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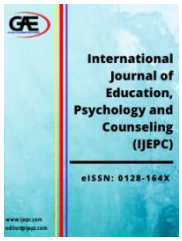

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IMPACT OF CAREER INTERVENTION ON VOCATIONAL PREFERENCE AMONG SECONDARY SCHOOL STUDENTS OF NIGERIA: A COMPARATIVE STUDY

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Abstract:

This comparative study aimed to assess the impact of career intervention on the vocational preference of secondary school students in the Hadejia Emirate of Jigawa State Nigeria. The research objectives included examining the effects of career intervention on vocational preference before and after the intervention, exploring gender differences in the intervention's impact, and investigating variations in the intervention's effect among students in different academic fields. A quasi-experimental design was employed, involving a pre-test post-test control group approach. Twelve secondary schools were randomly selected from the Hadejia, Kafin Hausa, and Birniwa education zones, with a sample size of 240 students evenly distributed between male and female participants. The research instrument, the Students' Vocational Preference Scale (SVPS), consisted of demographic information and statements related to vocational preference. The SVPS utilized a five-point Likert scale, and its validity and reliability were established through expert review and test-retest procedures. Statistical analysis involved paired-sample t-tests, independent sample t-tests, and analysis of variance (ANOVA). The study's findings indicated a significant difference in the effect of career intervention on vocational preference, suggesting a positive impact on students' vocational preferences. However, the intervention's effect did not significantly differ among students in commercial, arts, and science fields. Career intervention was not Gender sensitive. The study contributes to the understanding of the effectiveness of career interventions for secondary school students in Nigeria, emphasizing the importance of providing guidance and support to facilitate informed career decision-making.

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Keywords:

Career Intervention, Vocational Preference, Secondary Schools

Introduction

The organisation of career intervention in a school system as a pioneer demands considerable tact and skills. Many laudable ideas and programmes have failed because of the starting off or wrong steps. Career intervention was developed by Frank Parson in the year 1908, a time he was faced with the challenge of giving a name to what he thinks the school should provide as a service to school leavers about to go into the world of work. According to Parson in his book '*choosing a vocation'*, the term career intervention was referred to the process of assisting people choose a vocation, prepare for it, and attain efficiency and success. Frank Parson developed the idea of matching career is based on the ideal of matching career with personality traits of an individual (Akinade, 2016).

However, in Nigeria, career intervention was First mentioned in 1959 at St. Theresa 's Secondary School, Oke-Ado Ibadan by the Irish Rev. Sisters who were concerned about what the final year students at the school would be engaged in after leaving school. So, they invited some knowledgeable and influential people to advise the students on what careers existed. These people were not trained guidance counsellors, but the Rev. Sisters felt that they knew more about the world of work. The result of the work was that 60 students that graduated were properly placed. In addition, the gusto was sustained, and the professionals decided to hold regular meetings (Akinade, 2016).

The major skill of at Junior secondary school level as Denga (1986) stated include making tentative career choice, exploring key occupational areas, and assessing self-potentials such as interest, aptitude, and abilities to relate to occupation types, learning to become familiar with occupational clusters, the use of guest lectures and career visits to important establishments to facilitate a process of meaningful decision making, developing skills combine what to do with how to do it. Secondary school is a transition, this is a vocational exploration stage where students must be aware of occupational areas as well as assess their own abilities and interest in relation to the occupational clusters. Students at this level are capable of developing awareness of relevant factors to be considered in decision making. The group techniques to be used will chiefly comprise a description of the key type of opportunities engaged by different workers. Reason why people choose certain occupations and not others will be discussed (Denga, 1986).

As a result of the success of that programme, they continued with meetings, inviting representatives from different schools and many heads of schools and government agencies. In 1961, they formed an association called Ibadan career council (ICC) which was later called Nigerian Career Council. They continued organizing workshops to teachers, career masters, among others. The process continued up to the creation of Counselling Association of Nigeria (CAN) which was later metamorphosed to CASSON in 1976. The association organized workshops, conferences to teachers, students, professional bodies, doctors, among others (Makinde, 1976).

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In Nigeria, students lack adequate occupational information before they enter occupations. In some cases, the students concern themselves with reading of courses in the schools without due regard to the marketability and employability of the graduates in the field. Vocational preference is not one that is made abruptly, it is a continuous process. Career is a series of jobs that a person has in a particular area of work, usually involving more responsibilities as time passes (Okonkwo, 2011).

Sambo (2016) secondary school students in Nigeria generally are faced with problem of vocational or career choice towards the end of their secondary school education; this is because of the poor form of guidance programs being run in secondary schools. It is therefore the opinion of this study to stress the importance of vocational and career programme in guidance and counselling which is organized in secondary school level as to facilitate in the students the idea of vocational and career readiness and learning motivation that will eventually transform to the vocational maturity of the students. Re

Literature Review

Career Intervention

Career intervention according to this research refers to the combination of guidance and counselling. The process of assisting students to overcome their vocational problems using career interventions through the application of vocational theories, skills, and techniques.

OECD and Word Bank (2004) defined career intervention as a service and activities intended to assist individuals of any age and at any point through their life, to make educational, training, and occupational choices and to manage their career. The activities may take place on an individual or group bases and may be face-to-face or at a distance (including help lives and web-based services) such services may find in schools, universities, and colleges, in training institution, in public employment services, in the workplace, in the voluntary or community sector and in the private sector.

The EU Council of Ministers Resolution on Lifelong Learning (2004) defined career intervention as a series of activities that train individuals of any age, at any moment of their lives, to identify their own abilities, competences, and interests, to make decision that affect their education, work, and other areas where they might gain and apply abilities and competent. Career intervention is a developmental process by which students became aware of the interrelationship among interests, abilities, school, work, family, and life roles in relation to academic and career planning.

Career intervention is a lifelong process of career development; it usually empowers students to make a successful transition from the school to the world of work, from job to job, across their life span and to be productive citizen. Career intervention is a process by which students became aware of the world of work, explore career options, and prepare for post-secondary opportunities. Career intervention can be defined as a comprehensive, developmental programme designed to assist individuals in making and implementing informed educational and occupational choices. In simple words, it is a journey on which people develop to make mature and informed decisions. It is the act of guiding or showing the way; it is the act of seeking advice. Career guidance is the guidance given to individuals to help them acquire the knowledge, information, skills, and experience necessary to identify career options, and narrow

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them down to make one career decision. This career decision then results in their social, financial, and emotional well-being throughout. Career intervention refers to the "services intended to assist people, of any age at any point throughout their lives to make educational, training, and occupational choices and manage their careers. Career intervention is defined as a programme to inform and update learners about furthering their studies, study opportunities, different study fields and tertiary institutions, accreditation and it also includes motivation for learners to apply in time, plus available bursaries, scholarships, and leaderships information (Erasmus, 2009). Career intervention is conceptualized by Coetzee and Roythorne-Jacobs (2012) as a career service focused on helping individuals to articulate their behavioural repertoire and then translate it into vocational choices (Dangana, 2017).

Denga (1986 cited in Sambo 2016), surveyed the vocational need of Nigeria secondary school youth and identified the following crucial notes: need to choose an occupation of interest, to relate academic preparation to a job, to develop effective job-hunting skill, to obtain vocational information, need to understand self-potentials, to consult somebody about career plans, to develop skills for job of interest, to choose an occupation that is acceptable to parents and "significance to others" in society, to choose a career that has a bright future, and choosing a career is important in society.

Several studies were conducted with regards to career intervention on vocational preference, however, many of that research have some limitations with regards to methodologies, approaches, population sample and the participants, furthermore, many of this research were conducted in either University, college or senior secondary school students (Dabula (2013), Shumba, (2012), Ahmed et al (2021) and Shelftel (2014). This research was conducted on Junior secondary school students (class III) of Hadejia emirate, Jigawa state Nigeria.

Vocational Preference

Vocational preference is described as the process of choosing one vocation among a group of vocations. While making the vocational preference, the individual spends a time in which he/she determines suitable/unsuitable vocations for himself/herself. There are subjective and objective factors in vocational preference. Subjective factors are interest, demand, skill and social status; objective factors are payment, income and promotion, it means social security and economic return (London et al., 1972). The three variables that become prominent in the vocational preference of the individual are skill, value, and interest. While making a choice, the individual compares his very own details (interest, lifestyle, values, skill etc.) with the options at hand (vocations, sectors, location of companies, social security, etc.) and by means of this matching he/she chooses a vocation (Varçın et al., 2005).

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Problem Statement

The high rate of unemployment and underemployment among school leavers in Nigeria is a serious issue for concern. It is contended that one of the contributing factors of unemployment cum underemployment among school leavers in the country could be inadequate or lack of career intervention to students while in and out of school. In other words, they are not given sufficient and relevant vocational or occupational information which will enable them to graduate from school to a suitable occupation. It is through a graduate's occupation that he/she is expected to serve the country, contribute and at the same time benefit from economic growth and national development. In a case where is not properly guided on career decision making by a professional guidance counsellor; it would not be possible for such individual to contribute to economic and national development after graduation (Quintini G., 2019).

Okolie (2014) on another viewpoint, career intervention programme in secondary schools has not been given the proper attention it deserves; and until the proper attention is given to this form of education programme, majority of secondary school students will continue to have difficulty in career decision making, this accretion was supported by Jita L. (2023), Alao K. A. (2017), Egbule E. (2022) and Out M. S. & Omeje J. C. (2022). He also asserted that many secondary school students lack ideas on which course to study in the higher education institution after leaving secondary school. Also, the list of vocations appears inexhaustible, likewise the variety of persons with varied attributes; and certainly not all persons are suitable for all vocations because every vocation needs certain background, preparation, and aptitude; therefore, only those that have the requirements succeed. More so, the advent of civilization, industrialization and technological development opened a wide variety of new occupations; the problem of selecting occupation by students becomes complex and difficult. It's also clear that no support from government to promote career intervention programme not only in Hadejia emirate, but Nigeria in general, most of Nigerian secondary schools don't have guidance and counselling officer also. The issue of gender also needs to be considered.

In view of the above, this research will investigate the impact of Career Intervention on Vocational Preference Among Secondary School Students of Nigeria: A Comparative Study

Objectives

The research objectives were developed to guide the direction of this study:

i. To examine the effect of career intervention on vocational preference among Junior secondary school students of Hadejia Emirate, Jigawa State Nigeria before and after intervention
ii. To examine gender difference in the effect of career intervention on vocational preference among Junior secondary school students of Hadejia Emirate, Jigawa State Nigeria before and after intervention.
iii. To examine the difference in the effect of career intervention on vocational preference between commercial, Arts and Science Junior secondary school students of Hadejia Emirate, Jigawa State Nigeria before and after intervention.

Research Questions

The research questions were developed to guide the direction of this study:

i. What is the effect of career intervention on vocational preference among Junior secondary school students of Hadejia emirate, Jigawa state Nigeria before and after the intervention?

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ii. What is the effect of career intervention on vocational preference between male and female Junior secondary school students of Hadejia emirate, Jigawa state Nigeria before and after the intervention?

iii. What is the effect of career intervention on vocational preference between Commercial, Art and Science Junior secondary school students of Hadejia emirate, Jigawa state Nigeria before and after the intervention?

Hypotheses

H_0 : There is no significant difference in the mean score of vocational preference among junior secondary school students of Hadejia emirate, Jigawa state Nigeria before and after intervention. [paired-sample t-test]

H_0 : There is no significant difference in the mean score of vocational preference between Commercial, Art and Science Junior secondary school students of Hadejia Emirate, Jigawa state Nigeria after intervention [ANOVA on the post-test score]

H_0 : There is no significant difference in the mean score of vocational preference between male and female junior secondary school students of Hadejia emirate, Jigawa state Nigeria after intervention [independent sample t-test on the post-test score]

Methodology

Research Design and Study Area

The study was conducted using quasi-experimental design in the form of pre-test post-test control group design. The term quasi-experimental includes non-random assignment of participants to groups for the experiment (Creswell, 2012). The quasi-experimental method of obtaining information was based on the assignment of the respondents into two groups: the treatment and the control group. The selection of the design was made because it has the advantage of testing the results obtained from the post-test in order to analyze the effectiveness of the treatment or otherwise when compared with the control group. The participants will be divided into two groups: treatment and control group. Robson (2002) Quasi experimental design is suitable because the variables are isolated, controlled and manipulated. The independent variable is manipulated, and the dependent variable is measured. The research will be quantitative in nature, the data will be collected, tested, and analyze using statistical tools.
The study was conducted at twelve selected Junior secondary schools of Hadejia emirate, Jigawa state Nigeria. Hadejia emirate comprised three education zones with seven local governments. Hadejia education zone, comprised Hadejia, Kaugama and Malam Madori local governments, Birniwa Education zone comprised Birniwa, Guri and Kirikasamma local governments, while Kafin Hausa education zone comprised Kafin Hausa and Auyo local government respectively.

Participants

Twelve schools were randomly selected from the three-education zone of the emirate (Hadejia, Kafin Hausa and Birniwa education zone respectively). The sample of two-hundred and fourty were drawn from the population. Each school has ten (10) male and ten (10) female.

The use of two hundred and fourty (240) as sample size was guided based on the fact that sample size is determined to some extent by the style of the research (Cohen, Marrison & Manion, 2007). Gay (2009) also recommends that a minimum of thirty (30) respondents is

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adequate for experimental research. Kulwinder S. (2020) opined that the minimum number of sample size of quasi experimental research design should be 30-40. Simon G. (2018) is of the view that the minimum of 30 sample is enough to make geraralisation of the general population on quasi-experimental research. Therefore, being experimental research, two hundred and fourty (240) respondents were utilized as a sample of the study.

Instrumentation And Data Collection

In the process of collecting the data of the study in the selected samples, the researcher developed a questionnaire titled 'Students' Vocational Preference Scale (SVPS)' to collect the data. SVPS was designed by the researcher to extract information from the respondents (students) as regards vocational preference. The information was collected from pretest to both the groups, then experimental group received a lecture as treatment package, then the posttest was conducted to collect the posttest data. The use of questionnaires enabled the researcher to measure what he intends to measure. The questionnaire contained two sections (section A and B). Section 'A' has demographic information such as school name, school location, subject, and gender. Demographic information assisted the researcher to draw conclusion to whether there will be difference in the effect of treatment in term of gender, subject, and location. Section 'B' contained statements on vocational preference. The responses were in form of five Likert scales (Strongly Agree, Agree, Strongly Disagree, Disagree and Undecided). The items on the scale have two directional natures, some will be positive, while some will be negative. The content validity of Student's Vocational Preference Scale (SVPS) was given to expert in Test and Measurement, Guidance and Counselling and Psychology in the Department of Education, Bayero University, Kano, and faculty of Education Sule Lamido University Kafin Hausa to ascertain the appropriateness and relevance of the items in relation to the research objectives as well as adequacy of the instrument in measuring what it intended to measure. The items were rendered valid by experts after scrutiny.

In order to find the reliability of Student's Vocational Preference Scale (SVPS) test re-test procedure was used. Test re-test of reliability is determined by administering the same test twice to the same candidates under approximately the same conditions, the scores obtained on the two occasions are then correlated to establish the degree to which two sets of results corresponded. A test that yields similar scores on two administrations where no significant event has taken place is highly reliable, the result found is 0.85, that is to say, all items in the instrument appeared to be worthy of retention. The items in the instrument have good internal consistency and they were similar to one another hence it was adjudged to be statistically reliable for the research.

Data Analysis Procedure

The data obtained in this study were statistically analyze using mean and standard deviation to answer the research question, t-test for independent sample to test two hypotheses (hypothesis number 1 and 2), because it is the appropriate statistical package for determining the significance difference between two groups (variables) and Analysis of Variance (ANOVA) was used to test hypothesis number 3 to find out the significant difference between commercial, Arts and Science students. All hypotheses were tested at 0.05 level of significance.

Gay (2019) maintained that t-test for significant sample is the appropriate statistical tool for determining the significance differences between two groups in the same direction. Bichi (2018) asserted that t-tests allow researchers to determine whether the means of two samples

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differ so much that the samples are unlikely drawn from the same population. Howell (2017) the independent-samples t-test evaluated the difference between the means of two independent or unrelated groups. That is, we will evaluate whether the means for two independent groups are significantly different from each other.

Data was obtained from a total of two hundred and forty (240) participants drawn from eight local governments of Hadejia Emirate, Jigawa state Nigeria. The data analysis and results began with presentation of descriptive statistics of the respondents, followed by hypotheses and summary of the research findings.

Table: Percentage Distribution of the Respondent's by Gender

S/N	Gender	Frequency	Percentage (%)
1	Male	120	50.0
2	Female	120	50.0
	Total	**240**	**100**

The table above shows the percentage distribution of the respondents by Gender. 120(50.0%) are male and 120(50.0%) are female. The result above shows that equal number of male students and female students took part in the study.

Table: Percentage Distribution of the Respondent's by Subject

S/N	Subject	Frequency	Percentage (%)
1	Science	155	64.5
2	Arts	82	34.2
3	Commercial	3	1.3
	Total	**240**	**100**

The table above shows the percentage distribution of respondents by Subject, 155(64.5%) are Science Students, 82(34.2%) are Art students and 3(1.3%) are Commercial Students. The result above shows that Science Students are many than Arts and Commercial Students.

Table: Percentage Distribution of the Respondent's by Education zone

S/N	Education Zones Of Hadejia Emirate	Frequency	Percentage (%)
1	Hadejia Education zone	80	33.33
2	Kafin Hausa Education Zone	80	33.33
3	Birniwa Education Zone	80	33.33
	Total	**240**	**100**

The above table shows the percentage distribution of respondents by educational zones of Hadejia Emirate, Jigawa state Nigeria. 80 (33.33%) from Hadejia education zone, 80 (33.33%) from Kafin Hausa Education zone and 80 (33.33%) from Birniwa Education zone respectively.

Research Findings

What is the effect of career intervention on vocational preference among junior secondary school students of Hadejia emirate, Jigawa state Nigeria before and after intervention?

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Table: Effect of Career Intervention on Vocational Preference Among Junior Secondary School Students.

Career Intervention	**N**	$\overline{X}$	**SD**
Before Intervention	240	41.31	5.0
After Intervention	240	41.42	5.4

From table 5, the total number of respondents was 240, before intervention had a mean score of 41.31 and standard deviation (SD) of 5.0 in the after intervention with a mean score of 41.42 and SD of 5.4 with a mean gain of 0.04. the difference between the groups is 0.4, even though the difference is not high, but this indicated career intervention has significant effect on vocational preference among junior secondary school students of Hadejia emirate, Jigawa state Nigeria.

Research finding 2: What is the effect of career intervention on vocational preference between male and female junior secondary school students of Hadejia emirate, Jigawa state Nigeria before and after intervention?

Table: Gender Effect of Career Intervention on Vocational Preference Among Junior Secondary School Students.

Gender	N	Before	After	Gain
Male	120/120	40.45	40.66	0.21
Female	120/120	42.88	42.89	0.01

From table, the total number of respondents were 240, before intervention, male had a mean score of 40.45 and 40.66 after intervention with a mean gain of 0.21 while female had a mean score of 42.88 before intervention and 42.89 after intervention with a mean gain of 0.01. Even though the difference is not high, but this implies that career intervention has significant effect on gender in vocational preference among junior secondary school students of Hadejia emirate, Jigawa state Nigeria.

Research finding 3: What is the effect of career intervention on vocational preference between commercial, art and science junior secondary school students of Hadejia emirate, Jigawa state Nigeria before and after intervention?

Table: Effect of Career Intervention on Vocational Preference Between Commercial, Art and Science Secondary School Students.

Course	N	Before	After	Mean gain
Art	82	40.45	40.66	0.05
Commercial	3	44.00	44.04	0.04
Science	155	41.17	41.36	0.19

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From table, the total number of art students is 82, commercial 3 and science 155, before intervention, Art students had a mean score of 40.45 and 40.66 after intervention with a mean gain of 0.05, commercial students had a mean score of 44.00 and 44.04 after intervention with a mean gain of 0.04 and science students had a mean score of 41.17 before intervention and 41.36 after intervention with a mean gain of 0.19. This implies that career intervention on vocational preference between commercial, art and science secondary school students, the difference is more significant on science students.

Below are the results of the three hypotheses tested which were drawn from the objectives of the study. The hypotheses were tested in order to find out whether we can accept or reject them.

Ho1: There is no significant difference in the mean score of vocational preference among junior secondary school students of Hadejia emirate, Jigawa state Nigeria before and after intervention.

Table: Paired Sample T-Test Table of Vocational Preference Among Junior Secondary School Students of Hadejia Emirate, Jigawa State Nigeria Before and After Intervention

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	tve1	41.31	240	5.17	.32961
	tvve2	41.44	240	5.06	.32255

		N	Correlation	Sig.
Pair 1	tve1 & tvve2	240	.988	.000

		Paired Differences							
					95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	Df	Sig.
Pair 1	tve1 - tvve2	-.13821	.80635	.05141	-.239	-.037	-2.688	245	.00

A paired sample t-test was conducted to determine the significant difference in the mean score of vocational preference among junior secondary school students of Hadejia emirate, Jigawa state Nigeria before and after intervention. The result of a pretest (before intervention) shows that the mean score is 41.31 with the standard deviation of 5.17, and the result after intervention shows that the mean score is 41.44 and the standard deviation is 5.06 with the T-value of -239 which is equal to 2.66 and the p-value is .00. The result indicated that t-value is greater than the p-value, therefore, the hypothesis which stated that there is significant difference in the effect of career intervention on vocation preference among junior secondary school students of Hadejia emirate is rejected, meaning, there is significant difference in the effect of career intervention on vocational preference among junior secondary school students of Hadejia emirate, Jigawa state Nigeria.

The 95% confidence interval of the difference between the means ranged from [-.239 to .037] and indicated a difference between the means of the samples. therefore, the hypothesis is rejected that there is significant difference in the mean score of vocational preference among junior secondary school students of Hadejia emirate, Jigawa state Nigeria before and after intervention.

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Ho2: There is no significant difference in the mean score of vocational preference between Commercial, Art and Science Junior secondary school students of Hadejia Emirate, Jigawa state Nigeria after intervention.

Table: *Summary Of One-Way Analysis Of Variance (ANOVA) Showing* Vocational Preference Between Commercial, Art And Science Junior Secondary School Students Of Hadejia Emirate, Jigawa State Nigeria After Intervention.

Mode of Entry	*N*	*Mean*	*SD*
Science	155	41.3	*4.85*
Arts	82	41.5	*5.52*
Commercial	3	44.0	*3.61*

ANOVA

Model	SS	Df	MS	F	Sig	Remark
Between Groups	20.980	2	10.490	0.408	0.666	NS
Within Groups	6249.606	243	25.719			
Total	48712.71	176				

Table above shows the summary of one-way Anova between Commercial, Art and science students after intervention. The Mean score of science students is 41.3 with the standard deviation of 4.85, Art students 41.3 with standard deviation of 5.55, and commercial students with 44.0 with standard deviation of 3.61. The sum of square (SS) between group is 20.980, while within group is 6249.606. Standard deviation between groups is 2 and within groups is 243. The mean square (MS) of between groups is 10.490 and within Groups is 25.719. The F-value is 0.408 and the P-value is 0.666, therefore, the p-value 0.666 is greater than 0.05 level of significance, this indicated that the hypothesis which stated that there is no significant different in the effect of career intervention on vocational preference between commercial, art and science junior secondary school students of Hadejia emirate is accepted.

Since there is no significance difference in the above table, Scheffe"s post-hoc analysis was used to locate the direction of the difference among the groups. This was to establish whether there was difference in the effect of career intervention on vocational preference between commercial, science and art Junior Secondary School Students (JSS 3). The table below shows Scheffe's post-hoc analysis.

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Table: Scheffes's Analysis of Vocational Preference Among Commercial, Art and Science Junior Secondary School Students of Hadejia Emirate, Jigawa State Nigeria After Intervention.

(I) Subject	(J) Subject	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Science	Arts	.37343	.48245	.741	-.8148	1.5617
	Commercial	-.91925	2.07215	.906	-6.0228	4.1843
Arts	Science	-.37343	.48245	.741	-1.5617	.8148
	Commercial	-1.29268	2.09033	.826	-6.4410	3.8556
Commercial	Science	.91925	2.07215	.906	-4.1843	6.0228
	Arts	1.29268	2.09033	.826	-3.8556	6.4410

The scheffe's post-hoc analysis was used to determine the significant differences between groups since non-significant ANOVA was conducted. It is aimed to identify the magnitude and direction of the differences in the vocational preference between commercial, science and art junior secondary school students of Hadejia emirate, Jigawa state Nigeria after intervention. The table above presents the differences in the mean scores, standard errors, significant levels (sig) and 95% confidence intervals for the comparison of the groups.

The comparison between science and Art shows the mean difference of 0.37343, standard error 0.48295, significant level (sig) 0.741 (P-value) and 95% confidence interval (-0.8148, 1.5617). The difference of vocational preference between science and Art students is 0.37348 and the P-value is 0.741 which is greater than the 0.05 which means the difference is not statistically significant, so we still accepted the null hypothesis which stated that there is no significant difference between career intervention on vocational preference between commercial, science and Art junior secondary school students of Hadejia emirate, Jigawa state Nigeria after intervention.

The comparison between science and commercial students shows the mean difference of -0.91925, standard error 2.07215, P-value (sig) 0.906 and 95% confidence interval (-6.0228, 4.1843). The difference between science and commercial students is -0.91925, but the p-value is 0.906 which is greater than 0.05 level of significance, the difference is not significant, therefore, the null hypothesis is also accepted.

The comparison between Art and commercial students shows the mean difference of 1.29268, standard error 2.09033, p-value (sig) 0.826 and 95% confidence interval (-6.4410, 3.8556), the difference in vocational preference between the two groups is 1.29268, but the P-value is 0.826 which is greater than 0.05 level of significance, therefore, the null hypothesis is also accepted.

From the Scheffe"s post-hoc analysis on perception of the three fields of study in the table above, it could be deduced that there was no significant difference between science and arts. It could also be deduced that there was no significant difference between science and commercial. Scheffe"s post-hoc analysis showed that there was no significant difference between arts and commercial. In general, the effect of career intervention on vocational preference between commercial, science and Art junior secondary school students of Hadejia emirate, Jigawa state Nigeria is not significant.

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Ho 3: There is no significant difference in the mean score of vocational preference between male and female junior secondary school students of Hadejia emirate, Jigawa state Nigeria after intervention.

Table 13: Mean Score of Vocational Preference Between Male and Female Junior Secondary School Students of Hadejia Emirate, Jigawa State Nigeria

Grouping Variable (School Type)	N	Mean	Std. Deviation	Df	T	Sig.	Decision
Male	120	40.66	5.19	244	1.00	0.47	Accepted
Female	120	42.88	4.48				

From the table above, t-test was conducted to find out the effect of career intervention on vocational preference between male and female junior secondary school students of Hadejia emirate Jigawa state Nigeria. The groups were divided into two equal parts, 120(50%) male and 120(50%) female. The male students mean score is 40.66 with the standard deviation of 5.19, and the female students mean score is 42.88 with standard deviation of 4.48. The t-value is 1.00 and the p-value is 0.47. Therefore, since the p-value 0.47 is greater than 0.05 level of significance $p>0.05$, the hypothesis which stated that there is no significant difference in the effect of career intervention on vocational preference between male and female junior secondary school students of Hadejia emirate, Jigawa state Nigeria is accepted.

Summary Of the Findings

Below is the summary of the findings of the research:

1. There is significant difference in the effect of career intervention on vocational preference among junior secondary school students of Hadejia emirate, Jigawa state Nigeria.
2. There is no significant difference in the effect of career intervention on vocational preference between Commercial, Art and Science Junior secondary school students of Hadejia Emirate, Jigawa state Nigeria.
3. There is no significant difference in the effect of career intervention on vocational preference between male and female junior secondary school students of Hadejia emirate, Jigawa state Nigeria, mean, career intervention on vocational preference is not gender sensitive.

Discussion

This study set out mainly to find out the effect of career intervention on vocational preference among Junior Secondary School students of Hadejia Emirate, Jigawa State, Nigeria. In the study, career intervention was conducted with a view of assisting students to make better vocational preference through the use of students' vocational preference and scale (SVPPS).

The first finding revealed that there is significant difference in the mean score of vocational preference among junior secondary school students of Hadejia emirate, Jigawa state Nigeria. This implied that career intervention is significant to Junior secondary school students of Hadejia emirate, Jigawa state Nigeria. The findings revealed that there is significant effect in the post test mean score of vocational preference of the respondents exposed to career intervention (treatment) and those in control group in favour of treatment group. This shows that career intervention had an effect on vocational preference.

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The research of Edwards (2011) career guidance activities as factors influencing career choice among form four secondary school students in Kisumu municipality, Kenya, Shumba (2012) career choice and subject selection among South African students using correlation design, Lent R. W., and Brown, S. D. (2020) career decision making, fast and slow: Toward an integrative model of intervention for sustainable career choice, Egbo (2017) the impact of vocational Guidance on career choice of secondary school students in Enugu South, Park I. et al (2020) the Effects of a Future Time Perspective–Based Career Intervention on Career Decisions and the research of Bama and Borokonda (2019) career guidance and students' career choice in the Kumba municipality, Meme Division, Cameroon are in line with this finding that career intervention has significant effect on vocational preference among Junior secondary school students of Hadejia emirate, Jigawa state Nigeria.

The second finding stated that, there is no significant difference in then effect career intervention on vocational preference between Commercial, Art and Science Junior secondary school students of Hadejia Emirate, Jigawa state Nigeria. This revealed that there is no significant effect of career intervention on vocational preference based on class subject area.

This study of Mohammad S., Shafata R., and Nabil N. (2022) study and compare a vocational preference of school going children, Reddy et al. (2011) Vocational Education Preferences and Interests of the Indian Undergraduate Students, Dayon (2018) the career choice of students: Basis for curricular offering of high schools in Region XI, Yamin-Ali J. (2014) subject selection at secondary school level- A case study Mattoo M. I. (2013) career choices of students at secondary level are relevant to this finding that career intervention on class subject is not subject sensitive.

The third finding was that there is no significant difference in the effect of career intervention on vocational preference between male and female junior secondary school students of Hadejia emirate, Jigawa state Nigeria. This shown that career intervention is not gender sensitive. Many empirical evidence supported this finding, some of them include the following.

Deniz et al. (2014) investigation of vocational interest and vocational preference in terms of gender and socio-economic status, Mattoo M. I. (2013) find the career choices of students at secondary level, Li, Y.; Zhao, Y. (2023) the Gender Gap in Job Status and Career Development of Chinese Publishing Practitioners also supported this finding and Kucuk, S. S., C¸ Oksan, S. (2023) current study aimed to investigate two points among junior and senior-level high school students confirmed that career intervention is a gender sensitive

Conclusion

In conclusion, this study focused on the impact of career intervention on vocational preference among secondary school students in Nigeria. The research highlighted the importance of career intervention in guiding students towards making informed career decisions and preparing them for the world of work. The study also aimed to investigate gender differences and differences among different streams of students (commercial, arts, and science) in terms of the effect of career intervention on vocational preference.

The findings of the study will contribute to addressing the high rate of unemployment and underemployment among school leavers in Nigeria. It emphasized the need for adequate and relevant vocational and occupational information to be provided to students, enabling them to

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make suitable career choices and transitions from school to the workforce. The research also highlighted the importance of professional guidance counselors in facilitating effective career intervention programs in secondary schools.

The research design employed in this study was a quasi-experimental design, specifically a pre-test post-test control group design. The sample consisted of 240 students from twelve selected secondary schools in Hadejia Emirate, Jigawa State, Nigeria. The data collected was analyzed using statistical tools to examine the impact of career intervention on vocational preference and to test the hypotheses.

Overall, the study aimed to contribute to the existing knowledge on career intervention in Nigeria and provide insights into the effectiveness of such interventions on students' vocational preferences. By identifying the positive outcomes of career intervention, policymakers, educators, and guidance counselors can implement and improve career intervention programs in secondary schools, ultimately benefiting students in making informed career decisions and increasing their chances of successful employment.

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