A SURVEY OF GRADUATES EMPLOYABILITY IN GEOGRAPHICAL AND ENVIRONMENTAL EDUCATION IN ZARIA AND ITS ENVIRONS, KADUNA STATE, NIGERIA

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ABSTRACT

The aim of this study is to determine geography students' interest by gender toward the profession and actual employment opportunities in the labour market. The instrument is a 5-point likert scale questionnaire used to collect data from the respondents. The reliability coefficient of the instrument was found to be r=0.83. The questionnaire was administered to three hundred and ten (310) students drawn from five (5) schools randomly selected from thirty (30) senior secondary schools in Zaria in Sabon –Gari Local Government Area of Kaduna State, Nigeria. The sample was selected using stratified random sampling technique, while simple random sampling was adopted for the administration of questionnaire. The nominal scale was converted to ordinal scale for ease of data analysis with a range of 53-124 scores and a class interval of 10. Starting from 53, a mean of 153.3 and a standard deviation of ±25.5 were used to determine positive, negative and neutral interest. Two research questions and two (2) hypotheses guided the conduct of this study. From the results obtained, mean scores, standard deviation and two way analysis of variance (ANOVA) statistics was used to test the stated hypotheses at 0.05 level of significance. The results obtained showed that F – test calculated values was less than the F – critical values, hence, the result showed no significant differences between students interest toward graduate employability and actual employment in the labour market. The findings showed that no matter the awareness, gender disparity and interest toward graduate employability, employment scenario in Nigeria remains the same with several jobless geographers. It is therefore recommended that Government Ministries, Parastatals, agencies, professional bodies and stakeholders should engage in aggressive public awareness conferences, seminars and workshops toward improvement in employment opportunities of geography graduates.

Key words: Graduate employability, Geographical education, Environmental education, Zaria.

INTRODUCTION

Geographical and Environmental Education is a reputable discipline, yet a great deal of ignorance still exist among employers about its scope and content (Salter, 1982). It is commonly thought that the purpose of geography teaching in schools and universities is to produce teachers of geography: Outside the classroom the geographer is useful merely as a walking encyclopedia of knowledge about places and phenomena on the earth's surface (Anikweze, 2005). Geography as an academic discipline is a far more serious and worthwhile profession. Applying intellectual

discipline and practical skills, geographers have a great deal to contribute towards society's ever-present and ever-pressing desire for better living through better management of human affairs, with particular reference to environmental and human resources.

Several questions therefore arose with regards to employment opportunities for geographers among these are: what can the geographer contribute in the whole area of management of human affairs? What does he offer to the labour market in terms of job capability? Of what practical value is his training? It must be admitted, to start with, that unlike other professional disciplines as engineering, medicine, architecture, pharmacy or law, geography' does not lead directly into any specific profession. Its main virtue lies instead in the intellectual discipline which it gives through its systematic and regional courses. These provide not only basic or background knowledge that can lead eventually to a wide range of vocations but, more importantly, a general attitude of mind in which a problem is viewed from as many different angles as possible. This emphasis geographical training on what Lawton (1980) calls "the appraisal of complex situations involving both environmental and human factors" which is an advantage in an age in which knowledge has become hopelessly atomized such that the graduate in many disciplines knows more about his environment and human interaction toward human capacity building.

There are, at least four areas in which a geographer can be considered to be of practical value to society. These are: Acquisition of useful knowledge: One important aspect of geography is concerned with man's physical environment, what it consists of, how it functions, how it changes and how it is or might be manipulated by man for his own ends. Knowledge acquired may be put to use in the evaluation and management of land resources, as has been demonstrated in part by the study of the land resources. A second major aspect of geography focuses on man's socio-spatial organization, its elements, structure and dynamics and how it may be manipulated for the benefit of society. Knowledge gained here may be used in the allocation of resources within a space economy and in the reordering of economies and spatial organization of society, as in town and regional planning. There is a third aspect of geography which is concerned with area studies. This focuses on particular regions of the world and examines man's socio-spatial organization under particular regional settings. Depending on the regions selected for study, regional geography can help us to understand Nigeria in its world context and should be useful in the determination and execution of public policy' in both internal and external affairs. Others include: Acquisition of useful skills: Geography is unique amongst academic disciplines in the training which it seeks to give its students in the four basic communication skills namely literacy, numeracy, graphicacy and articulacy (Balchin, 1983).

A geographer receives some basic training in the collection and analysis of environmental and socio-economic data in the following areas: in map compilation and interpretation; and in verbal communication, both oral and written. Such training can be put to use in very many areas of human endeavour, including rural land use planning, town planning, census work, transport planning and market research. Another area of geographical intervention is the acquisition of useful mental abilities: A well trained geographer learns to make reasoned or critical judgments, to reason both inductively and deductively and to see problems not in isolation but in their total contexts. In short, a geographer learns the arts of tackling problems. He is therefore basically a versatile person who is capable of giving a good account of himself in many different situations. Training for citizenship is also less tangible. Although, no less valuable, result of geographical

training and the spirit of good citizenship which it engenders is necessary. A geographer should therefore develop an awareness of and a sympathetic attitude towards the environmental and cultural circumstances of other people. He should have a sound understanding of his own community and a feeling of belonging to and of responsibility towards it. He should appreciate the interdependence of people and places on the earth's surface. These are some of the qualities of a good citizen, one who can help to build a strong and united nation.

Between the oil-boom years of the early 1970s and 1981/82 when the current economic problems started in earnest, the Nigerian economy experienced a tremendous expansion. Massive post-war reconstruction efforts, the creation of seven new states in 1976, commencement of construction work on the new Federal Capital, the establishment of integrated rural development projects, the construction of new sea ports and airports, the establishment of river basin development authorities, the expansion of educational facilities at all levels - these and. many more developments blew job opportunities for all graduates in both the public and private sectors (Lawton, 1980 and Salter, 1982). They further suggested areas/fields graduate geographers might find career outlets to include among others the followings, Business, commerce and industry: For many posts in business, commerce and industry, a geography degree is useful or even desirable, although further job-specific training or apprenticeship almost certainly has to be undertaken in areas of: Managerial grades in general, Secretaryship grade in business firms, Buyers departments of large firms, Banking and insurance, Marketing and market research, The publishing trade, Journalism (especially as foreign correspondents and in-depth feature writers), Tourism (as tour operators or on the catering side), Shipping industry (as stevedores and shipping of clearing agents) and Consultancy (especially in planning).

In the Public Service too, at Federal, State and Local Government levels, has traditionally been the main employer of graduates in Nigeria and here the opportunities for the fresh geography graduate will continue to be relatively good. In the Civil Service, he can secure employment as an administrative officer or as a trainee professional in economic planning, town planning, land surveying, soil surveying, cartography, estate management and environmental resources management. The geographer continue to be in great demand as a teacher in our universities, polytechnics, colleges of education, pre-university institutions and secondary schools.

In the armed forces, a geography graduate could find employment as a combatant officer or as a professional (after relevant further training) in the support of educational and technical services (as an education officer, hydrographer, meteorologist, cartographer or specialist in air photo interpretation). Furthermore, geography graduates can also secure employment in the police force, the NSO, or the customs departments.

Geographers also play a significant role in politics. Geographers are very much concerned with peaceful co-existence in the society, with how best to reorder society or various aspects of it, and how to distribute the benefits. Hence, geographers have been taking active part in Nigerian politics in recent years. A geographer therefore is a major asset in the job market. He is a broad-minded, critical, articulate, levelheaded, versatile and trainable person. The perception of geography graduates of the job market according to Salter (1982), is important because it will influence his job opportunities upon graduation.

In October, 1971 the Bachelor of Science (B.Sc) and Bachelor of Arts (B.A) (Honours) geography intake at Ahmadu Bello University (ABU) according to Salter (1983) stated the following proposed careers upon graduation: Teaching (65.7%), General administration (5.70%), Urban and regional planning (2.9%), Land surveying (2.9%), Social welfare work (2.9%), (Don't know) (20.0%). In October, 1979 our freshmen gave the following as their proposed careers: Teaching (44.4%), General administration (4.4%), Urban and regional planning (42.60%), Business administration (1.5%). Land surveying (2.9%), Armed force (1.5%), Meteorology (1.5%), Cartography (1.5%). The proportion of the students hoping to go into teaching had dropped appreciably while the proportion opting for urban and regional planning had increased substantially. The proportion opting for the armed forces had also increased significantly.

Ologe (1980) from a systematically collected from 269 geography graduates of ABU from 1965 to 1975 revealed the following career-wise: Teaching (49.4%), General administration (17.7%), Urban and regional planning (15.7%), Business management (4.8%), Auditing (2.0%), Estate management (2.0%), Land surveying (1.6%), Armed forces (1.6%), Librarianship (1.2%), Educational broadcasting and the publishing trade (0.8%), Soil and rural survey (0.8%), Cartography (0.4%), Journalism (0.4%). Between 1976 to 1981, when 146 B.Sc. Honours geography graduates were surveyed in September 1981, Ologe (1982), found geographers in the following careers: Teaching (43.2%), General administration (7.3%), Urban and regional planning (33.0%), Business management (4.0%), Land surveying (3.2%), Armed forces (6.5%), Hydrology (0.8%).

The main conclusions which may be drawn from these sets of data are as follows: A high proportion of our graduates have secured employment outside teaching. Although many of them may have gone into some of these careers because of their geographical training. Many of them occupy very responsible positions today as permanent secretaries, directors of ministerial departments, bank managers, police and army officers. The most important career outlet outside teaching has been urban and regional planning; By contrast, the field of rural planning - as represented for example in many Rural or Agricultural Development Projects which have sprung up in the country in recent years - remains virtually uncultivated by geographers.

Proportion of other graduates have gone into cartography, land surveying, soil surveying and other fields which, by their very nature, should be literally populated by geographers. This may be a reflection of the poor pre-university science background and orientation of most of our graduates.

Employment opportunities have continued to pose serious challenges to geographers on graduation in the labour market and available statistics shows that very few geographers are employable after graduation to geography related trades (Ologe, 1980 and 1982). This prompted the need for the study on employment opportunities and graduate employability in geography and actual employment in the labour market after graduation to acquaint potential geographers of availability of job for geographers in our contemporary society.

The aim of this study therefore is to ascertain the interest of students by gender toward employment opportunities for geographers and actual employment in the labour market. The study objectives are to determine the difference in geography students interest toward profession

and the actual employment in labour market and to determine whether there is difference by gender in geographers interest toward employment opportunities for geographers.

The following research questions guided this study:

- Is there any difference in geography education students' interest toward particular profession and actual employment in the labour market?
- Has gender of geographers after graduation any effect in their interest toward employment opportunities for geographers.

The following null hypotheses were therefore postulated for testing at 0.05 level of significance.

H_o1: There is no significant difference between geography education student's interest toward employment opportunities and actual employment in the labour market.

H_o2: There is no significant difference by gender in the interest shown by geography students after graduation.

STUDY AREA

Kaduna State has a population of 6,066,562 (NPC, 2007). Sabon Gari L.G.A of the state is located approximately within latitudes 10^0 90' and 11^0 30' N and longitudes 7^0 30' and 7^0 70'E. The area falls within the northern Kaduna sub-region. The population of the area according to the 2006 census figure was 286271. Over 65% of the inhabitants are rural dwellers. Socio-culturally, the indigenous people are Hausa by language and culture. There is ethno-cultural intermingling. Islam is the dominant religion with some Christians.

MATERIALS AND METHODS

A survey research design was adopted for this study. This is because the study generated data from a relatively large number of cases at a time (Best and James, 1989). Thirty (30) public senior secondary schools from six educational zones in Kaduna state constituted the population of the study out of which five schools which comprised of three hundred and ten (310) students were randomly selected for the study from Sabon Gari L.G.A of the state. this sample selection is in line with findings of Numan, (1992) and Akuezilo and Agu (2002) who opined that 10% and above of a sample from a given population of study is appropriate for a study. A stratified random sampling was used to select five schools for the study while simple random sampling was used to administer the questionnaire.

The instrument used for this study was a geographers employment interest questionnaire (GEIQ) which was a 5 point likert scale questionnaire adopted from Ato and Wikinson (1979). To correlate scores of students' responses, they were transformed to ordinal scale. The reliability coefficient was found to be R=0.83 using person product moment correlation coefficient. Three experts of Ph.D qualification in Science Education of A.B.U Zaria validated the instrument to ensured content and face validity of the instrument.

For the purpose of data analysis the interest of students towards employment opportunities and actual field employment of geographers questionnaire was used (QEIQ). The criterion was that the students' scores from the GEIQ were collated in form of frequency distribution table. With

the range of 53 to 124 scores and a class interval of 10 starting from 53, a mean of 153.3 and a standard deviation (SD) of ±25.5 were used to determine the positive, negative and neutral interest. Students who scored above half standard deviation (1/2 SD) added to the mean (169.6) are regarded as having positive interest. Those who scored between the two extreme scores are regarded as having neutral interest toward geography employment opportunities. This procedure was also used by Orode (1987). Results from this analysis were used to test the hypotheses using a two way analysis of variance statistics (ANOVA).

RESULTS AND DISCUSSION

Hypothesis One: There is no significant difference between geography education students interest toward employment opportunities and actual employment in labour market.

Table 1: Two Way ANOVA for Difference in Geography Students Interest toward particular Profession and Actual Employment in Labour Market.

Source of variance	df	Sum of squares	Mean squares	f-cal	f-crit	α -level	p-value
Between groups	1	2033.67	2033.67				
Within groups	2	3046.33	1021	1.82	12.31	0.05	0.0000
Total	**3**	**5080**					

In order to determine the difference in geography students' interest toward particular profession and actual employment opportunities in the labour market, the raw scores were collated. Summary of results obtained showed that f-calculated 1.82 was less than f-critical value of 12.31 as evidenced in summary table 1 above.

Since f-calculated is less than f-critical, therefore, the null hypothesis is retained that. There is no significant difference between geography education. Students perception of employment opportunities and actual employment in the labour market.

Hypothesis Two: There is no significant difference in interest by gender, in the interest shown by geographers students toward employment opportunities.

Table 2: Two Ways ANOVA of Gender Difference in Interest toward Employment Opportunities for Geographers

Source of variance	df	Sum of squares	Mean squares	f-cal	f-crit	α - level	p-value
Between groups	1	1122.47	1122.47				
Within groups	2	1236.53		12.45	16.42	0.05	0.0001
Total	**3**	**2359**					

From table 2 above f-cal calculated is less than f-critical value. The null hypothesis is thus retained. Therefore there is no significant difference in gender interest toward employment opportunities for geographers.

It was evidenced in primary and secondary data of this study that, employment opportunities existed for geographers in the following fields: General administration, Business Administration, Urban and Regional Planning, Land surveying, Social welfare, Armed forces, Meteorology, Cartography, Hydrology, Estate management, Auditing and Journalism.

Evidence of this research findings further revealed that there is no significant difference in interest toward career choice by gender and the actual employment in the labour market. The result of the study as shown in table 1 revealed that there was no significant difference between geography students' perception of employment opportunities and actual employment in the labour market.

Furthermore, result on table 2 showed that there was no significant difference by gender on interest toward employment opportunities for geographers in the labour market. These findings are in line with findings of studies by Ologe (1982), Anikweze (2005) and Obeka who opined that interest is a factor in perception of career opportunities and actual employment in the labour market.

Gurug (1977) further buttressed these when in his studies on gender disparity in agricultural tasks found that there was no significant difference, because male and female members of the society were equally engaged in set tasks based on their interests.

Consequently, it can be said that several employment opportunities exist for geographers and actual employment is dependent on interest of the individual.

CONCLUSION

The result of this study as evidenced in tables 1 and 2 showed that there is no significant difference between geography students' perception and actual employment in the labour market. The result further showed that there was no significant difference in interest by gender toward employment opportunities.

Based on the findings of this study, it can be concluded that potential geographers in Zaria and its environs of Kaduna state, Nigeria have positive interest toward employment opportunities for geographers. The two hypotheses tested showed no significant difference in the interest shown by gender among students toward geographers employment opportunities and actual Job in the labour market. There was also no significant difference by general interest indicating that Job preference of geographers depends to a large extent on interest whether male or female.

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

1. That seminars, workshops and conferences on employment opportunities for geographers should be organized by Association of Nigerian Geographers (ANG), Science Teachers Association of Nigeria (STAN), Science Association of Nigeria (SAN) and other professional bodies to enlighten geographers of employment opportunities available to them.

2. Geography teachers in tertiary institutions should endeavour to teach and deliver public lecture on carrier opportunities during geography week.
3. Stakeholders especially school administrators are encouraged to provide adequate funds and resources for geographical garden, laboratory and weather station to ensure that students are adequately trained and equipped for the numerous employment opportunities available for the profession.

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