Academic performance, family support, interest, and career decision among undergraduate students in Nigeria

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ABSTRACT

Studies in the five recent years have shown that more than half of Nigerian undergraduate students changed their study programs and career decisions. Notwithstanding this fact, lack of research addresses factors that affect the Nigerian undergraduate students made such a decision. Therefore, the present study aims to explore the influence of academic performance, family support, and interest on career decision of undergraduate students in Jigawa state Nigeria. A set of questionnaires was utilized as an instrument to collect the data from a total of 373 Nigerian undergraduate students. Drawing on correlational study using structural equation modelling approach, this study revealed that academic reason (t=3.452; β=0.191; P=0.001) and family support (t=4.554; β=0.234; P=0.000) have statistically significant correlation with career decision making of the students. On the contrary, interest was empirically proven to not have a significant relationship with the career decision making (t=0.899; β=-.056; P=0.369). Thus, it is concluded that academic reason and family support play more crucial role in determining the career decision of undergraduate students in Nigeria than their interest abilities. This study provides implication for Nigerian government and non-government organizations to massively educate parents and families so that they can encourage their children's career paths and support their career choices.

Introduction

Making a career decision can be either simple or difficult depending on the levels of education and information about the career alternatives. A career is viewed as a continuous process that occurs during individuals' formative stage and throughout their life (Lent & Brown, 2020; Xu, 2021). According to these definitions, a career is a part of all the activities that occur before, during, and after the decision to pursue a particular

profession, including making an attempt to succeed and succeeding during these periods using various resources (Gati & Kulcsar, 2021; Hurst & Brantlinger, 2022; Sutiman et al., 2022). Individuals' stress levels or challenges will rise during this period; hence, making realistic career decisions becomes difficult (Parola & Marcionetti, 2022). Moreover, many variables must be considered when deciding on a career path. These variables may have complex interrelationships and influence one another. Academic reason or performance, family pressure, and interest in career decision making are the only variables examined in this study. A changing program of study occurs when a student makes an initial decision from a list of options, then reverses it and selects a completely different choice (Jemini-Gashi & Kadriu, 2022; Wang & Jiao, 2022). Undergraduate students on course change indicate that the phenomenon is common globally, but little is known about the phenomenon in Africa, particularly in Nigeria (Kanyingi-Maina, 2020).

The present study investigates the relationship between academic reason, family support, and interest and career decision-making among undergraduates in Jigawa State, Nigeria, using a structural equation modelling approach. Undergraduates, in some instances, change their chosen career or program of study due to so many reasons or factors (Lu, 2022; Maheshwari et al., 2022). Many variables influence an individual's career decision, including academic performance or reason, family or parental pressure, interest and ability, peer group pressure, personal attributes, and financial reasons (Yunusa et al., 2022). Furthermore, several studies have established the rate of changing programs once or several times before graduation. Leu (2017), in his study of college students who change their programs within three years of enrolment, it shows that 38% of students change their programs of study. Astorne-Figari and Speer's (2019) study showed that changes in course of study, the roles of academic performance, grade on course switching made 43% of students change their career decirion. Moreover, Wang & Jiao (2022) conducted a study on college students' career decision making and found that 50% of the students change their initial course. Similarly, Adeyaniu (2020) showed 36% of undergraduate students in Nigeria change their chosen course.

Career decision-making is very important, particularly among undergraduates or in human lives in general (Abdullah et al., 2018; Santos et al., 2018). The democratic structure of Nigerian society, along with the growing complexity of schools and the labor market system, frequently presents adolescents with an infinite number of educational and career alternatives (Akpochafo, 2017; Yunusa et al., 2022). Guidance and counseling are effective techniques among students in Nigeria for promoting career decision-making (Babatunde, 2018). Several studies have found that students changed programs of study because they were influenced by one or more factors or because they were given insufficient information when they first made their decision (Lopes, et al., 2017; Mudhovozi & Chireshe, 2012; Sharif et al., 2019). Because of a lack of career counseling, lack of experience, peer, teacher and family advices, or the prestige attached to a particular career, many Nigerian students select unsuitable careers (Akpochafo, 2017; Eremie, 2014). It was discovered that students' academic achievement influenced their career choice (Adeyaniu, 2020). Students that make their career decisions based on their academic performance will be more successful compared to those that do not consider their academic performance (Ikuemonisan et al., 2022).

In case of Nigeria, the career advice foundation found that 75% of undergraduate students change their chosen course (Okunlola, 2022; Yunusa et al., 2022). One of the possible explanations was that they were influenced by their family, interest and ability, or peer pressure (Osuizugbo et al., 2022). Yunusa et al. (2022) conducted interviews with Nigerian undergraduates who had switched majors and discovered that they were lack of knowledge about their chosen fields. They switched to what was meaningful to them after learning that the choice was not in congruence with their interests and abilities. This suggests that a lack of interest and ability influenced the students to change their chosen careers. Drawing on Yunusa's et al. (2022) interview finding, further research should be conducted to examine the empirical relationship between these possible factors (e.g.

academic performance, family pressure, interest and ability, and peer pressure) and career decision making of undergraduate students in Nigeria. This becomes an observable gap that is addressed by the current study.

In short, the previous studies have informed that career decision making of undergraduate students is highly influenced by a number of factors, such as academic performance, parental support, interest, peer group pressure, personal attributes, and financial reasons. However, lack of correlational research examines statistical connection between these factors and Nigerian undergraduates' career decision making. Therefore, the present study is responding to the current issue by investigating the empirical relationship between academic reason, family support, and interest and career decision making of undergraduate students in Nigeria. This study is urgently conducted due to the high number of Nigerian undergraduates who changed their career decision even their study programs in the recent years. Hence, examining the family support, academic reason, and interest is crucial since these variables represent both internal and external factors. This study becomes a prototype for providing statistical evidence of the empirical connections among the above-mentioned variables, as well as provides inputs and references for Nigerian government to take action to foster career decision making of undergraduate students.

Hypotheses Development

The Effect of Academic Reason on Career Decision

Academic reason in this study refers to the academic performance of students, which led to their choosing a course of study (Kocak et al., 2021; Lopes et al., 2017). Academic achievement or performance of students in a specific course determines a student's success in higher education institutions (Bell & Puckett, 2020). That is to say, a student's achievement in an institution is determined by his or her success in a specific course of study. According to Eremie (2014), academic performance is the best indicator of one's potential for success in life; it reflects one's ability and the qualities required for academic success. In reality, good academic grades are required for good jobs such as medical doctor, computer science, engineering, etc. Furthermore, other research has shown that academic achievement has an impact on students' career choices (Kocak et al., 2021; Lu et al., 2022; Osuizugbo et al., 2022; Ulas-Kilic et al., 2020). The present study tends to find out that academic performance has a relationship with career decision-making. Hence, a hypothesis is formulated.

H_1: Academic reason has a positive effect on career decision of undergraduate students in Nigeria.

The Connection between Family Support and Career Decision

Family support has a significant impact on students' choices of career decision and helps them overcome economic, social, and psychological difficulties in making wise career decisions (Koçak et al., 2021). It is evident that family has an impact on the child's decisions, development, character formation, and career processes (Cui et al., 2019). Family support was discovered to be a key determinant in career expectations (Ketchledge et al., 2021). However, some studies reveal that parental social support has a good impact on the career decision-making process of an individual (Salwani & Candrawulan, 2022; Wang & Jiao, 2022; Yunusa et al., 2022). It has been demonstrated that parents are the mirror for their children's career guidance. As the child matured, they became more aware of his parents' occupations. For example, a child who has a parent who works as a nurse is likely to be interested in health careers. The child may be inspired to choose an engineering career if one of the parents is an engineer. Families may advise their children to choose a profession that reflects their interests (Abdullah et al., 2018). We might consider family support quite effective in career decision making since families advise their children, provide financial support, teach social values, and provide

assistance at difficult periods in terms of career and other concerns (Lent & Brown, 2020). Parents have a stronger impact on their children's career choices than teachers (Koçak et al., 2021). This shows that parental career guidance and support can be beneficial, but parents might not be aware that simply setting a good example for their kids can have a big impact on their career choices (Okunlola, 2022). It suggests that parents are worried about their children's future professional endeavors. Hence, this study postulates a hypothesis as follows.

H_2: Family support has a positive effect on career decision of undergraduate students in Nigeria.

Does Interest Influence Career Decision?

Individual interest in a course of study is crucial since a lack of interest in a subject may have an impact on one's attitude, which in turn may have an impact on one's performance (Hoff et al., 2022; Maiorca et al., 2021). Only when a person makes the right career choice will it have a positive impact on the output (Ketchledge, 2021). The significance of interest and ability in influencing career choices cannot be ignored (Babatunde, 2018). Students' interest and ability are important elements that influence career decisions and performance (Xu & Lastrapes, 2022). According to Adeyanju et al. (2020), in their study about factors influencing federal university choice, it was found that 75.5% of respondents indicated that their interest and ability are the most important factors influencing their career decisions. This finding indicates that students select a course of study because they believe it is the best fit for their interests and abilities. Interest and ability have become the most important determining factors in an individual's career decision and vocational choice (Jiang et al., 2022). According to Maiorca et al. (2022), the most essential factor in choosing an institution and topic major is congruence with interests. Personal interest was described as the significant factor that affected career choice in individualistic settings (Hoff et al., 2022). Thus, this study tests the hypothesis below.

H_3: Interest has a positive effect on career decision of undergraduate students in Nigeria.

Method

Research Design and Study Area

Under the procedure of correlational research design, this study investigates the relationships between academic performance, family support, interest and ability, and career decision-making among undergraduates in Jigawa State, Nigeria. A correlational research examines relationships between variables without any control or manipulation from researchers (Seeram, 2019). In the context of this study, the research procedure was employed to scrutinize the empirical connection between variables of academic reason, family support, and interest and career decision of undergraduate students in Nigeria. This study was conducted in Sule Lamido University and Federal University of Dutse Jigawa state Nigeria.

Participants

A total of 373 Nigerian undergraduate students at Jigawa state of 1.200 total population participated in this study. They were chosen by following the procedure of convenient sampling. This sampling technique enables researchers to collect market research data from a conveniently available pool of respondents (Etikan et al., 2016). The reason of using convenient sampling technique for this study was that it is the most commonly used sampling technique as it's incredibly prompt, uncomplicated, and economical. Most of the participants were in the age of 18-23 years, with the average is 21 years old. They were dominated by male (195; 52%), while the rest is female (178; 48%).

They were coming from various fields of study such as science, education, computer engineering, law, and economics.

Instrumentation and Data Collection

Data were gathered using the Career Decision Making Self-Efficacy Short Form questionnaire (see Chuang et al., 2020), which includes 25 items, and the Factors Influencing Undergraduates' Career Decision Making Questionnaire (see Levin et al., 2020), which has 22 items. After the process of adaptation, a total of 27 items of questionnaire were used for this study, which comprised academic reason (6 items), career decision (5 items), family support (8 items), and interest (8 items). Two experts checked the questionnaires for content validity and for internal consistency, the questionnaire was piloted to a group of undergraduate students (N=25) in Sule Lamido University. The Factors Influencing Undergraduates' Career Decision-Making questionnaire has α =.839, while the Career Decision Making Self-Efficacy short form questionnaire has α =.945. This demonstrates that the instrument is suitable for the investigation. The researcher administered the questionnaires to the targeted participants and informed them about the purpose of the study. The questionnaires were given 20–25 minutes to be completed. The data was examined using SPSS and Smart Partial Least Squares (Smart-PLS3). In order to look into the instruments' Cronbach's alpha, the internal consistency of the instruments was discovered. Using Smart PLS 3 for measurement models and structural equation modelling, structural equation modelling analysis was done separately to evaluate the hypotheses.

Data Analysis

The study investigated the relationships between academic reasons, family, and interest, and career decision-making among Nigerian undergraduates by using structural equation modelling (PLS-SEM). There are two sections to structural equation modelling (SEM). The first section is an evaluation of the measurement model, in which the model's fit and validity are evaluated. Following that, when the measurement model's results are good, the second section begins with the testing of the study hypotheses (Mensah & Onyancha, 2022). Factors are referred to as constructs, latent or unobserved variables, and items are referred to as indicators or manifest variables in structural equation modeling (SEM).

Results

The first step of data analysis is conducted by testing the reliability of the questionnaire items. The study's factor loading was more than the recommended threshold of 0.7. Cronbach's alpha, rho_A, and composite reliability were used to assess the constructs' reliability. It is found that each construct's Cronbach's alpha, rho_A, and composite reliability all exceeded the recommended value of 0.7. The rho_A is a new method for determining the construct's reliability. The average variance extracted demonstrated the study's convergent validity. The extracted average variance was greater than 0.50 value. It means that all items are reliable and could be used for this study in further data abalysis. Table 1 shows the findings of factor loading, Cronbach's alpha, composite reliability, and average variance extracted.

Meanwhile, a recent perspective on PLS-SEM indicates that, rather than depending on Cronbach's alpha (too conservative) and CR (too strict and liberal), the "rho_A" coefficient should be used to measure the reliability of PLS construct scores (Hair et al., 2021). The recommended threshold for the rho_A as a reliability test is 0.70 (see Table 1). From the result of data analysis, it can be seen that all of the structures meet the rho_A requirements. As a result, the measurement model can be considered reliable. Hence, the next procedure of data analysis is determining the discriminant validity.

Table 1. Measurenment Model

Items	Loading	AVE	CR	CA	rho_A
Academic_Reason					
Acad_Res1	.911	.870	.976	.970	.992
Acad_Res2	.940				
Acad_Res3	.926				
Acad_Res4	.934				
Acad_Res5	.941				
Acad_Res6	.942				
Career Decision Making					
CDM-PS1	.856	.725	.930	.905	.907
CDM_PS2	.840				
CDM_PS3	.856				
CDM_PS4	.868				
CDM_PS5	.839				
Family					
Family_Inf1	.861	.792	.968	.963	.968
Family_Inf2	.888				
Family_Inf3	.919				
Family_Inf4	.924				
Family_Inf5	.915				
Family_Inf6	.909				
Family_Inf7	.849				
Family_Inf8	.853				
Interest					
Int_Abi_Inf1	.892	.858	.980	.977	1.003
Int_Abi_Inf2	.927				
Int_Abi_Inf3	.928				
Int_Abi_Inf4	.925				
Int_Abi_Inf5	.930				
Int_Abi_Inf6	.935				
Int_Abi_Inf7	.943				
Int_Abi_Inf8	.931				

Discriminant validity is the degree to which the measurement does not reflect another variable. One of the following criteria can be used to determine discriminant validity: The Fornell-Larcker criterion, the Hetero Trait Monotrait Ratio, and the Cross Loading Matrix. The Hetero Trait Monotrait Ratio was used to evaluate the discriminant validity of this investigation (HTMTR). The Fornell-Larcker criterion has been chastised for its inability to reliably identify discriminant validity in frequent study scenarios. This study used the heterotrait-monotrait criterion (HTMT), which was recommended by Henseler et al. (2015), as an alternative for testing discriminant validity. Discriminant validity is an issue when the HTMT value is greater than 0.85 (Henseler et al., 2015). No values in Table 2 were greater than 0.85, indicating an acceptable discriminant validity.

Table 2. Discriminant Validity

	Academic reason	Career decision making	Family support	Interest
Academic reason				
Career decision making	**.128**			
Family	.283	**.194**		
Interest	.026	.077	.103	

In terms of hypotheses testing, Table 3 presents the results of PLS-SEM analysis which depict that academic reason (t= 3.452; β= 0.191; P= 0.001) and family support (t= 4.554; β= 0.234; P = 0.0001) are proven to have a significant positive relationship with

career decision of undergraduate students in Nigeria. Thus, H_1 and H_2 of this study were accepted. On the contrary, interest (t= 0.899; β=-.056; P= 0.369) did not have any significant relationship with career decision making of the students, indicating that H_3 of this study was rejected.

Table 3. Hypotheses Testing Results

Hypotheses	SM	SD	Beta-Value	T-Value	P-value	Decision
Academic-> CDM	0.197	0.55	0.191	3.452	0.001	**Sig.**
Family ->CDM	0.244	0.051	0.234	4.554	0.000	**Sig.**
Interest-> CDM	-.059	0.062	-.056	0.899	0.369	Not Sig

Note: CDM: Career decision making; SM: Sample mean; SD: Standard deviation: Sig: Significant; Not sig: Not Significant

Moreover, the R^2 evaluates how exogenous variables predict endogenous variables. By indicating the model's percentage of construct variation, it evaluates the inner model's predictive power (Henseler et al., 2015). An R^2 value of 0.2 is regarded as high, even though there is no universally accepted level of R^2. Table 4 displays this study's R^2, which is 0.72, and the adjusted R^2 which is 0.065. Thus, this study's R^2 is regarded as high.

Table 4. R-square Assessment

	R Square	R Square Adjusted
Career Decision Making	0.72	0.065

Last but not least, the predictive relevance of Stone-Geisser (Q^2) was used to examined the predictive relevance of the structural model Q^2, which tested the accuracy with which all indicators' data points are predicted in the outer model of endogenous constructs. Based on the result in Table 5, the model has Q^2 values of 0.77 which is higher than 0. When the Q2 value is greater than 0, the model is said to be predictively relevant. Using the blindfolding procedure on Smart-PLS 3 software, the study's model was assessed to establish the cross-validated redundancy (Q^2). The Q^2 values for each endogenous construct are all larger than 0. All study's models show strong predictive relevance Q^2, which means that the model is good.

Table 5. Result of Predictive Relevance

Endogenous Variable	CCR Q^2 (=1-SSE/SSO)	CCC Q^2 (=1-SSE/SSO)
Career Decision Making	0.77	0.50

Notes: CCR: Cross-validated Redundancy Construct; CCC: Cross-validated Communality Construct

Discussion

The study investigated the relationships between academic reason, family support, and interest and career decision-making among undergraduates in Jigawa State, Nigeria. The study hypothesized that academic reason, family pressure, and interest have a positive connection with the students' career decision-making. The PLS-SEM analysis's output model suggests that academic reason and family support and career decision making have a very significant path coefficient. However, the third path coefficient which is interest and career decision making is found to not have any significant relationship among undergraduates in Nigeria.

The results of this research demonstrate that family support has a significant relationship with career decision making. This result is consistent to Ketchledge et al. (2021) that portray similar finding. This finding is reasonable since family helps their children choose an educational program that is appropriate for future career. For

instance, a children must have been supported to choose a career in medicine if one of the parents is a medical professional, so must on the other fields. Family and parents advise their children, provide financial support, teach social values, and provide assistance in terms of career and other concerns (Sharif et al., 2019). Therefore, we might consider family support to be extremely beneficial in determining career decision. As the child grew older, he gained a better understanding of his parents' occupation. Parents have been demonstrated to be an important source for their children's career decision making (Koçak et al., 2021). This finding further suggests that parents' attitudes towards crucial decision of their children including career choice make children to perceive their valuable support and overcome the challenges during the process. As a result, it can contribute to the children's correct decisions.

Academic performance is one of the most crucial mechanisms during career decisions. This study found a positive correlation between academic reason and career decision of undergraduate students in Nigeria. This result is similar to Ulas-Kilic et al. (2020) and Osuizugbo et al. (2022), which found that academic satisfaction played significant role in determining students' career decisions. This finding indicates that students choose their careers based on their academic achievements or performances. Academic performance represents one's talent and it is the best indicator of one's potential for success in life. Academic performance is closely associated to learning experiences and competencies acquired during the process of school. More experiences gained by students will greatly determine their performances in the future careers (Hoff et al., 2022). In short, academic experiences are crucial not only for the career process but also for the whole life of the students.

A different result yielded by the testing of H_3 about the empirical connection between interest and career decision. This study reveals that interest and ability have no significant relationship with career decision-making among undergraduates in Nigeria. This result is similar with Xu and Lastrapes (2022), but it contradicts Maiorca et al. (2021). It was also found that there is no significant relationship between interest and ability and the career choice of high school students (Jiang et al., 2022). Even so, a student's personal interest and ability matter in selecting a course of study at a university in order to succeed. It functioned as one of the main driving forces for students in choosing a program at higher institutions. Any career that does not match with the interests and abilities of students may lead to failure in their chosen career (Bell & Puckett, 2020).

This study contributes to the investigation and confirmation of the relationships between academic reason, family support, and career decision-making among Jigawa State undergraduates in Nigeria. Families should be informed and educated in terms of supports to determine their children's success in careers. For this reason, government and non-government organizations are encouraged to do socialization about this crucial matter to families and parents around Jigawa state Nigeria. Considering the positive effect of academic performance on career decision making, educational policymakers in Nigeria should do holistic planning to equip undergraduate students with adequate knowledge and skills during the process of education to gain experiences. Hence, they will combine both theory and practice and have sufficient knowledge about the future work field that they will enter in the future. In addition, workshops, seminars, and trainings that provide opportunities for parents and schools to enhance their capacity on children career development should be regularly provided.

Conclusion

This study is conducted to find out the empirical connection among academic performance, family support, interest, and career decision making of undergraduate students in Nigeria. Using correlational design, this study reveals that there are positive significant relationships between academic reason, family support, and career decision-making among Jigawa State undergraduates in Nigeria. However, interest is found not to

have any relationship with career decision. It was recommended that governments and nongovernmental organizations hold workshops for families so that they can learn more about their children's career paths and support their children's choices. Moreover, university policymakers should provide students with adequate inputs of knowledge and skills during the process of education to ensure that they will be ready to enter workplace to pursue their future careers.

Since this study was conducted only in a part of Nigeria, the result might not be generalized to different places and contexts throughout the country. Hence, we recommend future research to carry out similar study involving more participants from other parts of Nigeria. Moreover, this study only focused on three variables that influence career decision (e.g. academic performance, family support, and interest). For this reason, future research is encouraged to do similar research by exploring more variables such as financial support, social background, peer influence, and culture.

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