# RELATIONSHIP BETWEEN OPPORTUNITY RELATED FACTORS THAT INFLUENCE CAREER CHOICE AND ACADEMIC ACHIEVEMENT OF STUDENTS IN VOCATIONAL AND TECHNOLOGY EDUCATION PROGRAMMES IN UNIVERSITIES IN NORTHERN NIGERIA

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#### Abstract

The study investigated the relationship between opportunity related factors that influence career choice and academic achievement of students in Vocational and technology Programmes (VTEP) in Universities in Northern Nigeria. Two research questions and one null hypothesis tested at 0.05 level of significance guided the study. The study employed correlational and survey research designed. The population for the study was made up of 466 students, out of which 187 was sampled using the Yaro Yamane formula. Structured questionnaire was used to collect data. The reliability index of the instrument of 0.87 was obtained using Cronbach Alpha formula. The secondary data was the cumulative grade point average (CGPA) of the students studied. This was collected through a format designed by the researchers. Mean and standard deviation were used to answer research questions 1, while product moment correlation coefficient was used to answer research question 2. The same correlation coefficient formulated was used to test the hypothesis. The study revealed that lack of exposure of the students to the home, society and or the university they attended caused poor academic performance among VTEP students. It is therefore recommended that, before career choice, the students should be exposed to friendly physical and social environmental experiences so that they would become emotionally, mentally well-adjusted and stable. This will enable them to make wise career choice which will inturn influence high academic achievement among VTEP students.

Keywords: Relationship Career, Career choice, Academic achievement, vocational, Technology

## INTRODUCTION

Career selection is one of the most important activities every university student must undertake. Appropriate career choice is the building block for success in any career. Madu (1999) and Oladcle (2000) defined career as an occupation or a job one could do in one's lifetime. They observed that, there are many jobs, positions or occupations in the world and that no single person has the ability to pursue all the occupations in a life time. The implication is that, there will be some sort of choice based on certain standards. This implies that career choice as the act of deciding which career to pursue. The authors further asserted that if the standard process for choosing a career is not followed, it leads to poor academic achievement, disillusion, frustration, high attrition rate and a dissatisfying work life.

Before the nineteenth century in Nigeria, career selection was dependent on the wishes of parents (Fafunwa, 2000; Oko, 2001 and Jacqualine. 2012). Today aside from parents, many other factors determine career choice. Wayne (2009) and Jacqualine (2012) identified factors that influence career choice. These factors include pressure from peers and friends, prestige attached to certain jobs, experiences in the environment such as the schools one attended, career flexibility, occupational information and self-employment opportunities. Other factors include the student's interest, ability and opinion of trained guidance and counselling officers. In the same vein, Michael (2002) and Jacqueline (2012) grouped the career factors into three- namely, environment, personality and opportunity related factors. This study focused only on opportunity related factors that influence career choice and their relationship with academic achievement of students in VETP in Universities in Northern Nigeria.

Hornby (2000) defined opportunity as a favourable situation and location to do, for doing or of doing something. Provision, location, and the time the career choice enhances are made available are very important opportunities that students need to have to make wise career choice. The enhancers of a good career choice include career information through guidance and counselling experts, mentors,

financial strength and educational provisions. Michael (2002) reported that timing and location, as opportunities, are very important in fulfilling aspirations. This means if a student has these opportunities made available to him/her at the right place and at the right time, it will help the student make wise career choice. Unfortunately, most students, at the point of career selection, do not have opportunity of being properly guided by experts or do not have the opportunity of interacting with role models or mentors. Michael (2002) further observed that the income level, as an opportunity has played an important role in determining what career a student could choose. It is also Michael's observations that, the ease of getting job or employment opportunity is one of the reasons why students choose a career programme. Michael (2002) identified opportunity factors that are important for getting a job. These include academic attainment, entry level, job opening, job shadowing, vocational quidance, job placement and social background. In the same vein, Borchert (2002) stated that the process most commonly used by applicants for obtaining a job is using someone the student knows, such as a neighbour, the student's father, brother, mother, sister, a relation or a teacher. A student that has a relation that can get him/her ajob in a particular occupation would, because that opportunity, either solidify the commitment to go on higher education in line with the occupation he/she hopes to he employed in or stop further career plans. Opportunities and the way people respond to it is also based on established theories.

The theories of Holland (1959) on vocational choice and that of Bandura (1977) on social learning were used as framework. Holland's theory states that the personality of an individual exerts on career choice, while Bandura's theory states that it is environmental experiences that exerts more influence on career choice. However, it is the consensus of these two educators, Holland and Bandura that, the opportunity of being in an enhancing social and physical environments. where one could have his/her personality developed to full maturity, is a strong factor that influence appropriate choice of a career and a student's academic achievement. The review revealed that none of these theories is mutually exclusive or independent but are interdependent in determining vocational choices and academic achievement.

It is reasonable and safe to say that, if the outcome of previous studies addressed the academic problems of VTEP students, there would not be continued public outcry against the consistently poor academic performance, high attrition rate and lack of job satisfaction after graduation among VTEP students. Since these unacceptable situations still exist, it probably means that the findings and recommendations of previous studies did not address the peculiar problems of VTEP students in Universities in Northern Nigeria and or that the solutions provided by previous researchers are irrelevant or obsolete. This consistently poor academic achievement in present day competitive society means that many of the opportunities such as for employment and private businesses that could be obtained through high academic achievement, both as individuals and as a group, are not being obtained by VTEP students. It is envisage that, if these negative trends continuous unchecked, the future of VTEP, industries and general technological development will be at stake. Especially, the future long term effect will be, lack of sound VTE teachers that could teach effectively and efficiently at vocational training centers, Technical Colleges, Colleges of Education and faculties/schools of education in polytechnics and universities where VTEPs are run.

The turn over effect will be lack of adequately knowledgeable and skilled craftsmen and women technicians and technologist that should operate industries towards achieving the desired general technological development in Nigeria. Therefore, the current researchers considered that, empirical establishment of hypothesis that sought the significance of relationship between opportunity related factors that influence career choice and academic achievement of students in VTEP may provide relevant literature and strong bases for objective and reliable inferences on the causes of poor academic performance and high rate of attrition among VTEP students. This is the problem of this study. It is hoped that the findings of this study would be of great use to guidance and counselling experts, students, parents, universities, employers of labour and government. It will provide these beneficiaries with ideas, information and knowledge on opportunity related factors that influences and the once that does not influence career selection process among VTEP students. It will provide knowledge on the positive and negative effects of opportunity factors on academic achievement of students. Also, the knowledge would substantially increase the understanding of the beneficiaries of the need for exposing students to appropriate opportunity factors that would enable them make wise and effective career plans that will ensure achievement of individual, family and societal goals.

Despite the general findings of previous researchers on career choice factors and their relationship with academic achievement, none of these studies addressed or focused on the relationship between the opportunity related factors that influence career choice and academic achievements of students in vocational and technology education (VTEP) in Universities in Northern Nigeria.

### Purpose of the Study

The main purpose of this study was to determine relationship between opportunity-related factors that influence career choice and students' academic achievement in Vocational and Technology Education programmes (VTEP) in universities in Northern Nigeria. Specifically, the study sought to:

- 1. Determine perceived opportunity related factors that influence career choice of students in VTEP in Universes in Northern Nigeria
- 2. Determine relationship between perceived opportunities related factors that influence career choice and academic achievement of students in VTEP in Universities in Northern Nigeria.

#### **Research Questions**

In line with the purposes of the study, answers to the following questions were sought;

- 1. What are the perceived opportunities related factors that influence career choice of students in VTEP in Universities in Northern Nigeria?
- 2. What is the relationship between the perceived opportunities related factors that influence choice of career and academic achievement of students in VTEP in Universities in Northern Nigeria?

# **Hypothesis**

There is no significant relationship between opportunities related factors that influence career choice and academic achievement of students in VTEP in universities in Northern Nigeria.

## Methodology

This study adopted two research designs, survey and correlation designs. Survey research design was favored because opinions of the students were sought concerning opportunity factors that influenced their choice of career in VTEP. And, since this study was meant to establish relationship between two variables, which are, factors that influence career choice and academic achievement of students in VTEP, correlation research design was also considered appropriate for this study. The study was carried out in Northern Nigeria, specifically in universities where VTEP are run. The Universities selected are places from where students that responded to the questionnaire were accessed and also where documented data on students' academic achievement, popularly called cumulative grade point average (CGPA), was accessed.

The total population of the study was four hundred and sixty six (466) which comprised of 500 and 400 levels VTEP students from five universities. The distribution of the population is as shown in Table 1. The sample size used in this study was I87 students. This sample size was statistically determined using Yaro Yamani formula for finite population. Balloting was used to draw the sample size in each of the institutions visited. The population distribution and the sample sizes are as shown in Table I.

Table I: Distribution of Total Population and Sample Sizes from Universities in the Stud)

S/No	University	Population	Sample size	
1	A.B.U Zaria	124	48	
2	A.T.B.U Bauchi	150	48	
3	Benue State University Makurdi	24	24	
4	F.U.T Minna	108	44	
5	Uni. Agric. Makurdi	60	23	
	Total	466	187	

Two types of data were collected - Primary and secondary data. Structured questionnaire that had five points rating scales was used to collect the primary data from the students. The questionnaire collected information related to opportunities' factors that influenced their choice of career in VTEP. The secondary data collected was the existing documented progress report on students' academic achievements, which is popularly called cumulative grade point (CGPA). The CGPAs, like the questionnaire, also has five points rating scale. This made the correlation easier. The researchers developed questionnaire was subjected to face validation. Five experts in VTEP, two from each of MAUTECH, Yola and ATBU, Bauchi and one from Taraba state university did the face validation of the

questionnaire. Corrections and suggestions by these validates were adopted in the final production of the questionnaire before administration. Uzoagulu (1998) observed that carrying out validation exercise as described above ensures the objectivity and reliability of the face validation of the instrument.

The validated questionnaire was pilot tested to determine its reliability. Crombach Alpha Coefficient formula was used to calculate the reliability index of the pre-test data. The result of computation of reliability coefficient of the instrument was 0.87. The questionnaire was administered directly and retrieved the same way from the respondents by the researcher with the help of two research assistants in each of the universities visited. The strategies adopted ensured 100% return rate of the questionnaire. The collection of the students CGPA was also hitch free-perhaps because, the Registrars of the universities visited gave approval and directives, to that effect, to the officers in charge of exams and record offices of their universities based on official request presented to the universities by the researchers. The data for this study was analyzed using the statistical package for social sciences (SPSS). Mean and standard deviation were the descriptive statistical tools used to analyze the data in order to answer research question 1. To answer research question 2, that sought the magnitude of relationship between opportunity career choice factors and academic achievement of VTEP Students, Pearson product moment correlation coefficient was used. The hypothesis was tested using Pearson Product Moment Correlation Coefficient. The decision to use Pearson Product Moment Correlation Coefficient as a statistical tool was supported by Uzoaqulu (1998) who opined that, Pearson Product Moment Correlation Coefficient is the most sensitive tool for measures of correlation because it gives more reliable result.

#### Results

The presentation of the result was done in line with the research questions that guided the study and the hypothesis that was postulated.

**Research Question 1:** What are the perceived opportunity related factors that influenced students' choice of career in Vocational and Technology Education Programmes (VTEP) in universities in Northern Nigeria?

Table 2: Mean Ratings and Standard Deviations of Responses of Students on Perceived Opportunity Related Factors that Influence Choice of Career in VTEP

S/N	Perceived opportunity related factors that influenced			
	career choice of the students	$\overline{\mathbf{X}}$	SD	Decision
1	High career flexibility in VTEP influenced my choice	3.82	1.15	Agree
2	Self-employment opportunity in VTEP influenced my choice	4.02	1.21	Agree
3	Getting Job easily by VTE products influenced my choice	3.88	1.11	Agree
4	Opportunity of becoming an entrepreneur after completing VTEP	4.09	1.5	Agree
	influenced my choice			
5	More job opening for VTEP products influenced my choice	3.87	1.17	Agree
6	High chances of job promotion influenced my choice	3.53	1.24	Agree
7	Less floundering in VTEP influenced my choice	3.35	1.25	Disagree
8	Less chances of job shadowing in VTE influenced my choice	2.97	1.31	Disagree
9	Opportunity to interact with role models in VTE influenced my choice	2.47	1. 27	Disagree
10	Opportunity of receiving guidance and counselling service from experts influenced my choice	2.48	1.26	Disagree
11	Opportunity of receiving guidance and counselling service from experts influenced my choice	3.04	1.34	Disagree
12	The opportunity of attending a comprehensive secondary school influenced my choice	3.35	1.29	Disagree
13	Opportunity of passing through NCE (Tech/Bus/Agric./Home) program positively influenced my choice of VTEP	2.48	1.40	Disagree
14	Opportunity of coming into the university through pre-degree positively influenced my choice	2.46	1.38	Disagree
15	Opportunity of playing roles during childhood days relating to VTE influenced my choice	2.44	1.30	Disagree
16	Poor financial background influenced my choice	2.41	1.30	Disagree

Grand Mean

Key:  $\overline{X}$ = mean; SD = Standard deviation;

Table 2 showed that six out of the sixteen perceived opportunity related factors that in influence students' career choice has high mean rating ranging from 3.53 to 4.09. Based on the decision rule for answering this research question, that says, any item whose mean rating is 3.50 and above should be agreed as a factor, the six items were agreed as factors that influenced the students' choice of career in VTEP. The remaining ten items are items 47, 48, 49.50,51,52,53,54,55 and 56.Each had mean rating ranging between 2.43 and 3.35. These mean ratings are below this study's decision rule cut off Point of 3.50. So, the items were jettisoned as factors that influenced the students' choice of career in VTEP.

#### **Research Question 2**

What is the relationship between the perceived opportunity related factors that influenced career choice and academic achievement of students in VTEP in universities in Northern Nigeria?

Table 3: Pearson Product Moment Correlation Coefficient of the Relationship between the Perceived Opportunities Related Factors that Influenced Career Choice and Academic Achievement of Students in VTEP in universities in Northern Nigeria.

S/N	Correlation	$\overline{\chi}_{G}$	r	Df	Relationship
1	Perceived opportunity related career choice factors	3.53	0.14	185	Moderately correlated
2	Students CGPA	2.77			

Key:  $-\overline{X}_G$  = Grand mean; r = correlation co-efficient.; df: Degree of freedom.

Table 3 shows a correlation coefficient of 0.14 existing between opportunity related factors that influenced career choice and academic achievement of students in VTIZP. This shows that the relationship between the two variables is moderately positive.

# **Hypothesis Testing**

**H**<sub>01</sub>: There is no significant relationship between perceived opportunity related factors that influence career choice and academic achievement of students in VTEP in Universities in Northern Nigeria

Table 4: Two-tailed Pearson Product Moment Correlation Analysis of Significance of the Relationship between Opportunities Related Factors that Influence Career Choice and Academic Achievement of Students in VTEP in Universities in Northern Nigerian.

S/N	Correlation items	$\overline{X}_G$	R	R-crit	Df	NR	Decision
1	Perceived opportunity						
	related factors	2.35	0.14	1.97	1.85	187	Accept
2	Cumulative grade point						
	average of students	2.77					

Key:  $\overline{X}_G$  = Grand mean; r = correlation co-efficient; df = Degree of freedom: R-Crit = critical correlation co-efficient; level of significant = 0.05,: df = Degree of freedom; NR = Number of respondent.

Information on Table 4 show a calculated correlation coefficient value of 0.14 existing between the grand mean of opportunities related factors that influence career choice which is 3.35 and the CCPA of 277 which is the academic achievement of students in VTEP. This 0.14 correlation coefficient value shows an unusually low positive relationship between the correlated variables. The Table also shows a critical value of the correlation efficient of 1.97 existing between the two variables. By simple inspection, the critical correlation coefficient value is greater than the calculated correlation coefficient value for a 2-tailed test at 0.05 levels of significance; it means the two correlation coefficients are significantly different from each other. Based on the decision rule, for testing the hypothesis the null was retained.

## Findings of the Study

Based on the data collected and analyzed, the following findings emerged:

1. Out of the 16 perceived opportunity related career choice factors six were agreed by the VTEP students as factors that influenced their choice.

- 2. There is a low but positive correlation coefficient of 0, 14 existing between the perceived opportunities related factors that influenced career choice and academic achievement of students in VTEP in universities in Northern Nigeria.
- 3. There was no significant relationship between perceived opportunity related factors that influence career choice and academic achievement of students in VTEF in universities in Northern Nigeria.

## **Discussion of Findings**

The findings of research question I revealed that 6 out of the 16 perceived opportunity related career choice factors were rated high or were agreed with as factors that influenced their choice for a career in VTE. However, items 49 and 50 that had to do with "opportunity of interacting with role model in VTE and "opportunity of receiving guidance and counselling services" were rated low. 2.47 and 2.48 respectively. This means that these two items did not influence their career choice. It could therefore be inferred from this finding that, the low mean of students CGPA of 2.77, as depicted in Tables 2, 3 and 4 is due to lack of opportunity of interacting with role models in VTE and lack of opportunity of interacting with guidance and counselling experts before choosing their career. It could also be inferred that, if all the students had these opportunities, perhaps majority of them would be in educational programmes other than VTEP. Therefore, the low academic performance among VTEP students could be attributed to mismatch of person to career because of lack of clear career selection process and lack of opportunity of interacting with role models, career guidance and counselling experts. The finding in research question one corroborates the findings of Oladele (2000), Tuchel (2002) and Hewitt (2090). Each one of these researchers carried out separate studies on factors that influence career choice and academic achievement. All the researchers found out that, the opportunity that brought or influence choice of a career and the envisaged job opportunity through a relation or friend after graduation are strong motivators that make some people to choose a career. And that, the same forces do motivate the individuals to work hard, academically towards satisfying work or employment requirement, through which, they hope, their psychological, social and economic needs will be met. Furthermore, these researchers, Tuehel, Michael and Oladele asserted that, ifa child has the opportunity of interacting with role models in a career, coupled with the opportunity of receiving guidance and counselling service, high academic performance will not be by chance. Meaning, the high performance will then be the effect of the appropriate career information which in turn informed correct fit between the student and the career.

The finding of research question two revealed that a moderately positive correlation coefficient of 0.14 exist between the perceived opportunity related factors that influence career choice and academic achievement of students in VTEP in Universities in Northern Nigeria. Besides, the mean of CGPA of the students studied is 2.77. This is rather low. This signifies that the students are generally low academic achievers. Such low academic achievers, if sent into the classroom to teach, certainly, improvement of the quality of education at all levels in Nigeria will be far from being achieved. This low correlation coefficient which translates to low academic achievement may be attributed to lack of opportunity to interact with role models and experts in guidance and counselling before choice of career was made. This finding is in agreement with findings of Oladele (2000), Tuchel (2002) and Michael (2002) who reported that there is a strong relationship between opportunity related factors and academic achievement of students. These researchers concluded that the opportunity that brought or influence choice of a career and the envisaged job opportunity through a relation or a friend after graduation are strong motivators that make some people to choose a career. And that, the same forces do motivate the individuals to work hard, academically, towards satisfying the envisaged work or employment requirement, through which, they hope, their psychological, social and economic needs will be met.

The finding relating to the hypothesis showed that, there is no significant relationship between perceived opportunity related career choice factors and academic achievement or students in VTEP. This discovery does not mean absence of relationship, but it is saying, the relationship between the variables in this study is not significant-it is low. Furthermore, if the correlation coefficient were zero or negative then, we could conclude that there is no relationship between the variables in question, In other words, the low positive correlation does not necessarily mean that there is no causations. Rather, the low positive correlation coefficient is only suggesting that it has provided a low but reliable predictor of the effect of perceived opportunity related career choice factors on the academic

achievement of students in VTEP. So, the observed low but positive correlation coefficient between the perceived opportunities related career factors and academic achievement of students in VTEP may not be attributed to chance occurrence. Therefore, the finding is not misleading. This finding is in line with the findings of Oladele (2000), Tuchel (2002) and Michael (2012). Each one of them carried out a separate study that, in part, determined the significance of relationship between factors that influence career choice and academic achievement. Based on their findings concluded that, the opportunity that brought or influence choice of a career and the envisaged job opportunity through a relation or friend after graduation are strong motivators that make some people to choose a career. And that, the same forces do motivate the individuals to work hard, academically, towards satisfying work or employment requirement, through which, they hope, their psychological, social and economic needs will be met. Furthermore, these researchers. Tuchel. Michael arid Oladele asserted that, if a child has the opportunity of interacting with role models in a career, coupled with the opportunity of receiving guidance and counselling service, high academic performance will not be by chance. This means that, the high performance will then be the effect of the appropriate career information and correct lit between person and the career. This finding is also congruent with the theories of Holland (1959) and Bandura (1977). These theorists saw a chosen career as a product arising from combination of factors (forces) that influenced the individual. According to these theorists, those forces include opportunities of receiving experiences in the individuals' social and physical environments before the choice of the career was made. These researchers also believed that, envisaged job or work opportunities do serve as vectors that motivate individuals to choose a career. They believe that, the same job opportunity also motivates individuals to work hard, academically, towards obtaining a good certificate that will show his /her academic achievement. It is agreeable therefore that, opportunities of receiving enhancing experiences in an individual's environment do influence career choice which does in turn influence academic achievement and retention in the programme.

#### Conclusion

Based on the findings of this study, Firstly, Perceived opportunity related factors do collectively influence career choice among students in VTEP. Secondly, there is indeed positive relationship between factors that influence career choice and academic achievement of students in VTEP in Universities in Northern Nigeria. The third matter of concern is that, there is indeed incidence of under academic achievement among students in VTEP- due to perhaps miss match of the students to the programmes on which most of the students are. This mismatching is attributable to lack of opportunities such as having to interact with guidance and counselling experts, having occupational information and lack of opportunity of having a clear process for making career choice in the universities where the study was carried out.

#### Recommendations

The following recommendations were made based on the findings and conclusions drawn.

- 1. Prospective Technology Education students need to have a clear process of choosing a career in universities in particular. The first year in a University should be a year of preparation. During the year, three steps to be followed are recommended; the first step isthat the students should be given opportunity to know themselves, that is to know their personality; second, students should be given opportunity of receiving occupational information; third, the students should interacting with career guidance and counselling experts. All these should be ensured before choice of career is made. This will eliminate floundering and thus avail the students opportunity to make wise career choice.
- 2. Lack of enabling physical and social environment that should have been provided to the students by the family, society, the secondary schools and the Universities they attended was another missing link that caused mismatching of students to their careers which in turn caused poor academic performance among VTEP students. It is therefore recommended that, before career choice, the students should be exposed to friendly physical and social environmental experiences so that they would become emotionally, mentally well-adjusted stable. This will enable them to make wise career choice.
- 3. The little educational guidance the students may have received at the end of their junior secondary education was just to enable them choose a cluster of subjects offered at senior secondary level, that will lead to final choice of a career. The first year in the University is the

- best opportunity a student would have to make well informed career choice. Therefore, there is need for career guidance and counselling services to be intensified in the universities.
- 4. Since it was found that the students studied were generally low academic achievers, there is need for government to insist on employing only professionally trained and experienced vocational and technology education teachers to teach VTEP students in universities. This way, the difficulty in teaching and learning the VTEP subjects would be eliminated and thus avail the students opportunity of always receiving quality teaching. This will ensure high academic achievement and attrition will not be contemplated by the students.

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