

Vocational Maturity And Intellectual Ability As Correlates Of Vocational Choice Of Senior Secondary School Students In Nasarawa State, Nigeria

Victoria Idoko Momoh

(Ph.D) Bingham University, Karu, Nasarawa State, Nigeria

Abel Ebiega Enokela

(Ph.D) Federal College Of Education Ofeme-Ohuhu, Abia State, Nigeria

Abstract

This study investigated the relationship of between Vocational Maturity and Intellectual Ability and career choice of among senior secondary school Students in Nasarawa State. Specific variables considered are vocational self-concept, competence and skills, attitudes, interest, intellectual reasoning, perception and memory. The study adopted a correlation survey design with a sample size of 367 students, obtained from a population of 146,616 students in Nasarawa State. Two research instruments were used for collection of data for the study, comprising a self-structured questionnaire titled “Vocational Maturity and Vocational Choice Scale (VMAVCS) and adapted Akinade Vocational Interest Survey (AVIS). The instruments were validated by two experts from G & C departments and confirmed to be valid. The Pearson Product Moment Correlation was adopted as the statistical tool for the study at 0.05 level of significance. Findings of the study revealed that there is a significant positive relationship between vocational self-concept and intellectual reasoning on career choice; vocational attitude and intellectual memory on career choice; vocational attitude and intellectual memory on career choice; and vocational interest and intellectual rate of learning on career choice on career choice. In conclusion, there is a significant positive relationship between vocational maturity, intellectual ability and career choice among senior secondary school students in Nasarawa State, Nigeria. The study recommended that it is important for educators, counsellors, and parents to support students in developing both aspects of vocational self-concept and intellectual reasoning in order to make informed and satisfying career choices.

Key words: Vocational Maturity, Intellectual Ability, Vocational Choice, Career Awareness, Students

Date of Submission: 22-04-2025

Date of Acceptance: 02-05-2025

I. Introduction

The process of making a choice is usually complex and peculiar to individual's reasoning capability and the social influencing space the individual interacts with (Idoko & Sabo, 2020). The media is a career influencing agents has been found in studies to be an important factor in students' career decisions of individuals (Yunusa, Jaafar, Ismail, & Othman, 2022). Secondary school level of education is a crucial stage in the life of students as they face challenges of making vocational decisions and choices which may eventually determine their future livelihood. Students accessing higher institutions in Nigeria sometimes lack direction of course selection and could explain their reasons chosen courses of study. Career awareness provides complete understanding of possible career fields and opportunities (Mbaka, Mwanzia, & Murungi, 2023; Tusharjit & Biman, 2024). Oduor (2019) observed that graduates find employment in fields that are neither consistent with their professional qualifications nor consistent with their career goals. This makes the role of counselling so compelling to provide directions to students to enhance their career decisions (Abdullah, et al, 2018). Students need to develop a set of skills to help make career decisions that could guarantee peace of mind in the world of work. According to Idoko et al (2020) career choice can be influenced by multiple factors including personality, interests, self-concept, cultural identity, globalization, socialization, role model, social support and available resources such as information and expected occupational financial benefits. However, influencers of career choice among students that are of interest to this study are vocational maturity and intellectual ability. Career decision-making among higher secondary school students is an area of keen interest among scholars in the field of Psychology (Hammoud, Bakkar, Abu-Hilal, & Al Rujaiabi, 2019) because the future of students are

dependent upon the choice of career they make today based on the career interest. It is not merely a decision of a moment but a complex and difficult process spanning years, if not a lifetime.

Vocational maturity is a constellation of physical, psychological and social characteristics that can influence how an individual does in a given career. It refers, broadly, to the individual's readiness to make informed, age-appropriate career decisions and cope with career development tasks. Vocational maturity indicators in this study include: vocational self-concept, vocational competence, vocational attitude and vocational interest. Self-concept is a person's perceptions of themselves, formed through their experiences with and interpretations of their environment, and impacted by others' evaluations (Marsh, Pekrun, & Lüdtke, 2022). Vocational self-concept refers to how an individual thinks or regards himself/herself, irrespective of what other people think about him concerning a vocation he/she is about to choose. According to Adediran, Fayemi and Adebajo (2015), the more realistic an individual is in terms of understanding of himself/herself as well as the characteristics of different vocations, the better his choice of vocation can be satisfied. Another indicator of vocational maturity is vocational competence which involves knowledge, skills, abilities, and attributes that form a person perception about career. According to Safavi and Bouzari (2019) career competence enhances career adaptability. Vocational maturity also involves vocational attitude. Attitude is the accumulation of information about an object, person, situation or experience which forms an individual's opinion or predisposition towards that thing; and can enhance career adaptability in individuals (Rahim, Jaafar, & Arsad, 2021). Vocational maturity entails also vocational interest. Vocational interest can be defined as individual's likeness toward particular occupation; to get attracted it, to like it, and to be satisfied with it (Kumar, 2022). Personal interest could play a major role on the career choice of an individual (Choe, Lee, & Read, 2020).

The process of career choice transcends vocational maturity. Thus, intellectual ability which is also a variable in this study equally has a role to play in the process. Intellectual ability describes, and identifies the ability of the human mind to reach correct conclusions about what is true and what is false in reality; and how to solve problems (Jennings & Kemp-Welch, 2017; Colman, 2018). Intellectual ability in this study has the following indicators: intellectual reasoning, intellectual perception, intellectual memory and intellectual rate of learning. Intellectual reasoning is associated with the acts of thinking and cognition, and involves using one's intellect (Michael, 2016; Hintikka, 2013; Moshman & Geil, 2018). Intellectual perception is the ability to use the five senses; touch, sight, sound, smell, and taste to be aware and learn from the environment. Thus, students need intellectual perception by using their sense organs to understand various occupations so that could help them to be guided in their career decision making process. Intellectual memory is the capacity to take in, compare, and recall data. Memory refers to processes and systems that are responsible for storing, retrieving and using information when the original source of information is unavailable. In addition, intellectual rate of learning closely relates with memory but not identical (Sumrall et al., 2016).

Vocational maturity (vocational self-concept, competence, attitude and interest) and intellectual ability (intellectual reasoning, perception, memory and learning) could influence vocational choices of students. Thus, the interplay of vocational maturity and intellectual ability could provide a mix that can facilitate the career decisions of students.

Research Questions

In pursuance of the objectives of this study, the following research questions are asked;

- i. What is the relationship of the joint interaction of vocational self-concept and intellectual reasoning and career choice?
- ii. What is the relationship of the joint interaction of vocational competence and intellectual perception and career choice?
- iii. What is the relationship of the joint interaction of vocational attitude and intellectual memory and career?
- iv. What is the relationship of the joint interaction of vocational interest and intellectual rate of learning and career?

Statement of the Hypotheses

- i. There is no significant relationship between the joint interaction of vocational self-concept and intellectual reasoning and career choice.
- ii. There is no significant relationship between the joint interaction of vocational competence and intellectual perception and career choice.
- iii. There is no significant relationship between the joint interaction of vocational attitude and intellectual memory and career.
- iv. There is no significant relationship between the joint interaction of vocational interest and intellectual rate of learning and career.

II. Method And Procedure

This study adopted the correlation survey design. The population of the study comprised of 146,616 Senior Secondary School students in SSS 1 from 472 public secondary schools in Nasarawa State. The simple random sampling technique was used to draw a sample of 379 students. The instruments for the conduct of the research is a self-structured questionnaire entitled: "Vocational Maturity, intellectual ability and Career choice questionnaire (VMIACCQ)" and the adapted "Akinade Vocational Interest Survey (AVIS)." The instruments for the study were a close ended type of questionnaires with a reliability coefficient 0.76 and 0.79 respectively, using Cronbach Alpha reliability method. VMIACCQ instrument was developed by the researcher and AVIS was constructed by Akinade. Both of them consist of two sections, Section 'A' which deals with the bio-data of respondents. Section 'B' contained questionnaire items based on 4-point rating scale, strongly agreed (4), agreed (3), disagreed (2) and strongly disagreed (1); and required respondents to tick (☐) only one option on each item presented in the questionnaire. The benchmark for the measurement was put at 2.50. Thus, a mean score of 2.50 and above was regarded as being in agreement with the statement of a response item; while any that was below the 2.50 was adjudged as being in disagreement.

III. Literature Review

Rituparna and Tribeni (2020) carried out a study on vocational maturity among high school students of Sonitpur District of Assam to find out the level of vocational maturity among high school students using descriptive survey method with a sample of 5 secondary schools consisting of 100 students. The researcher found an average vocational maturity in most of the students with no significant difference between vocational maturity of male and female high school students. Manivannan and Saminathan (2018) carried out a study career maturity of secondary students using normative survey method with a sample of 200 students studying in Nagappattinam district, Tamil Nadu. The sample was selected by using simple random sampling technique. The study confirmed high level of career maturity among the students with no significant difference based on location and school type (i.e. Government and Private). Maxwell and Godson (2017) examined the vocational self-concept and occupational aspiration among secondary school students in Rivers State. The study adopted a descriptive survey design. The population of the study was 3,150 SS1 students; and a sample of 312 of SS1 students was selected through stratified random sampling technique. The findings of the study among others showed that the vocational self-concept has significant relationship with students' occupational aspiration. Kanimozhi and Ganesan (2017) carried out a study to examine intellectual reasoning ability and career decision among higher secondary students in Madurai District in India with a sample of 303 students selected a stratified random sampling techniques. The findings revealed a positive correlation between mathematical achievement and reasoning ability. This could influence vocational reasoning ability in alignment with academic achievement. Abdullah, Hussin, Shonubi, Ghazali & Mansor (2018) carried out a study to examine vocational decision-making competence, self-knowledge, and occupational exploration in Malaysia with a sample of 1655 graduating students from universities in Malaysia, and adopted the cluster sampling method. The result showed positive relationship between self-knowledge, occupational exploration, and self-confidence and attitude that will lead to work-related engagement. Inácio, Oliveira and Santos (2018) examined intellectual memory styles and performance of students in career choice with a sample of 370 students from public schools. The results showed significant relationship of intellectual memory and career choice of students who participated in study. Meyer (2015) examined students' intellectual perceptions of life skill development in project based learning schools in Minnesota. Data for the study were obtained both from rural and urban location. The results showed students' intellectual perceptions of their life skills were positive and that project-based learning helped them develop multiple life skills including, but not limited to communication, collaboration, problem-solving, responsibility, and time management. Hina (2015) examined factors affecting student's attitude towards technical education and vocational training with a sample of 300 students of Technical Education and Technical and Vocational Institutes under the umbrella of TEVTA Punjab (Central, North, and South). The results of the study revealed that parental influence, peers influence, socioeconomic status and career & job potential variables are statistical significant which impact on the student decision towards TEVT. Love (2015) examined students' interest as correlate of career aspiration of senior secondary school students in Rivers State. The population of the study comprised of senior public secondary school students in Obio/Akpor Local Government Area of Rivers State. A sample of 200 senior public secondary students was drawn through stratified sampling technique. The results showed that there was significant relationship between students' interest and their career aspiration. Jimoh (2014) investigated the impact of high rate of learning on career choices of the female secondary school students in Ondo West Local Government of Ondo State, Nigeria using a descriptive survey design and adopted a purposive sampling technique to select a sample of 600 from 3(three) schools. The study established impact of the high rate of learning on career choices.

IV. Results And Discussion

Mean statistics and standard deviation were used to answer and analyze research questions. Any item with mean score of 2.50 and above is in agreement while those scores below 2.50 are regarded to be in disagreement with the statement. For hypotheses whose p-values were found to be more than 0.05, were rejected while for those less than 0.05 they were accepted. Out of the 379 research questionnaires that were distributed, only 367 (96.8%) were retrieved back while 12 (4.2 %) were lost. Thus, the retrieved questionnaires were used for analysis in this study.

Data Presentation on Vocational Maturity and Intellectual Ability

Testing of Hypothesis

All the null hypotheses were tested using Pearson Product Moment correlation coefficient at 0.05 level of significance.

Hypothesis 1: There is no significant relationship between the joint interaction of vocational self-concept and intellectual reasoning and career choice.

Table 9: Summary of Table on Pearson's Product Moment Correlation Showing Significant Relationship between the Joint interaction of Vocational Self Concept and Intellectual Reasoning and career choice

Variables	Career Choice	N	Mean	r	r ²	p-value	Decision
Vocational Self Concept	Realistic	367	3.4	0.170	0.069	0.022	Significant
	Investigative	367	3.38	0.121	0.058	0.010	Significant
Intellectual Reasoning	Artistic	367	2.4	0.247	0.083	0.041	Significant
	Social	367	2.01	0.142	0.063	0.031	Significant
	Enterprising	367	3.51	0.121	0.058	0.000	Significant
	Conventional	367	3.43	0.252	0.084	0.021	Significant
Average of r-cal				0.176			

Table 9 indicates the summary of Pearson's Product Moment Correlation shows significant positive relationship between the joint interaction of Vocational Self Concept and Intellectual Reasoning on career choice. Results indicate calculated r-values of 0.17, 0.121, 0.247, 0.142, 0.121, and 0.252 for Realistic, Investigative, Artistic, Social, Enterprising, and Conventional respectively. The average r-calculated value for all the career choice is given as 0.176.

Also, results show that realistic kinds of career choice, there was a significant positive relationship between the interaction of vocational self-concept and intellectual reasoning and career choice ($r\text{-cal} = 0.170$, $r^2 = 0.069$, $p\text{-value} = 0.022$). For investigative kinds of career choice, there was a positive significant relationship between the interaction of vocational self-concept and intellectual reasoning on career choice ($r\text{-cal} = 0.121$, $r^2 = 0.058$, $p\text{-value} = 0.010$). For artistic kinds of career choice, there was a significant positive relationship between the interaction of vocational self-concept and intellectual reasoning on career choice ($r\text{-cal} = 0.247$, $r^2 = 0.083$, $p\text{-value} = 0.041$). Social kinds of career choice, there was a significant positive relationship between the interaction of vocational self-concept and intellectual reasoning on career choice ($r\text{-cal} = 0.142$, $r^2 = 0.063$, $p\text{-value} = 0.031$). Enterprising kinds of career choice, there was a significant positive relationship between the interaction of vocational self-concept and intellectual reasoning on career choice ($r\text{-cal} = 0.121$, $r^2 = 0.053$, $p\text{-value} = 0.000$). Finally in Conventional kinds of career choice, there was a significant positive relationship between the interaction of self-concept and intellectual reasoning on career choice ($r\text{-cal} = 0.252$, $r^2 = 0.084$, $p\text{-value} = 0.021$). It is observed from the results that the p-values of r (probability values) obtained for all the career choices were less than 0.05 level of significance. Hence, there is a significant positive relationship between the interaction of vocational self-concept and intellectual reasoning on career choice.

Hypothesis 2: There is no significant relationship between the joint interaction of vocational competence and intellectual perception and career choice.

Table 10: Summary of Table on Pearson's Product Moment Correlation Showing Significant Relationship between the Joint interaction of Vocational Competence and Intellectual Perception on career choice

Variables	Career Choice	N	Mean	r	r ²	p-value	Decision
Vocational Competence	Realistic	367	2.5	0.779	0.147	0.025	Significant
	Investigative	367	2.4	0.866	0.155	0.017	Significant

Intellectual Perception	Artistic	367	2.5	0.738	0.143	0.067	Insignificant
	Social	367	2.6	0.742	0.144	0.083	Insignificant
	Enterprising	367	2.9	0.641	0.133	0.020	Significant
	Conventional	367	2.6	0.562	0.125	0.048	Significant
Average of r-cal				0.721			

Table 10 indicates the summary of Pearson's Product Moment Correlation Showing Significant relationship between the joint interaction of vocational competence and intellectual perception and career choice. Results indicate calculated r-values of 2.5, 2.4, 2.5, 2.6, 2.9 and 2.6, for realistic, investigative, artistic, social, enterprising, and conventional career choice respectively. The average r-calculated value for all the career choice is given as 0.0721.

Also, results show that realistic kinds of career choice, there was a significant positive relationship between the joint interaction of vocational competence and intellectual perception and career choice ($r\text{-cal} = 0.779$, $r^2 = 0.147$, $p\text{-value} = 0.025$). For investigative kinds of career choice, there was a significant positive relationship between the joint interaction of vocational competence and intellectual perception and career choice ($r\text{-cal} = 0.866$, $r^2 = 0.155$, $p\text{-value} = 0.017$). For artistic kinds of career choice, there was an insignificant positive relationship between the joint interaction of vocational competence and intellectual perception and career choice ($r\text{-cal} = 0.738$, $r^2 = 0.143$, $p\text{-value} = 0.0067$). Social kinds of career choice, there was an insignificant positive relationship between the joint interaction of vocational competence and intellectual perception on career choice ($r\text{-cal} = 0.742$, $r^2 = 0.144$, $p\text{-value} = 0.083$). Enterprising kinds of career choice, there was a significant relationship between the joint interaction of vocational competence and intellectual perception and career choice ($r\text{-cal} = 0.641$, $r^2 = 0.133$, $p\text{-value} = 0.020$). Finally in Conventional kinds of career choice, there was a significant positive relationship between the joint interaction of vocational competence and intellectual perception and career choice ($r\text{-cal} = 0.562$, $r^2 = 0.125$, $p\text{-value} = 0.048$). It is observed from the results that the p-values of r (probability values) obtained for Realistic, Investigative, Enterprising and Conventional were less than 0.05 level of significance. Hence, there is a significant relationship between the joint interaction of vocational competence and intellectual perception and career choice (realistic, investigative, enterprising and conventional kinds of career choices)

Hypothesis 3: There is no significant relationship between the joint interaction of vocational attitude and intellectual memory and career.

Table 11: Summary of Table on Pearson's Product Moment Correlation Showing Significant Relationship between the Joint interaction of vocational attitude and intellectual memory on career choice

Variables	Career Choice	N	Mean	r	r ²	p-value	Decision
Vocational Attitude	Realistic	367	2.7	0.472	0.115	0.019	Significant
	Investigative	367	2.7	0.433	0.110	0.012	Significant
Intellectual Memory	Artistic	367	2.5	0.340	0.097	0.014	Significant
	Social	367	2.0	0.371	0.102	0.034	Significant
	Enterprising	367	2.3	0.216	0.077	0.039	Significant
	Conventional	367	2.6	0.156	0.061	0.041	Significant
Average of r-cal				0.331			

Table 4.11 indicates the summary of Pearson's Product Moment Correlation showing significant positive relationship between the joint interaction of vocational attitude and intellectual memory and career choice among senior secondary school students in Nasarawa State. Results indicate calculated r-values of 2.7, 2.7, 2.5, 2.0, 2.3 and 2.6 for realistic, investigative, artistic, social, enterprising, and conventional respectively. The average r-calculated values for all the career choice is given as 0.331.

Also, results show that realistic kinds of career choice, there was a significant positive relationship between the joint interaction of vocational attitude and intellectual memory and career choice ($r\text{-cal} = 0.472$, $r^2 = 0.115$, $p\text{-value} = 0.019$). For investigative kinds of career choice, there was a significant positive relationship between the joint interaction of vocational attitude and intellectual memory and career choice ($r\text{-cal} = 0.433$, $r^2 = 0.110$, $p\text{-value} = 0.012$). For artistic kinds of career choice, there was a significant positive relationship between the joint interaction of vocational attitude and intellectual memory and career choice ($r\text{-cal} = 0.340$, $r^2 = 0.097$, $p\text{-value} = 0.014$). Social kinds of career choice, there was a significant positive relationship between the joint interaction of vocational attitude and intellectual memory and career choice ($r\text{-cal} = 0.371$, $r^2 = 0.102$, $p\text{-value} = 0.034$). Enterprising kinds of career choice, there was a significant positive relationship between the joint interaction of vocational attitude and intellectual memory and career choice ($r\text{-cal} = 0.216$, $r^2 = 0.077$, $p\text{-value} = 0.039$). Finally in Conventional kinds of career choice, there was a significant positive relationship between the joint interaction of vocational attitude and intellectual memory and career choice ($r\text{-cal} = 0.156$, $r^2 = 0.061$, $p\text{-value} = 0.041$).

0.102, p -value = 0.034). Enterprising kinds of career choice, there was a significant positive relationship between the joint interaction of vocational attitude and intellectual memory and career choice (r -cal = 0.216, r^2 = 0.077, p -value = 0.039). Finally in Conventional kinds of career choice, there was a significant positive relationship between the joint interaction of vocational attitude and intellectual memory and career choice (r -cal = 0.156, r^2 = 0.061, p -value = 0.041). It is observed from the results that the p -values of r (Probability values) obtained for all career choices were less than 0.05 level of significance. Hence, there is a significant positive relationship between the joint interaction of vocational attitude and intellectual memory on career choice.

Hypothesis 4: There is no significant relationship between the joint interaction of vocational interest and intellectual rate of learning and career choice.

Table 12: Summary of Table on Pearson's Product Moment Correlation Showing Significant Relationship between the Joint interaction of vocational attitude and intellectual memory on career choice

Variables	Career Choice	N	Mean	r	r^2	p-value	Decision
Vocational Attitude	Realistic	367	2.8	0.22	0.078	0.013	Significant
	Investigative	367	2.3	0.323	0.095	0.011	Significant
Intellectual Memory	Artistic	367	2.7	0.134	0.061	0.009	Significant
	Social	367	2.2	0.173	0.069	0.052	Insignificant
	Enterprising	367	2.3	0.126	0.059	0.030	Significant
	Conventional	367	2.6	0.261	0.079	0.023	Significant
Average of r-cal				0.206			

Table 12 indicates the summary of Pearson's Product Moment Correlation showing significant positive relationship between the joint interaction of vocational attitude and intellectual memory and career choice among senior secondary school students in Nasarawa State. Results indicate calculated r -values of 2.7, 2.7, 2.5, 2.0, 2.3 and 2.6 for realistic, investigative, artistic, social, enterprising, and conventional respectively. The average r -calculated value for all the career choice is given as 0.0.206.

Also, results show that with realistic kinds of career choice, there was a significant positive relationship between the joint interaction of vocational attitude and intellectual memory and career choice (r -cal = 0.472, r^2 = 0.115, p -value = 0.019). For investigative kinds of career choice, there was a significant positive relationship between the joint interaction of vocational attitude and intellectual memory and career choice (r -cal = 0.433, r^2 = 0.110, p -value = 0.012). For artistic kinds of career choice, there was an insignificant positive relationship between the joint interaction of vocational attitude and intellectual memory and career choice (r -cal = 0.340, r^2 = 0.097, p -value = 0.014). Social kinds of career choice, there was a significant positive relationship between the joint interaction of vocational attitude and intellectual memory and career choice (r -cal = 0.371, r^2 = 0.102, p -value = 0.034). Enterprising kinds of career choice, there was a significant positive relationship between the joint interaction of vocational attitude and intellectual memory and career choice (r -cal = 0.216, r^2 = 0.077, p -value = 0.039). Finally in Conventional kinds of career choice, there was a significant positive relationship between the joint interaction of vocational attitude and intellectual memory and career choice (r -cal = 0.156, r^2 = 0.061, p -value = 0.041). It is observed from the results that the p -values of r (probability values) obtained for all career choices were less than 0.05 level of significance. Hence, there is a significant positive relationship between the joint interaction of vocational attitude and intellectual memory and career choice.

This study analyzed relationship between vocational maturity, intellectual ability and career choice among senior secondary school students in Nasarawa State, Nigeria. Four hypotheses were analyzed and are discussed below.

The first hypothesis revealed that there is a significant positive relationship between the joint interaction of vocational self-concept and intellectual reasoning and career choice. On vocational self-concept, the finding of the study is in line Maxwell and Godson (2017) who noted that vocational self-concept had significant relationship with students' occupational aspiration; significant difference between students with high self-concept and their occupational aspirations. This finding of this study also agrees with Kanimozhi and Ganesan (2017) who found a positive correlation between mathematics and reasoning ability; by implication ability can also foster career decision.

The second hypothesis reveals a significant relationship between the joint interaction of vocational competence and intellectual perception and career choice (realistic, investigative, enterprising and conventional kinds of career choices). On vocational competence, the findings of this study reveal its similarity with the works of Jaafar, et al (2018) which showed that the relationship between employability (competence) skills and

career choice was high; and the work of Abdullah, et al (2018) which confirmed significant relationship between self-knowledge and career decision-making. On intellectual perception on career choice, the finding of this study also harmonizes with the work of Meyer (2015) which confirmed students' positive intellectual perceptions of life skills.

The third hypothesis reveals that there is a significant relationship between the joint interaction of vocational attitude and intellectual memory and career choice. The finding agrees with Hina (2015) who confirmed that career and job potential variables were statistical significant in impacting students' decision towards TEVT. On the other hand, Love (2015) results showed that there was significant relationship between students' interest and their career aspiration.

The fourth hypothesis revealed that there is a significant relationship between vocational interest and intellectual rate and career choice. The finding is in line with the finding of Love (2015) which confirmed significant relationship between students' interest and their career aspiration; and Jimoh (2014) who established impact on the high rate of learning on career choices.

V. Conclusion And Recommendations

The four hypotheses tested revealed that there is a significant relationship between the joint interaction of vocational self-concept and intellectual reasoning and career choice; there is a significant relationship between the joint interaction of vocational competence and intellectual perception and career choice; there is a significant relationship between the joint interaction of vocational attitude and intellectual memory and career choice; there is a significant relationship between the joint interaction of vocational attitude and intellectual memory and career choice among senior secondary school students in Nasarawa State in all the occupational domains(realistic, investigative, artistic, social, enterprising, and conventional).

It is important to note that career choice is a complex process influenced by various factors, including personal interests, values, skills, and socioeconomic factors. However, this study concentrated on vocational maturity and intellectual ability as important factors that could determine career choice among senior secondary school students.

General Recommendations

Based on the findings of the study the following recommendations are made;

- i. Teachers and parents should support students to develop vocational self-concept and intellectual reasoning in order to make informed and satisfying career choices.
- ii. Vocational teachers in secondary schools should relate teaching topics to career decision-making in order to improve vocational competence and intellectual perception of students.
- iii. Government and educational policy makers should promote critical thinking skills in schools to increase positive vocational attitude and intellectual memory on career choice among secondary school educational system.
- iv. Students should explore their interests, skills, and values when considering career options and seek guidance from career counsellors
- v. The government and curriculum designers should put in place a programme that help students develop a positive character to enhance their perception towards career choice.

Implications for Counselling

This study has implications for counselling. The following are some of the implications:

- i. Counsellors need to from time to time help students to attain a high level of vocational maturity and intellectual ability in order to guide them to choose careers that would best suit their psychological make-ups.
- ii. Counselling services should be established in all secondary schools in Nasarawa State for optimal career benefits for students in the state.
- iii. Counsellors need to relate with principals, teachers, and other stakeholders to give career guidance programmes like career day or week to enlighten students more about career options through the joint efforts of the school and resource persons who may give career talks during such periods.
- iv. Counselling services should incorporate field trips to various organizations where students can have access to different professionals to interact with them as doing so can increase the vocational maturity and vocational intellectual ability.

Limitations of the Study

In the cause of carrying this research the following limitations befell the researcher;

- i. The findings in this study depended on the honesty of respondents in answering the questionnaires. The tendency to agree more on socially desirable answers rather than fully and truly express their opinions could

- result in false data to be accepted as result. This is possible limitations especially among adolescents who could easily be influenced by peer pressure.
- ii. Respondents were reluctant in providing the required information which resulted in taking more time in search of willing participants to participate in the study. It is also possible that the attitude of some of the students who refused to participate in the study could have negatively influenced the attitude of those who participated towards the study.
 - iii. Although the sample size is adequate to carry out the study, participants were drawn from only from Akwanga, Keffi and Lafia; and the sample might not be representative of all students in different school types in Nasrawa State.
 - iv. Typical of survey, the study was cross-sectional in nature, reaching many respondents within a short time and could not be as penetrating as case studies.

References

- [1] Abdullah, N., Hussin, N., Shonubi, O.A., Ghazali, S.R. & Abu Talib, M. Career Decision-Making Competence, Self-Knowledge, And Occupational Exploration: A Model For University Students. *Journal Of Technical Education And Training* V.10 N.1 P.72-81 2018.
- [2] Adediran, A.A., Fayemi, J.A. & Adebajo, Y. A. (2015). The Adoption Of E-Learning To The Study Of Social Studies At The Secondary School Levels In Nigeria. *Asia Pacific Journal Of Contemporary Education And Communication Technology*, 1(1), 1-7.
- [3] Choe, S. Y., Lee, J. O., & Read, S. J. Self-Concept As A Mechanism Through Which Parental Psychological Control Impairs Empathy Development From Adolescence To Emerging Adulthood. *Social Development*, V. 29 N. 3 P. 713-731 2020
- [4] Colman, A.M. (2018). *A Dictionary Of Psychology* (3rd Ed.). Oxford [Etc.]: Oxford University Press
- [5] Hammoud, M. S., Bakkar, B. S., Abu-Hilal, M. M., & Al Rujaibi, Y. S. M. Relationship Between Psychological Hardiness And Career Decision-Making Self-Efficacy Among Eleventh Grade Students In Sultanate Of Oman. *International Journal Of Psychology And Counselling*, V.11 N.2 P. 6-14 2019
- [6] Hina, A. (2015). Factors Affecting Student's Attitude Towards Technical Education And Vocational Training. *International Conference On Business, Economics And Management (ICBEM2015)*, Dec. 15-16, Pp. 60-63
- [7] Hintikka, J. (2013). *Philosophy Of Logic*. Encyclopædia Britannica. Encyclopædia Britannica, Inc.
- [8] Idoko, V. M. & Sabo, A.U. (2020). Influence Of Vocational Maturity On Secondary School Students Vocational Choice In The Federal Capital Territory, Abuja. *Icheke Journal Of The Faculty Of Humanities*, 18(3), 237-251.
- [9] Jaafar, S., Zakaria, N. & Rasheid, N. (2018). Career Choice And Employability Skills For Vocational College Students. *Journal Of Physics: Conference Series*. 1049 (1), 1-15
- [10] Jennings, J. & Kemp-Welch, T. (2017). *The Century Of The Intellectual: From Dreyfus To Salman Rushdie*, Intellectuals In Politics, Routledge: New York.
- [11] Jimoh, A. (2014). Impact Of High Rate Of Learning On Career Choices Of The Female Secondary School Students In Ondo West Local Government Area Of Ondo State, Nigeria. *European Scientific Journal*. (1), 1857-7881.
- [12] Kanimozhi, P. & Ganesan, P. (2017). Intellectual Reasoning Ability And Career Decision Among Higher Secondary Students. *International Journal Of Research*, 5(6), 471-475.
- [13] Kumar, J. Vocational Interest (Literary Area) Of Secondary School Students In Relation To Their Locus Of Control And Certain Demographic Variables. *Quest Journals Journal Of Research In Humanities And Social Science* V. 10 N. 8 2022 P: 354-363 ISSN(Online):2321-9467 www.questjournals.org
- [14] Love, N. (2015). Students' Interest As Correlate Of Career Aspiration Of Senior Secondary School Students In Rivers State. *Global Journal Of Educational Research*, 14, 61-66
- [15] Marsh, H.W. Pekrun, R. & Lüdtke, O. Directional Ordering Of Self-Concept, School Grades, And Standardized Tests Over Five Years: New Tripartite Models Juxtaposing Within- And Between-Person Perspective, *Educational Psychology Review* V. 34 P. 2697-2744 2022
- [16] Maxwell, E & Godson, U.I. (2017). Self Concept And Occupational Aspiration Among Secondary School Students In Rivers State. *International Journal Of Innovative Psychology & Social Development*, 5(2):1-4
- [17] Mbaka, E. K., Mwanzia, R. M., & Murungi, J. M. School Determinants And Career Awareness Among Students In Public Secondary Schools In Meru-South Sub-County, Tharaka Nithi County. Kenya, *Journal Of Pedagogy And Curriculum*, V.2 N.1 P 58-67. 2023. <https://doi.org/10.51317/Jpc.V2i1.436>
- [18] Michael, B. (2002). Career Choice Factors Of High School Students. Anunpublished Research Paper Submitted To The Graduate College/university Of Wisconsin-Stout
- [19] Jmoshman, D. & Geil, M. Collaborative Reasoning: Evidence For Collective Rationality Collaborative Reasoning: Evidence For Collective Rationality 2018. [Online] Available At: <https://digitalcommons.unl.edu/cgi/viewcontent.cgi?referer=http://sinetwork.live/reasoning-elements/&httpsredir=1&article=1053&context=edpsychpapers>.
- [20] Oduor, H. Work-Related Stress And Employee Commitment At Delta State Polytechnic, Ogwashi Uku, Delta State Of Nigeria. *Global Journal Of Management And Business Research* 2019
- [21] Rahim, N.S.A., Jaafar, W.M.W., & Arsad, N. Career Maturity And Career Decision-Making Self-Efficacy As Predictors Of Career Adaptability Among Students In Foundation Program, Universiti Putra Malaysia *Asian Journal Of University Education (AJUE)* V. 17 N.4 P.464-477 2021.
- [21] Rituparna, C. & Tribeni, S. (2020). A Study On Vocational Maturity Among High School Students Of Sonitpur District Of Assam. *Palarch's Journal Of Archaeology Of Egypt/ Egyptology*, 17 (7), 15862 – 15870.
- [22] Safavi, H. P., & Bouzari, M. The Association Of Psychological Capital, Career Adaptability And Career Competency Among Hotel Frontline Employees. *Tourism Management Perspectives*, V. 30 P. 65-74 2019.. <https://doi.org/10.1016/j.tmp.2019.02.001>
- [23] Tusharjit T. & Biman H. A Study On Career Awareness Among Senior Secondary School Students In North Lakhimpur Area Of Lakhimpur District *International Journal For Multidisciplinary Research* V. 6 N.4 P.1-9 2024.
- [24] Yunusa, S., Jaafar, W.M.B. W., Ismail, A., & Othman, W.N.B.W. A Study On The Relationship Between Family Peer Group Media And Career Decision Making Among Undergraduates In Nigeria. *International Journal Of Academic Research In Progressive Education And Development*, V. 11 N.1 P. 319-330 2022. <http://doi.org/10.6007/IJARPED/V11-I1/11971>