

## The Influence of Demographic Variables on Teachers' Occupational Interests in Public Secondary Schools in North Central Nigeria

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### **Abstract**

*The study examined the influence of demographic variables on teachers' occupational interests in public secondary schools in North Central Nigeria. The design adopted for the study was descriptive survey. The population for the study consisted of all professional teachers in public secondary schools in North Central Nigeria estimated to be 123,565 as at 2016 according to the Federal Ministry of Education. Multi-stage sampling procedure was used to show a sample size of 384 teachers comprising 153 males and 231 females. The sample size cut across four states within North Central Nigeria – Benue, FCT, Kwara and Plateau States. The instrument adopted for the study was a modified version of Bakare's Vocational Interest Inventory (VII) made up of sixty items. One research question and three hypotheses guided the conduct of the study. The data generated was analysed using simple percentages, mean, standard deviation, t-test and analysis of variance. Findings revealed that teachers' occupational interest in North-Central Nigeria was the enterprising interest type. The three demographic variables – gender, rank and state of domicile had varying degrees of influence on teachers' occupational interests. The authors recommended among other measures that employers of labour in the education sector should ensure that only individuals with requisite skills and interest in the teaching profession should be employed to teach in schools.*

**Keywords:** *Influence, Demographic variables, Teachers' occupational interests, Public secondary schools.*

### **Introduction**

Teachers are the prime movers of education. They are required to acquire and possess professional and intellectual skills and competences necessary for effective service delivery. This is facilitated through training and retraining to enhance capacity building for optimum productivity in terms of job performance and students' academic achievement and overall personality development. Beside manpower development which keep teachers abreast with current trends in global best practices in teaching and learning, their psychological and emotional compatibility with their work environment is equally a priority. This is because a teacher whose personality trait does not match his occupational or career environment cannot deliver optimally in the teaching profession. Occupational interests as defined by Holland (1997) referred to an individuals' natural inclination towards certain occupations that fits his or her personality type, compatibility between an individual's personality uniqueness and his work environment. There are many parameters that are brought to bear on teachers' job performance. Such parameters include among others, motivation, job satisfaction, availability of teaching facilities, students' attitudes towards their studies as well as school administrative factors. However, the issue of teachers' occupational interests as it hinges on their productivity has not been given much emphasis in recent years.

The model frequently used in occupational interest research is Holland's theory of occupational personalities and work environments (Holland, 1997). In this model, Holland organized interests into six types: realistic (R), investigative (I), artistic (A), social (S), enterprising (E) and conventional (C). Individuals with realistic interests are generally focused on working with things rather than people. Investigative interest tends to go along with enjoyment of science. Individuals with artistic interest tend to gravitate towards creative expressions and patterns. Social interests are focused on helping people through areas such as education, social work, religious work and counselling. Enterprising individuals enjoy business leadership and management positions, and individuals with conventional interest prefer highly structured environments. Just as Holland's model use interests to describe people, the theory also used six types of interests to depict specific environments. For example, individuals with social interests are likely to be found in a social environment in which their social needs are met and their interests are fostered.

Holland's theory contends that every individual resembles one of six basic personality types and as a result, manifest some of the behavioural traits associated with that type. Holland also defined six environments and declared that each environmental type can be assessed by surveying the occupants of that environment. The theory is built on six basic occupation:

1. In our culture, most people are one of six personality types: realistic, investigative, artistic, social, enterprising and conventional. Some refer to these as Holland's codes or RIASEC;
2. People of the same personality type working together create a work environment that fits their type. For example, when artistic persons are together on a job, they create a work environment that rewards creative thinking and behaviour – an artistic environment;
3. There are six basic types of work environments: realistic, investigative, artistic, social, enterprising and conventional. Work include doing things to achieve a purpose like paid and unpaid jobs, volunteering, sports or hobbies;
4. People search for environments where they can use their skills and abilities and express their values and attitudes. For example, investigative types search for investigative environment. Artistic people look for artistic environments and so forth;
5. People who choose to work in an environment similar to their personality type are more likely to be successful and satisfied if they choose a job, for example, that has an artistic environment, like choosing to be an actor or actress in a film show – an environment dominated by artistic type of people where creative abilities and expressions are highly valued; and
6. How you act and feel at work depends to a large extent on your workplace or environment. If you are working with people who have a personality type like yours, you will be able to do many things they can do and you will feel most comfortable with them.

The first interest congruence research began with Strong's development of occupational scales for the strong occupational interest bank (SOIB), (Strong, 1927). Although Strong never used the term congruence when describing occupational scales, these empirical keys were created to assess an individual's interest-fit with members of an occupation. Early research (Strong, 1943) showed a relation between scores on the occupational scales and job satisfaction. Kuder (1966) also developed empirical scales that are expected to be related to job satisfaction.

Holland's theory of occupational environments was first published in 1959 and has proved to be relatively robust despite rigorous criticisms and subjection to empirical testing. The theory has been revised and updated many times to the latest (1997) version.

Application of Holland's theory of occupational interests involve assessing individuals in terms of two or three prominent personality types and then matching the respective types with the environmental aspects of potential careers. The theory predicts that the higher the degree of congruence between individual and occupational characteristics, the better the potential for

positive career – related outcomes including satisfaction, persistence and achievement. The table below is a description of Holland’s personality types.

**Table 1: Descriptive of Holland’s personality types.**

Holland Type	Description	Examples of occupations
Realistic	Interest in activities involving motor coordination skills, physical strength and masculinity. People oriented towards the realistic type prefer acting out problems or being physically involved performing work tasks. They typically avoid tasks involving interpersonal and verbal skills and seek concrete rather than abstract problem solutions.	Automobile mechanics, Aircraft controller, electrician, surveyor, farmer
Investigative	Main characteristics include thinking rather than acting, organizing and understanding rather than dominating or persuading and associability rather than sociability. Investigative types prefer to avoid close interpersonal contact, though the quality of their avoidance seems different from that of their realistic colleagues.	Biologist, Chemist, Physist, Anthropologist, Medical Technologist, Geologist
Artistic	Manifestation of strong self-expression and relations with people indirectly through artistic expression are central to artistic types. They tend to dislike structure and prefer tasks emphasizing physical skills or interpersonal interactions. They tend to be introspective and much as in the manner of the investigative but differ in that their interests are much stereotypically feminine than masculine and they often relatively have little self-control and express emotion more readily than most people.	Composer, musician, stage director, writer, Actor/Actress, interior decorator
Social	Social types generally gravitate to activities that involve promoting the health, education or wellbeing of others. Unlike the realistic and investigative types, social types tend to seek close relationships. They are apt to be socially skilled and often averse to isolative activities as well as to activities that require extreme physical functioning or intellectual problem solving.	Teacher, religious leader, counsellor, clinical psychologist, care worker, speech therapist
Enterprising	Although often verbally skilled, enterprising types tend to use these skills for self gain rather than to support others as do social types. They are more frequently concerned about power and status as are conventional types, but differ in that they usually aspire to attain power and status, while the conventional types honour others for it.	Sales person, manager, business executive, television producer, sports promoter
Conventional	Typified by great concern for rules and regulations, great self-control, subordination of personal needs and strong identification with power and status, conventional types prefer structure and order and thus seek interpersonal and work situations where structure abounds.	Book keeper, court reporter, financial analyst, banker, cost estimator, tax expert

**Source:** (Holland 1966)

Three demographic variables – gender, rank and state of domicile will be used to assess their relative influences on teachers’ occupational interests in government secondary schools in North-Central Nigeria. Rank connotes the level of career progression of a teacher in his

employment. The various ranks a teacher attains in his career progression are Senior Education Officer (SEO), Education Officer II (EO II), Education Officer I (EOI), Higher Education officer (HEO), Principal Education Officer (PEO), Assistant Chief Education Officer (ACEO), Chief Education Officer (CEO), Assistant Director (AD) Deputy Director (DD) and Director (D).

State of Domicile refers to a state within the North Central Geo-political zone of Nigeria where a teacher is employed to teach. This covers seven (7) states among which are Benue, FCT, Kogi, Kwara, Nasarawa, Niger and Plateau. This study seeks to ascertain the influence of these variables on the occupational interests of teachers within the geo-political zone of Nigeria. No empirical work known to the researchers has investigated the influence of these demographic variables as they bear on teachers' occupational interests.

### **Statement of the Problem**

There has been increasing concern over the last five decades regarding the falling standard of education in Nigeria. Many factors have been deduced regarding this perennial situation. However, the teacher as a key player in the teaching-learning process is mostly implicated for this anomaly. Beside other teacher variables such as qualification, teaching experience, motivation and job satisfaction, their occupational interests is also very crucial. Perhaps teachers are not meeting up with public expectation in their job performance as a result of inappropriate occupational interests. Interest in the job may significantly influence the way and manner a teacher views his or her job. This psychological reality may have short or long term effect on the teachers' job performance in his/her daily work schedule. It could be the basis of perceived satisfaction or dissatisfaction which may ultimately affect his or her productivity (Ikeotuonye, Maisamari & Badu, 2003). This notion needs to be investigated. If the pattern or nature of a teacher interest in the job is not in harmony with individual personality, it may reflect a low level of enthusiasm with the job. As a consequence, productivity in terms of service delivery rendered by the teacher may fall below acceptable level. The recurring decimal of students' woeful performance in internal and external examinations especially at the secondary school level is a concern to all stakeholders in the education industry. Moreover, occupational interests may not operate in isolation. The extent to which demographic variables bear on teachers' occupational interests needs to be investigated. Hence, the main thrust of this study is to examine the influence of demographic variables on teachers' occupational interests in public or government secondary schools in North-Central Nigeria.

### **Purpose of the Study**

This study seeks to:

- i.** Determine the occupational interests of teachers in public secondary schools in North Central Nigeria;
- ii.** Ascertain the influence of gender on teachers' occupational interests in public secondary schools in North – Central Nigeria;
- iii.** Evaluate the influence of rank on teachers' occupational interests in public secondary schools in North Central Nigeria; and
- iv.** Ascertain the influence of state of domicile on teachers' occupational interests in public secondary schools in North-Central Nigeria.

### **Research Question**

The research question stated below shall be answered in the conduct of this study:

What is the pattern of teachers' occupational interests in public secondary schools in North – Central Nigeria?

### Hypotheses

The following research hypotheses shall be tested in the conduct of this study at 0.05% level of significance:

**HO<sub>1</sub>:** There is no significant difference in the occupational interests of teachers in public secondary schools in North Central Nigeria on the basis of gender.

**HO<sub>2</sub>:** There is no significant difference in the occupational interests of teachers in public secondary schools in North-Central Nigeria with regard to rank.

**HO<sub>3</sub>:** There is no significant difference in the occupational interests of teachers in public secondary schools in North-Central Nigeria with respect to state of domicile.

### Methodology

The research design adopted for the study is descriptive survey design. The population for this study consisted of all professional teachers in public or government secondary schools in North Central Nigeria. According to Department of Planning, Research and statistics, Federal Ministry of Education (FME), the total population of teachers in government secondary schools in North Central Nigeria as at 2016 stood at 123,565. The study used multi-stage sampling procedure in view of the large geographical coverage and a massive population involved in the study. First, the researchers used balloting to select four out of the seven states in North-Central Nigeria. The states randomly picked were Benue, FCT, Kwara and Plateau states with a population of 91,738 teachers' according to the Federal Ministry of Education (FME, 2016). Subsequently, a sample size of 384 teachers was drawn using stratified random sampling procedure recommended by Krejcie and Morgan (1970). The sample size consisted of 153 males and 231 females representing 39.8% and 60.2% respectively. Respondents were drawn from each of the three senatorial districts in each state that is a school from each senatorial district as presented below.

**Table 2: Sample Distribution of Respondents**

S/No	State	Name of Schools	No. of Teachers	Percentage
1.	Benue	GSS Gboko	35	<b>29.95</b>
		GMSS Makurdi	48	
		Wesley High School, Otukpo	32	
		<b>Total</b>	<b>115</b>	
2.	FCT	GSS Gwagwalada	36	<b>23.43</b>
		GSS Kwali	34	
		GSS Pyakasa	20	
		<b>Total</b>	<b>90</b>	
3.	Kwara	GGDSS Ilorin West	25	<b>19.28</b>
		Offa Grammar School, Offa	24	
		Govt. Tech. College, Lafugi	25	
		<b>Total</b>	<b>74</b>	
4.	Plateau	GSS Bankinladi	37	<b>27.34</b>
		GSS Mangu	35	
		GSS Garkawa, Shendam	45	
		<b>Total</b>	<b>105</b>	
<b>Grand Total</b>			<b>384</b>	<b>100%</b>

**Source:** Field Survey, 2019

The instrument used for the study is a modified version of Bakare's (1974) Vocational Interest Inventory (VII). The original version of the inventory contains 100 items featuring ten different work environments. The modified inventory contains sixty (60) items on several activities which are performed in six different kinds of jobs. The instrument consisted of two sections A



and B. section A consisted of respondents demographic data featuring gender, rank and state of domicile where respondents were requested to tick as appropriate. In section B, respondents were requested to tick on a 4 – point rating scale to indicate their degree of “like” or “dislike” against each activity. The statistical rating was (computed thus: like very much (4), like (3), dislike (2) and dislike, Very much (1). Each activity in the inventory represented a personality type and corresponding work environment (RIASEC).

The researchers personally administered the instrument to teachers in selected schools and retrieve them upon completion. The researchers also solicited the help of field assistants who were trained on the modality for administering and completing the questionnaire. The trained research assistants were insiders who were staff members of their respective schools. The questionnaire was mailed to the field assistant in the respective states and mailed back to the researchers upon completion. The data collected was analysed using simple percentages, mean scores, standard deviation, t-test and analysis of variance (ANOVA).

## Results

### Answer to Research Question

What is the pattern of teachers’ occupational interest in public secondary schools in North-Central Nigeria?

**Table 3: Occupational Interests of Teachers in North Central Nigeria (N – 384)**

Interest Areas	Mean	Std. Dev.	Rank
Realistic	3.005	.8922	2 <sup>nd</sup>
Investigative	2.904	.8928	4 <sup>th</sup>
Artistic	2.903	.8923	5 <sup>th</sup>
Social	2.998	.8781	3 <sup>rd</sup>
Enterprising	3.398	.8735	1 <sup>st</sup>
Conventional	2.880	.8599	6 <sup>th</sup>

The findings in the table are very revealing. The dominant occupational interests of teachers in the North – Central Geo-political zone is the enterprising type ranking first followed by the realistic and social interests ranking second and third respectively. The investigative interest rank fourth with the artistic and conventional occupational interests coming fifth and sixth respectively.

### Testing of Hypotheses

**Hypothesis One:** There is no significant difference in the occupational interests of teachers in public secondary schools in North Central Nigeria on the basis of gender.

**Table 4: t-test on difference between male and female teachers in occupational interests in North-Central Nigeria**

Variable	Gender	No.	Mean	S.D	t-val	Df	Sig(2 tailed)	Decision
Realistic Interest	Male	153	3.02	0.53	4.35	382	0.000	Rejected
	Female	231	2.79	0.50				
Investigative Interest	Male	153	3.03	0.50	4.22	382	0.000	Rejected
	Female	23	2.82	0.46				
Artistic Interest	Male	153	2.98	0.49	2.41	382	0.016	Rejected
	Female	231	2.85	0.48				
Social Interest	Male	153	3.03	0.52	1.18	382	0.240	Accepted
	Female	231	2.98	0.42				
Conventional Interest	Male	153	2.96	0.44	3.06	382	0.002	Rejected
	Female	231	2,83	0.39				

The analysis in table 4 was carried out to determine whether male and female teachers differed significantly in occupational interests in public secondary schools in North Central Nigeria. Significant values of .000.000, 0.016, .002 and .002 respectively for realistic, investigative, artistic, enterprising and conventional occupational interest (less than 0.05 level or significance) shows that there is significant difference. Male and female teachers therefore differed significantly in their realistic, investigative, artistic, enterprising and conventional occupational interests. Male and female teachers however do not differ in their social interest with significant value at 0.240.

### Hypothesis Two

There is no significant difference in the occupational interests of teachers in public secondary schools in North Central Nigeria with regard to rank.

**Table 5: One-way ANOVA for Difference in Occupational Interests of Teachers with regard to rank**

Variable	Rank basis	Sum of squares	Df	Mean square	F	Sig.	Dec.
Realistic	Btw Groups	.667	3	.222	0.815	0.49	Accepted
	Working Groups	103.709	380	.273			
	<b>Total</b>	<b>104.376</b>	<b>383</b>				
Investigative	Btw groups	.831	3	.277	1.184	0.32	Accepted
	Within Groups	89.098	380	.234			
	<b>Total</b>	<b>89.931</b>	<b>383</b>				
Artistic	Btw groups	4.141	3	1.380	6.101	0.00	Rejected
	Within Groups	85.965	380	.226			
	<b>Total</b>	<b>90.106</b>	<b>383</b>				
Social	Btw Groups	2.374	3	.791	3.773	0.01	Rejected
	Within Groups	79.715	380	.210			
	<b>Total</b>	<b>82.090</b>	<b>383</b>				
Enterprising	Btw Groups	2.041	3	.791	3.773	0.01	Rejected

	Within Groups	79.715	380	.210			
	<b>Total</b>	<b>82.090</b>	<b>383</b>				
Enterprising	Btw Groups	2.041	3	.680	3.11	0.03	Rejected
	Within Groups	83.125	380	.219			
	<b>Total</b>	<b>85.166</b>	<b>383</b>				
Conventional	Btw Groups	1.563	3	.521	3.034	0.03	Rejected
	Within Groups	65.236	380	.172			
	<b>Total</b>	<b>56.799</b>	<b>383</b>				

The analysis in table 5 was carried out to determine whether teachers differed significantly in occupational interests on the basis of rank. Significant values of .49 and .32 more than the 0.05 level of significance for realistic and investigative interests showed that there was no significant difference between teachers on the basis of rank. Teachers therefore did not differ significantly in their realistic and investigative interests on the basis of rank.

Furthermore, significant value of 0.00, 0.01, 0.03 and 0.03 for artistic, social, enterprising and conventional occupational interests (less than the 0.05 level of significance) showed that there was significant difference. Teachers in public secondary schools in North-Central Nigeria therefore differed significantly in their artistic, social enterprising and conventional occupational interests on the basis of rank.

### Hypothesis Three

There is no significant difference in the occupational interests of teachers in public secondary schools in North Central Nigeria with respect to state of domicile.

**Table 6: One way ANOVA for Difference in teachers' occupational interests on the basis of state of domicile**

Variable	Domicile State	Sum of squares	Df	Mean square	F	Sig	Dec.
Realistic	Btw Groups	1.389	6	.231	0.85	0.53	Accepted
	Within Groups	102.988	377	.273			
	<b>Total</b>	<b>104.376</b>	<b>383</b>				
Investigative	Btw Groups	5.308	6	.885	3.94	0.00	Rejected
	Within Groups	84.623	377	.224			
	<b>Total</b>	<b>89.931</b>	<b>383</b>				
Artistic	Btw Groups	1.472	6	.245	1.04	0.40	Accepted
	Within Groups	88.634	377	.235			
	<b>Total</b>	<b>90.106</b>	<b>383</b>				
Social	Btw Groups	1.420	6	.237	1.11	0.36	Accepted
	Within Groups	80.670	377	.214			
	<b>Total</b>	<b>2.090</b>	<b>383</b>				
Enterprising	Btw Groups	.979	6	.163	0.73	0.63	Accepted
	Within Groups	4.187	377	.223			
	<b>Total</b>	<b>85.166</b>	<b>383</b>				
Conventional	Btw Groups	1.121	6	.187	1.07	0.63	Accepted
	Within Groups	65.677	377	.174			
	<b>Total</b>	<b>66.799</b>	<b>383</b>				



The analysis in table six was carried out to determine whether teachers differed significantly in occupational interests on the basis of state of domicile in secondary schools in North-Central Nigeria. Significant values of 0.53, 0.40, 0.36, 0.63 and 0.38 for realistic, artistic, social, enterprising and conventional interest respectively (more than the 0.05 level of significance) showed that there was no significant difference. Teachers therefore did not differ significantly in their realistic, artistic, social, enterprising and conventional interests on the basis of state of domicile.

Furthermore, the significant value of .000 for investigative occupational interest (less than the 0.05 level of significance) showed that there was significant difference. Teachers therefore differed significantly in their investigative occupational interests on the basis of state of domicile.

### **Discussion of Findings**

Answer to the research question for the study sought to ascertain the pattern of occupational interests of teachers in public secondary schools in North-Central Nigeria. The findings revealed that the dominant occupational interest of teachers in North Central Nigeria was the enterprising occupational interest with a mean value of 3.398. This was followed by realistic occupational interest with a mean value of 3.005. The social interest ranked third with a mean value of 2.998. The investigative, artistic and conventional occupational interests ranked fourth, fifth and sixth respectively. This pattern of occupational interest is not very appropriate for the teaching profession which is largely a social occupation. Next in rank to the social occupational interest should have been conventional and investigative or artistic occupational interests. Teaching as a social occupation is people oriented, unlike enterprising occupation, which is verbally oriented but usually for self gain. The pattern or nature of occupational interests as revealed in this study is incompatible with the teaching profession. This explains why many teachers exhibit divided loyalty to the teaching profession.

The influence of gender on teachers' occupational interest in North-Central Nigeria was revealed in hypothesis one. Teachers did not differ in their social occupational interest on gender basis with a non-significant value of 0.240. They however differed significantly in their realistic, investigative, artistic, enterprising and conventional interests. This is highly commendable with the status of teaching as a social occupational interest. These findings are contrary to that of Ojiah and Shamo (2013) who found significant difference in job satisfaction and work attitudes between male and female teachers.

The findings in hypothesis two revealed that teachers differed significantly in their artistic, social, enterprising and conventional occupational interests on the basis of rank. They however did not differ significantly in their realistic and investigative occupational interests. This implies that rank as a demographic variable had significant influence on teachers' occupational interest with regard to rank. These findings are obvious because the higher a teacher career development stage or rank, the higher his inclination to realistic and investigative interests as an administrator and technocrat.

The influence of state of domicile on teachers' occupational interests was revealed in hypothesis three. No significant difference was found in realistic, artistic, social, enterprising and conventional occupational interests on the basis of state of domicile. However, teachers' differed significantly in their investigative occupational interest with regard to state of domicile. Perhaps differences in educational policies among states may be accountable for variations in investigative occupational interests.

### **Conclusion**

The pattern of teachers' occupational interests in secondary schools in North Central Nigeria is not very appropriate to the teaching profession. Gender, rank and state of domicile as

demographic variables had varying influences on teachers' occupational interests in North Central Nigeria.

### **Recommendations**

The following recommendations are made based on the findings of the study:

1. Employers of labour in the education industry should ensure that candidates seeking teaching appointment are subjected to aptitude test to ascertain the relevance of their occupational interest to the teaching profession. This will enhance better job performance and productivity;
2. Educational administrators should identify special peculiarities in the teaching force on the basis of gender and rank and design job schedules appropriate to such peculiarities; and
3. State governments should identify priority areas in academic fields of study and employ more teachers in such areas, to boost second scholarship.

### **References**

- Bakare, C.G.M (1974). The Construction and validation of vocational interest inventory for use in Africa. *The West African Journal of Educational and Vocational Measurement*, Vol. 11 (10 & 11).
- Holland, J.L. (1997). *Making vocational choices: A theory of careers*. Englewood cliffs, N.J: Prentice Hall.
- Ikeotunoye, A.I. Maisamari, J.Y. & Badu J.B. (2003). Vocational interests of medical doctors in hospitals and clinics in the Federal Capital Territory, Abuja. *Abuja Journal of Education*, Vol. 5, (1). Pp 1 – 18.
- Kuder, G.F. (1966). The occupational interest survey. *Personell and Guidance Journal*, 45 (1), Pp 72 – 77.
- Krejcie, R.V. and Morgan, D.W. (1970). *Determining Sample Size for Research activities: Educational Psychological Measurement*. Sage Publications.
- Ojiah, P.O. and Shamo, I.I (2013). Relationship between job satisfaction and attitudes to work among secondary school teachers in Gwagwalada Area Council, Federal Capital Territory. *Centre point Journal, Humanities Edition*, Vol. 15 (2), Pp 201 – 209.
- Strong, E.K. (1927). *Vocational Interest Blank*. Palo Alto, CA: Stanford University Press.
- Strong E.K. (1943). *Vocational Interests of Men and Women*. Stanford, California: Stanford University Press.