff, Chu, Einarsdóttir, Briley, Hanna, & Rounds, 2022). Above all, educational experiences are critical to a student's entire life, not just their career path.

The results of the present study align with previous research that has identified significant relationships between students' career choices, academic engagement, and academic performance. Career choice has been found to have a positive impact on academic performance, while the relationship between academic engagement and academic performance is more complex, with studies reporting mixed findings. The present study's examination of collinearity diagnostics adds to the validity and reliability of the regression coefficients, enhancing the confidence in the obtained results.

Previous studies have examined the correlation between students' career choice, academic engagement, and academic achievement, yielding useful insights in this domain. In alignment with the results obtained in the current study, other prior studies have provided evidence supporting the combined influence of occupational selection and academic involvement on academic achievement. The current study's findings are substantiated by the research conducted by Agu (2017) that career aspiration interacted

significantly with gender to enhance students' academic performance. A similar finding was also made by Bleidorn, Jaap, Peter, and Samuel, (2016), which established gender as a weaker factor for predicting academic performance but was a moderating factor along with career aspiration to promote better learner academic performance.

The findings of the current study are consistent with other research, highlighting the combined influence of students' profession selection and academic involvement on their academic achievement. The concurrent analysis of these factors yield a more robust forecast of scholastic achievement compared to their isolated examination. The results of this study enhance our comprehension of the variables that impact academic achievement and emphasize the significance of considering both professional aspirations and academic involvement within educational settings.

Conclusion and Recommendations

The study highlights the importance of considering both career choice and academic engagement when examining academic performance. While career choice and academic engagement positively predict academic performance individually, academic engagement exhibits a negative relationship with achievement when considering career choice as a constant. This suggests that academic engagement might not be central to the course used for prediction. Based on the results of the study, subsequent suggestions are put forth: Educational institutions must offer comprehensive career guidance and counselling services to facilitate students in making well-informed decisions regarding their career paths. In addition, educational institutions ought to prioritise the cultivation of intellectual engagement among students, regardless of their chosen career paths, as it is a crucial element in their holistic growth and advancement. Educational institutions can offer career guidance and counselling services, which can assist students in making well-informed career decisions that are congruent with their interests, capabilities, and aspirations. This has the potential to raise students' academic engagement and, thus, better their overall academic achievement.

Further investigations in the field may delve into supplementary aspects, including student motivation, self-efficacy, and learning strategies, to attain a more holistic comprehension of the determinants that impact academic performance of students in the Faculty of Education.

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