4-19-2016

Homophily-heterophily consciousness and Staff quality as Correlates of Effective Reference Services in University Libraries of North-Central Nigeria

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HOMOPHILY- HETEROPHILY CONSCIOUSNESS AND STAFF QUALITY AS CORRELATES OF EFFECTIVE REFERENCE SERVICES IN UNIVERSITY LIBRARIES OF NORTH CENTRAL NIGERIA

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ABSTRACT

The study investigated if homophily-heterophily consciousness and staff quality, could correlate with effective reference services. The study made use of three objectives, three research questions and four hypotheses. It adopted the descriptive design of the correlation type which seeks to establish the relationship that exists between two or more variables. A total of 1,500 undergraduate students were selected from nine universities in North Central Nigeria using proportionate sampling technique. The research instrument was a questionnaire with three subscales which were used for data collection. They were Effective Reference Services Questionnaire (ERSQ), Homophily-Heterophily Questionnaire (HM-HTQ), Staff Quality Questionnaire (SQQ). A total of 1,500 copies of the questionnaire were

distributed, retrieved and found usable for analysis. A total of 1,500 copies of the questionnaires were analysed using descriptive statistics, while Pearson product moment correlation was used to determine the relationship between the variables, and multiple regression was used to predict or determine the effect of the independent variables to the dependent variable. All the hypotheses were tested at 0.05 level of significance. .

The findings were that effective reference services in university libraries were not effective. The correlation coefficients between homophily-heterophily and effective reference services delivery to undergraduate students is r= 0.981 and since P < 0.05, it implies that there is significant relationship between homophily-heterophily and effective reference services delivery. The correlation coefficients between staff quality and effective reference services is r= 0.792, P= < 0.05, it implies that there is significant relationship between staff quality and effective reference services. . The significance of composite contribution of the two independent variables to the dependent variable was tested at P < 0.05 using the F- ratio at the degree of freedom(df=4/1495). The analysis of variance for the regression yielded an F-ratio of 1930845.959 significant at 0.05 level of significance. Using the standardised regression coefficient to determine the relative contribution of the independent variable to the dependent variable, staff quality (B=10.820, t =64.373, P< 0.05) is the most potent contributor to the prediction, followed by homophily-heterophily (B= 0.006, t = 3.20, P < 0.05). The study concluded that all the two independent variables had significant relative contribution to the dependent variable, and then recommended that the university authorities should ensure that all the reference staff should have all the qualities of the independent variables for effective reference services delivery, as they are potent factors to consider when recruiting staff in libraries, and other service organisation.

INTRODUCTION

Background to the study

A university is established for the purposes of teaching, learning, research and community service. As a tertiary institution, the university offers a variety of courses leading to the award of certificates, diplomas, bachelors and post-graduate degrees. The university is generally regarded as a custodian of knowledge where every student, especially the undergraduates acquire knowledge in various disciplines. This knowledge is usually in various disciplines for self development, which in turn prepares them for future roles in the society .Universities impart knowledge which is the power to solve human socio-economic and political problems, and the power to produce and distribute goods. Many aspects of the university environment help to develop student's learning because transfer of knowledge and information takes place there. (Ifidon, 1999; Whitmore, 2001; Aguolu and Aguolu, 2002)

University education is expected to provide students with a wide range of technical skills, access to numerous types of acceptable knowledge sources, critical thinking capacity, cultural and civil values and beliefs, as well as certification in scores of different disciplines. They impart instruction in lifestyle skills that will assist in upward social progression, (Ojedokun, 2007). The tripartite function of any university is to conserve recorded knowledge, through teaching, conferences, seminars, publications, and to advance knowledge through research and community services. Broadly speaking, five main functions are identifiable for Nigerian universities. They are conservation of knowledge, pursuit, promotion and dissemination of knowledge through teaching, advancement of knowledge through research, that is pure, applied and development oriented research, promotion of intellectual leadership, development of human resources for meeting manpower needs (Ifidon, 1999; Weber and Flatley, 2008; Aguolu and Aguolu, 2002.). Nigerian universities are established to make optimum contributions to national development, through the training of high level manpower. Due to these high expectations, the Nigerian government concretised its ideals and goals of university education in the country, when it ascribed specific roles to the nation's universities in its political, social, and economic development, through the national policy on education (1981). The federal government identified these roles to include

the acquisition, development and inculcation of the proper value orientation for the survival of the individual and society; the development of the intellectual capacities of the individuals to understand and appreciate their environment; the acquisition of both physical and intellectual skills which will enable individuals to develop into useful members of the community; and the acquisition of the local and external environments.

These functions of the universities can be adequately achieved when students are involved in taking class assignments, writing of term papers, projects and other academic research work in other in order to assess their level of understanding of the teaching and learning exercise. However, these feats would be achieved when these undergraduate students accustom themselves to the use of the university libraries.

The university library is the principal instrument of the university in the conservation of recorded knowledge. Proper fulfillment of this role provides a sound basis for the transmission and advancement of knowledge. A university library is a house of knowledge that stores various information materials, and supports the academic programmes of the universities through the provision of relevant reading materials. The library has to collect materials published and unpublished, print and non print, and in some depth and globally in almost all fields of knowledge, not necessarily in the disciplines offered by the university.

The value of the records of human communication lies in the information they contain. Information can be stored in books, periodicals, technical reports, pamphlets, microforms, conference papers of learned societies and professional associations, disks machine readable databases, manuscripts, CD - ROMS, maps, archival materials and many other formats. Information required by users appear in a variety of formats as mentioned earlier and they are generally referred to as information carriers. Other information carriers acquired by libraries are cartographic materials, graphic materials, sound recordings, motion pictures, video recordings and digital materials.(Aguolu and Aguolu, 2002; Idiodi and Igbinosa, 2003; Aina ,2004).

The university library is a service organisation and the users have of necessity to be the central focus. Adequate services should be rendered by the library staff to support the intellectual, cultural and technical development of the undergraduates enrolled in the Nigerian universities.

The section of the library that gives direct personal assistance to users in their quest for information is the reference section. Reference services are direct personal assistance to users in their quest for information that will lead them to knowledge. Reference services are undertaken to either provide or locate answers for the user. The answers may be limited or

extensive, actual or citations to the information leading the user to other sources, human or material which will provide the necessary information. Reference services could range from very simple questions that take little time to very complex questions that demand the expertise and various search strategies of the reference librarian.

Provision of effective reference services involves supportive duties and actions, from selection of materials to adequate space and personnel. (Senna, 2003; Aina, 2004). Reference services also involve providing instruction on the use of library resources, through user education. It also includes all the functions performed by the reference librarian to meet the information needs of users in person, by telephone, or electronically including but not limited to answering substantive questions at the reference desk. The reference librarians instruct users on the selection and use of appropriate reference tools for finding information. They conduct researches on behalf of the users and direct users to the location of library resources, and assist in the evaluation of information, and refer them to resources outside the library when appropriate. They keep reference statistics and participate in the development of reference collections (Reitz, 2004; Fabunmi, 2010).

Information communication technology (ICT) has greatly impacted on reference services delivery to make it more effective. It has revolutionised access to information retrieval in the university libraries. The introduction of various (1CT) trends has led to reorganisation, change in work pattern, and demands for new skills, job retraining and reclassification positions. The electronic data base, online services, CD-ROMS, and the advent of the internet has radically transformed access to information. This is because online catalogue terminals, indexes and abstracts on CD-ROM work stations allow users to search data bases in their entirety. This saves the users the task of searching numerous catalogue drawers or annual volumes of printed indexes. Reference librarians now answer reference questions by email and this boosts the competence of the librarian before their users. University libraries are using modern ICTs for their core functions, implementing effective and efficient library cooperation, and resource sharing networks, implementing management information systems, developing institutional repositories of digital contents, and digital libraries, and initiating ICT based capacity building programmes for library users.

Information and communications technology (ICT) has brought unprecedented changes and transformation to university libraries. Conventional library and information services (LIS) services such as OPAC, user services, bibliographic services, current awareness services, selective dissemination of information services, in-depth literature searches, inter library loan services, audio-visual services, document delivery services and

customer relations can also be provided more effectively and efficiently, using ICTs. In recent times, as part of global shift from the hard copy information prints to electronic based ones, university libraries now subscribe to a number of electronic databases consisting of journals and monograph reports. Some of these databases are JSTOR, AGORA, HINARI, and OARE. This means they can be accessed by logging into the university's website while on campus but needs passwords outside the campus.(Bopp and Smith,2001;Fabunmi, 2010; Krubu and Osawaru, 2011).

The reference librarian must offer services that would attract users at all times. He should be amicable and approachable at all times, must have the desire to help the enquirer at all times, should be empathetic, resourceful and attentive among other qualities. He must have a high degree of bibliographical knowledge or broad subject knowledge, adequate knowledge of reference tools, keen analytical mind, flexibility of mind and the right psychological approach to information. He must be a person of intellectual depth and breath, who has the ability to keep users at ease. He must have an equable temperament so as to be able to always keep patrons at ease irrespective of their ages and temperaments, and must have the ability to communicate with different types of users. He must have the ability to decide at what stage to stop searching the resources of his library, and to resort to outside resources or even engage in referral services for his users (Clarke, 1997; Nwalo, 2000; Aina, 2004; Fabunmi, 2010, Ezeala and Yusuf, 2011).

It is only reference librarians with the foregoing attitudes that can deliver effective reference services. Effective reference services delivery has become an issue in academics because the undergraduate users of the university libraries need to know how to locate information in different directions and locations, so as be informed and educated graduates needed for socio-economic development. This will produce the high academic quality graduates needed in the society. It will equally reduce the issue of low academic quality graduate syndrome which has become a great concern to Nigeria.

For maximum effectiveness in reference services delivery, there must be a reference interview between the reference librarian and the library patrons. According to Mc–Daniels and Ohles (1993), page 32 "an ideal reference interview occurs when a patron asks for reference assistance, and the reference staff, through dialogue with the patron determines his information needs, and interprets the question and subsequent answer in terms of the library's resources". The reference interview clarifies and eliminates ambiguities in the questions or reference queries being posed. It makes the reference librarian articulate the needs of the user,

and helps him out, for instance, if the patron is a stammerer, who cannot even articulate his questions properly.

An effective reference librarian should be able to conduct a good reference interview and produce satisfactory result. He must possess all the good qualities expected of a reference librarian, as such would impact on his performance. Efficiency is a limited concept that is concerned about the internal workings of the organization, as against effectiveness which is a broad concept that takes into account a conglomeration of factors and criteria both inside and outside the organization. Efficiency is measured as the ratio of inputs to outputs; therefore, it refers to the ways in which resources are put to use (Narayana and Rayane, 1997). According to Millet (2009), being effective in its simplest terms, means having the internal and external processes that lead to the desired end result. It means having the means to produce the desired effect in reference services which is maximum user satisfaction. In the same vein, Drucker (2006) posit that effectiveness implies causing the desired or intended result. It means doing right things and selling right targets to achieve an overall goal, and achieving your worthwhile goals that support your vision and mission. Management effectiveness relates to getting the right things done.

Effective reference services in any university library cannot thrive without the consciousness of homophily-heterophily concepts on the part of the reference librarians. Homophily-heterophily refers to the degree to which interacting individuals are similar or dissimilar in certain attributes. The attributes that lead to homophily are demographic characteristics like age, education, socio-economic status, attitudes, beliefs, and values. The degree to which people differ in the attributes is the heterophily between them, (Rufner and Burgon, 1988; Lovin and Cook, 2001; Elliot, 2007; Bowik, (2008). The authors posit that homophily–heterophily factors are factors in communication arts and communications research where the source and receiver relationships are the units of analysis.

These factors cut across some disciplines like the communication arts, psychology, sociology, social network analysis, and now have implications for researches in library and information sciences, especially in information communication in libraries. It has become more pertinent to work with these factors in information communication in libraries as it has to do with beliefs, values attitudes, and other demographic peculiarities between the source of information and receiver of information, which would bring about a change in behaviour (Adebisi, 1994). This change if it is satisfaction from the clientele shows the reference transaction process was effective. This means that the consciousness of such demographic peculiarities as they could affect source of information and receiver of information in

reference service transaction makes it pertinent for the reference staff to employ his skill of homophily-heterophily consciousness to deliver effective service to his users.

The reference librarian and his staff have been entrusted with the task of assisting users exploit the library's stock of accumulated wisdom of mankind. Nwalo (2000) and Aina (2004) opine that no matter how well and systematic the materials are organised, no matter how good the catalogue is, personal assistance to users in exploiting information resources is essential. The reference librarian is a link between the information and the user therefore, the homophily-heterophily factors have serious implications for reference services in libraries. This is because the search strategy consists of steps the reference librarian would use in supplying the required information. He would first analyse and clarify the query; identify the type of reference service; and identify the information source to use. This means that the success of the reference transaction process depends on how well the two parties have cooperated during this transaction.

Lending support to the foregoing, (Mc-Daniels and Ohles, (1993); Clarke, (1997); Nwalo, (2000); and Aina, (2004) all opined that if every user were to formulate his questions clearly, half of the problem would have been solved, but many users have vague ideas of what they want or need and might mislead the reference librarian into providing an unacceptable answer. This could be as a result of many factors like doubt on the ability and competence of the librarian, inferiority or superiority complex, limitations of language, limitations of users knowledge by the librarian, lack of proper communication skills, attitude of the librarian to the user, notion of the reference librarian. All the foregoing factors that could impede effective reference services are hinged on the homophily- heterophily factors which shows the extent to which interacting individuals are similar or dissimilar in certain attributes. With homophily-heterophily consciousness, the reference librarian as observed by Carke (1997) and others should have the right psychological approach to all information seekers. For instance, a homophilous reference librarian may always empathise to a heterophilous user, so that the heterophilous user would give out successful reference transaction interview. This would enable the homophilous staff draw out all the clarification and information he needs, articulate his needs and help him out, for example if the patron is a stammerer who cannot even articulate his questions properly.

The rendering of reference services in an academic library involves the interactions between human beings who use material facilities. The reference librarian is involved in service delivery through judicious provision of needed reference sources and provision of conducive setting for reference service. The user is the recipient of all the reference activities

of the reference librarian which include acquisition, organisation, storage, creation, access and dissemination of information.

It is important to note that the process of reference service is essentially based on various types of communication. It involves intrapersonal communication, between the reference librarian and the library user. They are source, channel, receiver and feedback. The cordiality between the source and the receiver would result in the choice of channel and the contents of human communications, mediated interpersonal communication, group communication, written communication, and information technology mediated communication. The types of communication notwithstanding, there are basic elements in the process of communication or even mediated by electronic facilities. There is an established commonality on the principal issues and elements in the communication process. In other words the extent to which the source and receiver are homophilous, to that extent communication will flow positively and effective reference service would be rendered. The effectiveness of reference services in any university library depends strongly on the reference staff's communication competence which engenders homophily. Homophily is necessary for effective reference services because reference staff are the means by which effective reference services are provided. Though Homophily- heterophly concerns the interaction between the users and staff of the reference department, this study has measured it from the user approach. Every service in the library ought to be user – centred . Therefore any measurement of effectiveness of a service needs to be done from the users point of view because he who wears the shoe knows where it is pinching.

Another determinant of effective reference services is the staff quality. Age, cognitive ability, knowledge, experience, and individual skill, attitude among others determine the quality of staff. Other factors that could determine the quality of staff are hereditary, environmental, and demographic factors. The highest determinant of staff quality is the level of education, which is subsumed in the demographic factor. Knowledge driven economies demand high level skill in the work force. The skills of the reference staff, and the quality of their output is what makes it unique and uniquely attractive. A reference staff is unique and skilled at offering services which will attract high patronage, (Kumar and Surreh, 2001; Ojedokun, 2007; Noolen, 2010). There are many qualities that a competent staff should have, he should have the   knowledge and skills to effectively deliver services. The quality of staff in a business can mar or build it. The same applies to reference services as the section is the image making section of the library. To this extent, Bicknell (2002) posits that

the quality of reference service can only meet user needs and expectations through appropriate staff behavior and excellent communication skills, a user friendly environment, and a suitable level of staff morale with a lot of high cognitive competence.

The foregoing assertion implies that a good quality staff must be homophily-heterophily conscious. High cognitive competence is required for the reference staff to handle all kinds of queries. He needs bibliographic expertise and broad subject knowledge to be able to handle complex queries, even if it is directional, ready reference or in-depth search queries (Lavin 1995)

Authors like Mc-Daniels and Ohles, (1993); Clarke, (1997); Nwalo, (2000); and Aina, (2004) all opined that the reference librarian is a link between the information and the user therefore, the homophily-heterophily consciousness have serious implications for reference services in libraries. This is because the search strategy consists of steps the reference librarian would use in supplying the required information. He would first analyse and clarify the query; identify the type of reference service; and identify the information source to use. This means that the success of the reference transaction process depends on how well the two parties have cooperated during this transaction. This implies that the extent to which user needs are promptly satisfied is dependent on the ability and willingness of staff ((staff quality) to exploit the resources and their homophily-heterophily consciousness in communication transaction.

All these assertions need to be empirically clarified in Nigerian university libraries. That is why the researcher has embarked on a study of this nature to investigate how homophily-heterophily consciousness in communication transactions and staff quality, would correlate effective reference services delivery in the university libraries in North Central States of Nigeria.

Statement of the problem

The Nigerian universities are expected to train high academic quality under graduates who would eventually metamorphose to high academic quality graduates needed for socio-economic development. Non usage and under-utilisation of university libraries because of lack of effective reference services has serious negative implications for the quality of undergraduates, who eventually become graduates that are churned out by the universities in Nigeria. There is serious need for effective reference services in the Nigerian university libraries so that the undergraduates would be attracted to the library. This is because the lecturers within the confines of the classroom cannot do it alone.

Non-application of the homophily-*heterophily* consciousness, brings lack of knowledge and skills in reference services transactions. Low or poor quality staff, could result in ineffective reference services as poor staff quality cannot give effective reference services. It is on this note that this study investigated homophily-heterophily consciousness and staff quality, as correlates of effective reference services in university libraries in North Central Nigeria.

Objectives of the study

The broad objective of the study is to establish the effect of homophily-heterophily, and staff quality on effective reference services in university libraries in Nigeria. The specific objectives are to:

1. find out the perceptions of undergraduates on effectiveness of reference services in the university libraries of North Central Nigeria;
2. identify the homophily-heterophily consciousness of the reference librarians; in the university libraries of North Central Nigeria;
3. find out the opinions of undergraduates as regards the quality of reference librarians; in the university libraries of North Central Nigeria;

Research questions

1. What are the perceptions of the undergraduates as regards reference service effectiveness in the university libraries of the North Central Nigeria?
2. Are the reference librarians homophily-heterophily conscious?
3. What are the opinions of the undergraduates as regards the staff quality of reference librarians in the universities of North Central Nigeria?

Hypotheses

The following null hypotheses were tested in the study at 0.05 level of significance:

1. There is no significant relationship between homophily-heterophily consciousness of reference librarians and effective reference services delivery to undergraduate students in the university libraries in north central Nigeria.
2. There is no significant relationship between the quality of staff and effective reference services delivery to the undergraduates of the university libraries in North Central Nigeria.

3. There is no significant composite contribution of the independent variables on the dependent variable.
4. There is no significant relative contribution of the independent variables (homophily-heterophily consciousness and staff quality, on the dependent variable (effective reference services in the university libraries in North Central Nigeria.

Scope of the study

The study focused on the extent to which homophily-heterophily, and staff quality will affect effective reference services to the undergraduate students of the universities of the North Central States of Nigeria.

The universities studied are Federal University of Technology Minna, Ibrahim Badamasi Babangida University(IBBU) Lapai Niger state,(state university) University of Abuja, (federal university) Nigerian Turkish Nile University (NTNU), Abuja (private university), University of Ilorin federal university), University of Jos (federal university), Benue state University, Kogi State University, Nassarawa State University Keffi.

The study dwelt primarily on the effect of two independent variables of homophily-heterophily consciousness and staff quality, on the dependent variable- effective reference services.

Significance of the study

This study would provide empirical evidence that will help reference service effectiveness by examining some variables like homophily-heterophily and staff quality, to see the kind of effects they would have on reference services to the undergraduates in the university libraries studied. However, results of the study could be applied across any library or organisation in the world that is concerned with excellence and service effectiveness.

The result of this study would be of significance to the federal government through its agency, the National Universities Commission (NUC), libraries, and students in tertiary institutions, for example it could encourage the NUC to appropriate more funds for the university libraries which will enable the reference section into providing effective services.

This will be achieved when there is deliberate consciousness on the part of university library management that the reference workers must possess all the attributes of the independent variables, for instance being conscious of homophily-heterophily in reference services, having reference workers of high staff quality, who exhibits high cognitive, affective and psychomotor skills, having well trained staff that that are qualitative. When all

the independent variables are present, then effective reference services will be delivered, and undergraduates will no longer be half baked and then the issue of half baked graduate syndrome will stop.

The consciousness of homophily –heterophily consciousness in reference services delivery will bring about effectiveness in reference services. The implication is that undergraduate students would enjoy coming to use the resources and services of the library, and the result is that graduates of high academic quality would be produced in Nigerian universities. Conscious recognition of the two variables of this study in reference services delivery would give a boost to the profession and its practices.

Finally it will bring into the knowledge industry, the consciousness of homophily-heterophily in service delivery, so that all manner of services delivery will be done efficiently and effectively. The consciousness of this homophily–heterophily concept would eventually become a practice in all spheres of life, This would make the world a better place to live in.

METHODOLOGY

Research design

This study adopted the descriptive design of the correlation type. Nwaogu (1991), states that this type of study seeks to establish the relationship that exists between two or more variables. Usually such **studies** indicate the direction and magnitude of the relationship between the variables. The researcher has no intention to manipulate any of the variables but will study the effect of the independent variables on the dependent variables

Population of the study

The population of the study comprises all the regular and full time university undergraduates in the twenty-one (21) universities in the North Central Nigeria. North Central Nigeria consists of the seven states situated geographically in the middle belt region of the country, spanning from the west, around the confluence of the River Niger and the River Benue. The region itself is rich in natural land features, and boasts some of Nigeria's most exciting scenery. The region is also home to many historical and colonial relics.

There are about twenty –one universities in North Central nigerid (21). They are comprised of private, state and federal government universities.All the universities under review have been licensed by the National Universities Commission.

The total number of undergraduate in North central Nigeria is one hundred and twenty three thousand, nine hundred and fifty(123,950) students, according to ICT and Admissions Offices of the various universities. (2012- 2015)

The researcher relied on the responses of students alone, because the work is about using user opinion to determine reference services effectiveness. The users who are undergraduate students are made to respond objectively to the all the questionnaire items.

Sampling technique and sample size

A couple of sampling techniques were used for this study. They are

(1) Simple random sampling technique for selecting universities

(2) purposive sampling techniques for selecting faculties and departments.

(3) Proportionate sampling technique for selecting the sample size of respondents in the various universities according to their population

(4) Stratified sampling technique for selecting the respondents according to their strata or levels of study.

Simple random sampling technique was adopted to select nine (9) universities out of the twenty-one universities in North Central Nigeria. Simple random sampling technique involves balloting where the elements are listed on small sheets of paper and wrapped to select the desired number or sample size. According to Aina (2004) everysbody in the population is given a chance be part of the sample. Choosing nine (9) out of twenty one (21)universities was very representative because the percentage was 42. 86%.

Purposive sampling method was adopted to select two faculties from each of the universities. The technique was also used to select two departments from each of the two faculties. Purposive sampling method was considered appropriate because of the need to study homogenous population in terms of departments common to all the selected faculties. In purposive sampling, the researcher handpicks certain groups or individuals for their relevance to the issue being studied. The advantage is that information is got from the respondents who are crucial to the study (Aina, 2001 and Nwaogu, 1991).

The sample size of this study would be 1500 of the 123,950 full time regular under graduate students of North Central Nigeria. The sampling fraction used for selecting the sample from 123, 950 students was 1.21%. This gave the researcher 1500 undergraduate students selected from the nine universities. The students for each university were selected through proportionate sampling technique. The sample size of 1500 students was considered

adequate and representative of the whole population, especially considering the fact that the population is a homogenous population of regular undergraduate students. Secondly, scholars like Jeeves (2010) states that for a population of fifty thousand (50,000), three hundred and ninety seven (397) representing 0.79% could be used as sample. In the same vein, Krejcie and Morgan (1970) state that for a population of 200,000, a sample of 384 representing 0.19% could be used. Based on these assertions, the researcher considered 1500 (1.21%) of 123,950 of the study population appropriate and representative of the larger population of the present study.

Data collection instruments/ research instruments

The questionnaire was the research instrument that was used for this study. The questionnaire was designed under three different subscales known as effective reference services questionnaire,(ERSQ), Homophily-heterophily questionnaires(HM-HTQ), staff quality questionnaires(SQQ). This questionnaire was the main instrument for data collection. These instruments, that is ERSQ, HM-HTQ, SQQ, all have One section A. This section: A focused on the background information of the undergraduate students which is their demographic variables. These include information on the name of their universities, gender, faculty, the department and academic level.

Section B: Effective reference services scale(ERSQ) is concerned with data on effective reference services to the undergraduates students. There were questionnaire statements like how often do you visit the library? Do you get satisfactory services? Do the staff give you satisfactory services as expected in a reference section? Do the reference staff assist you in consulting the monographs and fact books?

 Section C : Homophily- Heterophily Scale (HM-HTQ) focused on age, education, socioeconomic attributes, attitudes beliefs and values as factors that encourage or discourage reference services effectiveness.   Questionnaire statements like, the reference staff is uncooperative in attending to you because he feels you are not a match educationally? The reference staff is rude to you because he feels you are of low socioeconomic status?

Section D: Staff quality Scale (SQQ) focused on staff qualities that encourage or discourage effectiveness of reference services. Questionnaire statements like the reference staff are desirous to help you? The reference staff is resourceful? The reference staff has high degree of bibliographical knowledge? The reference staff exhibit high level of tacit and explicit knowledge?

The four point likert rating scale of Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD), and Very Often, Often, Occasionally and Never; were used to determine the average or aggregate responses of the respondents. For the scale on effective reference services delivery the ratings were 1- Very often, 2- Often, 3- Occasionally and 4- Never.

Validity and reliability of the instruments

Validation of the instruments implies adopting procedures to ensure the instruments measure what they are supposed to measure (Nwogu, 1991).Therefore to ensure face and content validity of the questionnaire, they were given to the some senior lecturers and professors in the Department of Library and Information Technology (LIT) FUT Minna. It was corrected and pretested by administration of forty (40) copies on the undergraduate students of Faculty of Education, University of Ibadan. It was administered to them across the major departments of the Faculty.

The Cronbach Alpha method was used to determine the reliability coefficients of the instruments. The value obtained was 0.95 for Effective Reference Services Questionnaire (ERSQ), 0.91 for Homophily-heterophily Questionnaire (HM-HTQ) 0.94 for Staff Quality Questionnaire (SQQ).

Method of data analysis

The data in the study were analysed using Pearson product moment correlation coefficient and multiple regression. Pearson product moment correlation was used to determine the relationship between the variables, while multiple regression was used to predict or determine the effect of the independent variables to the dependent variable. The socio-demographic information were analysed using descriptive statistics of frequency counts and percentages.

Analysis of research questions

Results from analysis of the research questions are hereby presented in the order of the research questions as follows:

Three research questions were answered in this study, to find out the correlations of all the independent variables to the dependent variable. The results are presented in order of the research questions.

Research question 1: What are the perceptions of the undergraduates on reference service effectiveness in the university libraries of the North Central Nigeria?

In order to determine how effective the reference services given to the undergraduates are, the respondents were asked to identify with some questionnaire statements that could reveal effectiveness and maximum satisfaction. The findings are presented in Tables 4.4.

Table 1 Frequency Table Showing effectiveness of reference Services to the undergraduate students

Table 1 Effective reference services to the undergraduate students

S/NO	Statements	Very Often frequency /percentage (3)	Often frequency /percentage (2)	Occasionally Frequency/percentage (1)	Never Frequency/percentage (0)	Mean $\overline{X}$	Standard Deviation
1	How often do you visit the reference services section of the library	_	446 (29.7%)	1054 (70.3%)	_	2.7027	.45724
2	Do the staff give you direct personal assistance as much as expected in reference services?	_	296 (19.7%)	1204 (80.3%)	_	2.7027	.45753
3	Do the staff give you satisfactory services?	_	250 (16.7%)	1250 (83.3%)	_	2.7027	.45724
4	How often does the reference staff answer your questions satisfactorily?	_	206 (13.7%)	1294 (86.3%)	_	2.7027	.45724
5	Do the reference staff assist you in making use of the vertical files?	_	246 (9.7%)	1244 (90.3%)	_	2.7027	.45724
6	Are you assisted in CD-ROM searches?	_	276 (18.4%)	1224 (81.6%)	_	2.6533	.47607
7	Are you assisted in surfing the web?	_	496 (33.1%)	1004 (66.9%)	_	2.6840	.46507
8	Are you assisted in online searches and retrieval?	_	475 (31.7%)	1025 (68.3%)	_	2.6840	.46507
9	Are you assisted in consulting the fact books / monographs?	_	276 (18.4%)	1224 (90.3%)	_	.26753	.6753
10	Are you assisted while using the encyclopedias?		386 (25.7%)	1114 (74.3%)	_	2..6673	.47133
11	Are you assisted while using the directories?		246 (16.4%)	1254 (83.6%)	_	2.6720	.46964
12	Are you assisted while using the dictionaries both subject , general, bilingual and polyglot	_	246 (16.4%)	1254 (83.6%)	_	2.6667	.47156
13	Are you assisted while using the year books?	_	146 (9.7%)	1354 (90.3%)	_	2.6740	.46890
14	Are you assisted while using the manuals?	__	386 (25.7%)	1114 (74.3%)	__	2.6887	.46319
15	Are you assisted while using handbooks and almanacs?	__	460 (30.7%)	1040 (69.3%)	_		

16	Are you assisted while using gazetteers ,atlases and maps?	_	300 (20.0%)	1200 (80.0%)	_	2.6733	.46915
17	Are you assisted while using bibliographical sources (abstracts indexes, bibliographies ,and library catalogues)?		386 (25.7%)	1114 (74.3%)	_	2.6680	.47109
18	Are your reference enquiries always met efficiently and adequately?	__	389 (25.9%)	1111 (74.1%)	_	2.6727	.46940
19	Are the reference assistances given to you adequate in quality and quantity for your intellectual and academic growth?	__	346 (23.1%)	1154 (76.9%)	__	2.6660	.47180
20	Generally do the reference transactions go smoothly?	_	472 (31.7%)	1028 (68.3)	_	2.6747	.47180
21	Overall, would you consider reference services offered by your library as effective	_	50 YES	1450(97%) NO	_	2.6747	.48681

From Table 1 the students responses show that all of the 21 questionnaire statements that reveals maximum reference services effectiveness and user satisfaction, all had high mean scores. Their high mean score is above 1.5 on the four point Likert Scale, where very often is 3, often is 2, occasionally is 1 and never is 0, that is the addition of 3,2,1,0 is 6. When 6 is divided by 4 it is 1.5.That is how 1.5 is the bench mark mean score therefore any mean score above it shows ineffectiveness. Unfortunately all the questionnaire items had high mean scores above 1.5, for instance item 1 How often do you visit the reference services section of the library, mean = 2.702 ,STD =.45724, item 2 Do the staff give you direct personal assistance as much as expected in reference services? mean = 2.702, STD =.45753, Item 4 Are you assisted in surfing the web? Mean = 2.702, STD = 4572, item 9 Are you assisted in consulting the fact books / monographs? Mean= .26753, STD .6753, item 17 Are you assisted while using bibliographical sources (abstracts indexes, bibliographies, and library catalogues)?mean =2.6680 , STD= 47109, item 21: Overall, would you consider reference services offered by your library as effective Mean= .26747, STD .48681. All the 21 items had high mean scores which are above the 1.5 bench mark on the four point Likert Scale. This is a clear case of in effectiveness on the part of reference services delivery, as much as 1450 respondents (97%) indicated and said NO that generally reference services given to them were not effective.

Secondly, the results from Table 1 shows that the reference services to the undergraduate students in the university libraries in North Central States of Nigeria are

occasionally effective. This is an indication that the services being rendered by the library staff to the undergraduate students in the university in the North Central States of Nigeria is far from being satisfactory and, therefore, not effective. This is shown in Table 1 as the highest number of respondents in the 21 item questionnaire indicated that reference services were not effective.

Research question 2: Are the reference librarians homophily-heterophily conscious?

In order to ascertain the homophily-heterophily consciousness of the reference librarians, the respondents were asked to respond to some statements that revealed absence of homophily- heterophily consciousness or non practice of the homophily concept. The findings are presented in table 2.

Table 2: Homophily-heterophily table (HM-HT Q) for undergraduate students

S/No	Statements	SA frequency /percentage((4)	A frequency /percentage 3	D Frequency /percentage 2	SD Frequency /percentage 1	Mean _ X	STANDARD DEVIATION
1	The reference staff is uncooperative in attending to you because he feels you are not a match educationally.	780 52.0	610 40.7	80 5.3	30 2.0	3.4267	.68673
2	The reference staff feels your level of education is low, and treats you with disrespect	780 52.0%	610 40.7%	80 5.3%	30 2.0%	2.6673	.47133
3	The reference staff is rude to you because he feels that you are of low socioeconomic status.	241 16.1%	1004 66.9%	149 9.9%	106 7.1%	2.9200	.73255
4	The reference staff is unfriendly because of the apparent differences in religion.	210 14.0%	1030 68.7%	178 11.9 %	82 5.5%	2.9120	.68549
5	The reference staff shows antagonism because of the differences in socioeconomic status	272 18.1%	1014 67.6%	153 10.2%	61 4.1%	2.9980	.66805
6	The reference staff cooperates in the reference transaction process because both of you have similar dress codes.	275 18.3%	1050 70.0%	108 7.2%	67 4.5%	3.0220	.65864
7	The reference staff show antagonism because of the differences in dress code e.g Islamic dressing	253 16.9%	954 63.6%	136 9.1%	157 10.1%	2.8687	.81314
8	The reference staff cooperate I n reference transaction processes because of the apparent similarity in religion.	648 43.2%	441 29.4%	163 10.9%	243 16.9%	2.9927	1.09670
9	The reference transactions go smoothly because the reference librarians and the students have the same culture.	344 22.9%	748 49.9%	104 6.9%	304 20.3%	3.0240	1.17431
10	The reference transactions go smoothly because the reference librarians and students have the same native language.	780 52.0%	610 40.7%	80 5.3%	30 2.0%	2.6673	.47133
11	The reference transactions go smoothly because the reference librarians and students are from the same tribe.	747 49.8%	595 39.7 %	86 5.7%	72 4.8%	2.6720	.46964
12	The reference transactions go smoothly because of the reference librarians ideological leaning	749 49.9%	609 40.6	93 6.2%	49 3.3%	3.3720	.74430
13	The reference transactions go smoothly because the reference librarians and students belong to the same religious sect.	768 51.2%	608 40.5	74 4.9%	50 3.3%	3.3960	.73363
14	The reference staff feels the students intelligent quotient (IQ) is low, and as such they should not engage them in reference transactions.	765 51.0%	611 40.7%	94 6.3%	30 2.0%	3.4073	.69790
15	The reference staff is understanding, friendly and amiable, cooperative, sympathetic and empathetic loving and, respectful, unassuming and caring and has the right psychological approach to information, thereby showing persistence in information search.	42 2.8%	49 3.3%	634 42.3%	775 51.7%	3.4280	.69171
16	In another vein, the reference staff is unfriendly, antagonistic, insensitive and uncaring, rude and disrespectful, antipathetic, harsh and haughty.	692 46.1%	645 43.0%	85 5.7%	75 5.2%	3.3007	.79751

From Table 2, the students responses show that all of the 16 item   questionnaire statements that reveal absence or unconsciousness of homophily-heterophily   all have high mean scores. Their high mean score were above2.5 on the four point Likert Scale, where very strongly agreed is 4, Agreed is 3, Disagreed is is 2, and strongly disagreed is 1, that is the addition of 4,3,2,1 is 10. When10 is divided by 4 it is 2.5.That is how 2.5 is the bench

mark mean score therefore any mean score above it shows absence or unconsciousness of homophily -hetrophily. Unfortunately all the questionnaire items had high mean scores above 2.5, for instance item 1 The reference staff is uncooperative in attending to you because he feels you are not a match educationally, mean = 3.4267, STD= .68673, item 2: The reference staff feels your level of education is low, and treats you with disrespect, mean = 2.6673. STD = .47133, item 5: The reference staff shows antagonism because of the differences in socioeconomic status mean= 2.9880, STD= 66805, item12: The reference transactions go smoothly because of the reference librarians ideological leaning, mean = 3.3720, STD = .74430, item 16: In another vein, the reference staff is unfriendly, antagonistic, insensitive and uncaring, rude and disrespectful, antipathetic, harsh and haughty. Mean= 3.3007,STD = .79751, These high mean scores reveal absence or un consciousness, or non practice of the homophily-heterophily concept.

Secondly a greater majority of the respondents either agreed or strongly agreed to all the questions that revealed absence, un consciousness, or non practice of the homophily-heterophily concept, for instance, item 4 has a frequency of 1030 representing 68.7% for agree and a frequency of 210 representing 14,0% that strongly agreed and agreed to all the items that reveal absence or non practice of the homophily –heterophily concept. The same goes for item 5 with 1014 responses and a frequency of 67.6%, 272 representing 14.0% all agreeing and strongly agreeing to all the questions that reveal un consciousness, or non practice of the homophily-heterophily concept. The same goes for all the other items but in item number 15 where there was a little twist in the question like, the reference staff is understanding, friendly and amiable, cooperative, sympathetic and empathetic loving and, respectful, unassuming and caring and has the right psychological approach to information, thereby showing persistence in information search, majority of the respondents for the first time disagreed and strongly disagreed with frequencies of 634 representing 42,3% and 775 representing 51.7% for strongly disagreed. All these in clear and concise terms, translate to absence or unconsciousness, or non practice of the homophily-heterophily concept in reference services delivery.

Research question 3: What are the opinions of the undergraduates as regards the staff quality of the reference librarians in the universities of North Central Nigeria.

The respondents were made to react to all the questions that revealed good staff quality. The findings are presented in Table 3

Staff quality table (SQQ) for undergraduate students

Table 3: Reference staff quality

S/N0	STATEMENTS	SA frequency/ percentage (4)	A frequency /percentage 3	D Frequency/ percentage 2	SD Frequency/ percentage 1	Mean _ X	Standard Deviant	Std Deviation
1	The reference staff is desirous to help you and exhibits flexibility of mind.	36 2.3%	69 4.6%	668 44.5%	728 48.5%	3.3927	.68614	
2	The reference staff is resourceful.	48 3.2%	79 5.3%	653 43.5%	720 48.0	3.3633	.72733	
3	The reference staff is accommodating and amicable.	219 14.6%	60 4.0%	389 25 .9%	832 55.5%	3.2227	1.06294	S
4	The reference staff are people of intellectual depth and breath and demonstrates intellectualism at all times.	88 5.9%	186 12.4	768 51.2%	458 30.5%	3.0640	.81262	
5	They are generalists and specialist in one	29 1.9%	82 5.4%	889 59.3%	500 33.3%	3.2400	.63875	
6	They are intellectually gifted	26 1.7%	57 3.8%	943 62.9%	474 31.6%	3.2433	.60363	
7	They show innovation in the discharge of their duties.	18 1.2%	58 3.9%	954 63.6%	470 31.3%	3.2507	.58085	
8	They have high degree of bibliographical knowledge.	23 1.5%	58 3.9%	952 63.5%	467 31.1%	3.2420	.59414	
9	They have the right psychological approach to information seekers, and exudes confidence in handling difficult queries.	29 1.9%	54 3.6%	957 63.8%	460 30.7%	3.2320	.60533	
10 11	They are good listeners that avoid unnecessary interruptions while making reference transactions and enquiries. They exhibit high level of tacit and explicit knowledge.	53 3.5% 36 2.4%	90 6.0 % 84 5.6%	918 61.2 % 934 62.3	439 29.3 % 446 29.7%	3.1620 3.1933	.68415 .64205	
12	They exhibit high cognitive skills and competences in reference transactions.	66 4.4 %	77 5.1%	909 60.6 %	448 29.9	3.1933	.64205	
13	They exhibit high level of tactics in information retrieval both physically and electronically.	122 16.8%	122 8.1%	786 52.4%	340 22.7%	3.1593	.70778	
14	They exhibit high cognitive competence in acquiring new skills and knowledge.	113 7.5%	217 14.5%	740 49.3%	430 28.7 %	2.9913	2.9913	
15	They exhibit high level of education, and demonstrate high level of academic attainment.	56 3.7%	92 6.1%	885 59.0 %	467 31.1%	3.1753	.70113	

From Table 3 the student's responses show that all of the 15 item   questionnaire statements that reveal good and excellent staff quality were either disagreed upon or strongly disagreed upon. All have high mean scores. Their high mean score were above 2.5 on the four point Likert Scale, where strongly agreed is 4, Agreed is 3, Disagreed is   2, and strongly disagreed is 1. The scores add up to 10, that is, the addition of 4,3,2,1 is 10. When10 is divided by 4 it is 2.5. That is how 2.5 is the bench mark mean score therefore any mean score above it shows   poor quality staff and ineffectiveness. Unfortunately all the questionnaire items had high mean scores above 2.5, for instance item 1: The reference staff

is desirous to help you and exhibits flexibility of mind. Mean =3.392, STD = .6814, item 2: The reference staff is resourceful. Mean = 3.3633, STD .72733, item 6: They are intellectually gifted. Mean = '.3.2433, STD .60363, item 8: They have high degree of bibliographical knowledge. Mean = 3.2420, STD = .59414, item 11: They exhibit high level of tacit and explicit knowledge. Mean = 3.1933, STD = .64205. These high mean scores show ineffectiveness caused by poor staff quality.

On the other hand, the table shows the fact that the respondents rated the staff quality for reference services low. For instance item 12: They exhibit high cognitive skills and competences in reference transactions has a frequency of 909 respondents representing 60.6% who disagreed and a frequency of 448 representing 29.9% who strongly disagreed to that item. This indicates that the reference staff is of poor quality and cannot offer effective reference services. Item 13: They exhibit high level of tactics in information retrieval both physically and electronically has a frequency of 786(52.4%) who disagreed, and 340 (22.7%) who strongly disagreed. This indicates that the reference staff is of poor quality and cannot offer effective reference services. In the same vein item 15: They exhibit high level of education, and demonstrate high level of academic attainment, has a frequency of 885 representing 59.0%who disagreed, and 467representing 31.1% who strongly disagreed. This again indicates that the reference staff is of poor quality and cannot offer effective reference services.

Presentation of hypotheses / Hypotheses testing

four hypotheses were tested in the study at 0.5 level of significance. The results are as follows:

Hypothesis One:

There is no significant relationship between homophily-heterophily concept and effective reference services delivery to undergraduate students in the university libraries in North Central Nigeria.

Table 4: Correlation table showing relationship between homophily-heterophily and effective reference services delivery

Variable	N	Df	Mean	Std Deviation	r	P	Remark
Homo-Heterophily	1500	1498	48.54	7.20	0.981	0.000	Sig
Effective Service Delivery	1500		56.72	7.41			

The result from Table 4 shows the relationship between homophily-heterophily and effective reference service among undergraduate students in the North Central. The relationship was found to be significant (r = 0.981, P < 0.05). It implies that there is significant positive relationship between homophily-heterophily and effective reference service among undergraduate students in the North Central, Nigeria. Therefore, the null hypothesis is rejected.

Hypothesis Two: There is no significant relationship between the quality of staff and effective reference services to the undergraduate students of the university libraries in North Central Nigeria.

Table 5:   Correlation table showing relationship between staff quality and effective reference services delivery

Variable	N	Df	Mean	Std. Deviation	r	P	Remark
Staff Quality	1500	1498	41.71	5.19	0.792	0.000	Sig
Effective service Delivery	1500	1498	56.72	7.41			

The result from Table 5 shows the relationship between staff quality and effective reference service among undergraduate students in the North Central. The relationship was found to be significant (r = 0.792; P < 0.05). It implies that there is significant positive

relationship between staff quality and effective reference service among undergraduate students in the North Central, Nigeria. Therefore, the null hypothesis is rejected.

 Hypothesis three: There will be no significant composite effect of the independent variables on the dependent variable**.** The result has been presented in Table 6

Table 6: Summary of regression analysis of the combined prediction of the independent variables on effective reference services

R = 0.760						
$R^2 = 0.577$						
Adjusted $R^2 = 0.575$						
Std. Error of Estimate = 0.10317						
	Sum of Squares	Df	Mean Square	F-ratio	P	Remark
Regression	82213.102	4	20553.276	1930845.959	0.000	Sig
Residual	15.914	1495	0.011			
Total	82229.016	1499				

Table 6 showed that the composite /combined effect of the independent variables (homophily-heterophily concept, staff quality,) were such that these factors have positive multiple correlations with the dependent variable (R = .577). This however, showed that these factors are quite relevant and important in predicting effective reference services. This is in line with the result earlier obtained on each of the two factors in their correlations with effective reference service. Also, the two factors combined could explain 76% of the total variance in effective reference service (R^2 = 0.575). The remaining 24% was due to other factors and residuals not included in this study.

The table 6 also showed that the adjusted R^2 value of 0.575 obtained is not due to chance as it was found to be significant ($F_{(4,1495)}$ = 1930845.959; P < .05). Consequently, the

hypothesis which states that there will be no significant composite effect of the independent variables on the dependent variable was therefore not accepted.

Hypothesis four: There is no significant relative contribution effect of the independent variables (homophily-heterophily concept, staff quality, on the dependent variable (effective reference services in the university libraries)

Table 7: Summary of relative contribution of the independent variables to effective reference services

Table 7: Summary of relative contribution of the independent variables to effective reference services

Model	Unstandardized Coefficients		Standardized Coefficients		T	Sig.
	B	Std. Error	Beta(ß)	Rank		
1 (conant	-2.447	0.205			11.926	0.000
	0.006	0.002	0.006	2nd	3.320	0.001
	1.171	0.018	0.820	1st	64.373	0.000

Table 7: Summary of relative contribution of the independent variables to effective reference services

Model	Unstandardized Coefficients		Standardized Coefficients				
	B	Std. Error	Beta(ß)	Rank	T	Sig.
1 (conan t	-2.447	0.205			11.926	0.000
	0.006	0.002	0.006	2nd	3.320	0.001
	1.171	0.018	0.820	1st	64.373	0.000

Significant at P< .05

Table 7 reveals the relative contribution of the two independent variables to the dependent variable, expressed as beta weights. The partial correlation coefficient of homophily-heterophily concept has positive relationship with the effective reference services of the undergraduate students. The positive value of the effects of staff quality, implies that the effective reference services to undergraduate students is actually determined by reinforcement of these two variables. Using the standardized regression coefficient to determine the relative contributions of the independent variables to the explanation of the dependent variables staff quality (ß = 0.820, t= 64.373, P < .05) is the most potent contributor to the prediction followed followed by homophily-heterophily factor (ß = 0.006, t = 3.320, p < 0.05) .

Discussion of findings based on research questions

Research Question1: sought to find out the perceptions of the undergraduate students as regards reference services effectiveness in the university libraries in North Central States of Nigeria,

The study revealed that reference services to the university undergraduates in the libraries of North Central Nigeria were occasionally effective. This is an indication that the reference services being rendered to the undergraduate students are grossly inadequate and far from being satisfactory. This is aptly demonstrated in Table 1 in the frequency table

showing effective reference services delivery, majority of the respondents had the same view on the 20-question items listed, as being occasionally satisfactory and grossly inadequate . There is a clear case of in effectiveness on the part of reference services delivery, as much as 1450 respondents in questionnaire item 21 (97%) indicated and said NO that generally reference services given to them were not effective. These findings contrast with the views of Kumar and Surreh (2001), Millet (2001) and Drucker (2006) about what effective reference services are. These authors posit that effective reference service delivery implies having the means to cause desired result or intended result which comes as a result of maximum satisfaction. It also means having the way to cause the desired effect in reference service delivery, and anything short of this is ineffective reference services delivery. Effective reference service delivery implies having the means to cause desired result or intended result which comes as a result of maximum satisfaction. It also means having the way to produce the desired effect in reference services delivery, and anything short of this is ineffective reference services delivery.

Research question 2: Are the reference librarians homophily-heterophily conscious?

In order to ascertain the homophily-heterophily consciousness of the reference librarians, the respondents were asked to respond to some statements that revealed absence of homophily- heterophily consciousness or non practice of the homophily concept. The findings are presented in Table 2.

Majority of the respondents either agreed or strongly agreed to all the questions that revealed absence, unconsciousness, or non practice of the homophily-heterophily concept. This is aptly demonstrated in Table 4.5, for instance item 4 has a frequency of 1030 representing 68.7% for agree and a frequency of 210 representing 14,0% that strongly agreed and agreed to all the items that reveal absence or non practice of the homophily – heterophily concept. The same goes for item 5 with 1014 responses and a frequency of 67.6%, 272 representing 14.0% all agreeing and strongly agreeing to all the questions that reveal un consciousness, or non practice of the homophily-heterophily concept. The same goes for all the other items but in item number 15 where there was a little twist in the question like, the reference staff is understanding, friendly and amiable, cooperative, sympathetic and empathetic loving and, respectful, unassuming and caring and has the right psychological approach to information, thereby showing persistence in information search, majority of the respondents for the first time disagreed and strongly disagreed with frequencies of 634 representing 42,3% and 775 representing 51.7% for strongly disagreed.

All these in clear and concise terms, translates to   absence or un consciousness, or non practice of the homophily-heterophily concept in reference services delivery.   All these contrast with the findings of of Golub and Jackson (2008) in their work "how homophily and heterophily affects diffusion of learning in networks". They found that consciousness of homophily – heterophily enhanced quick learning and assimilation which could be likened to effective reference services delivery. They now suggested that universities and other organizations should bring the homophily–heterophily consciousness into service delivery. It also discordant or in contrast with the views of Ruffner and Burgon (1988), Lovin and Cook (2001), Elliot (2007), Bowik 2008, that people are more likely to interact well with similar others, and to be either lukewarm or unfriendly to dissimilar others. The implication is that non practice or unconsciousness of the homophily –heterophily concept can only engender ineffective reference services to university undergraduates.

 Research question 3: which sought to find out the opinions of the undergraduates as regards the staff quality of the reference librarians in the universities of North Central Nigeria.

A glance at the Table 3 exhibits the fact that all the questionnaire items   showed impressive and desired staff quality. They were either disagreed to, or strongly disagreed to by the respondents. For instance item 12: They exhibit high cognitive skills   and competences in reference transactions has a frequency of 909   respondents representing 60.6% who disagreed and a frequency of 448 representing 29.9% who strongly disagreed to that item. This indicates that the reference staff is of poor quality and cannot offer effective reference services. Item 13: They exhibit high level of tactics in information retrieval both physically and electronically has a frequency of 786(52.4%) who disagreed, and 340 (22.7%) who strongly disagreed. This indicates that the reference staff is of poor quality and cannot offer effective reference services. In the same vein item 15: They exhibit high level of education, and demonstrate high level of academic attainment, has a frequency of 885 representing 59.0% who disagreed, and 467 representing 31.1% who strongly disagreed.

This again indicates that the reference staff is of poor quality and cannot offer effective reference services. This is discordant with the views of Katz (1990), Senna (2003), Ojedokun (2007) and many others, that staff quality is the most crucial factor in library's ability to secure resources, adapt to change and deliver quality and effective reference services. Hammid and Nayan (2005) equally share the same view as they claim that any university library depends on the ability to utilize the knowledge and experience of their reference staff as their asset. Lee (200) pointed out that the knowledge and experience of

reference staff are the assets of any university library, because that is what they use to give effective and satisfactory reference services.

Discussion of Findings based on the tested hypotheses

Hypothesis 1: There is no significant relationship between homophily-heterophily concept and effective reference services delivery to undergraduate students in the university libraries in North Central Nigeria.

Table 4 indicates the correlation table showing relationship between homophily – heterophily and effective reference services delivery to the undergraduate students of the North Central States of Nigeria. From the result, a statistically significant relationship was found between homophily-heterophily and effective reference service among undergraduate students in the North Central Nigeria ($r = 0.981$, $P < .05$). Since there is significant relationship between homophily-heterophily and effective reference service among undergraduate students in the North Central, Nigeria, it implies that homophily-heterophily have positive relationship with effective reference services. Based on this, the null hypothesis is rejected, which means that there is a significant relationship between homophily-heterophily and effective reference services delivery. This significant positive relationship revealed by hypothesis one, contrasted with all the questionnaire statements that revealed that the reference staff were uncooperative, unfriendly, insensitive, and uncaring. These showed absence or no consciousness of the homophily- heterophily concept in reference service delivery.

The significant and positive relationship between homophily – heterophily and effective reference services as expressed in hypothesis one: is in inconsonance with the findings of of Golub and Jackson (2008) in their work "how homophily and heterophily affects diffusion of learning in networks". They found that consciousness of homophily – heterophily enhanced quick learning and assimilation which could be likened to effective reference services delivery. They now suggested that universities and other organizations should bring the homophily–heterophily consciousness into service delivery. It also agree with the views of Ruffner and Burgon (1988), Lovin and Cook (2001), Elliot (2007), Bowik 2008, that people are more likely to interact well with similar others, and to be either lukewarm or unfriendly to dissimilar others.

Hypothesis 2: There is no significant relationship between the quality of staff and effective reference services to the undergraduate students of the university libraries in North Central Nigeria.

Table 5 indicates the correlation table showing relationship between staff quality and effective reference services delivery to undergraduate students of North Central Nigeria. The results from the table shows that there is a statistically significant relationship between staff quality and effective reference services delivery among university undergraduates in North Central Nigeria (r = 0.792, P < .05). Since there is significant relationship between staff quality and effective reference service among undergraduate students in the North Central, Nigeria, it implies that staff quality have positive relationship with effective reference services. Based on this, the null hypothesis is rejected, which means that there is a significant relationship between staff quality and effective reference services delivery.

This significant positive relationship revealed by hypothesis 2 is in agreement with all the questionnaire statements that reveal good staff quality, For instance, the fact that the reference staff should be desirous to help and should have flexibility of mind, the fact that the reference staff should exhibit high cognitive skills and competencies in reference transactions, the fact that the reference staff should be resourceful, intellectually gifted, exhibit high cognitive skills and competences in reference transactions, and a lot others, agree with the views of Katz (1990), Senna (2003), Ojedokun (2007) and many others, that staff quality is the most crucial factor in library's ability to secure resources, adapt to change and deliver quality and effective reference services. Hammid and Nayan (2005) equally share the same view as they claim that any university library depends on their ability to utilize the knowledge and experience of their reference staff as their asset. Lee (200) pointed out that the knowledge and experience of reference staff are the assets of any university library, because that is what they use to give effective and satisfactory reference services.

This is in consonance with the findings of Fabunmi (2010), who stated that the effectiveness and efficiency of reference services would not just depend on collections or resources available but on the quality of staff and their level of education which is supposed to be high and impressive.

Hypothesis 3: There will be no significant composite or joint effect of the independent variables on the dependent variable or there will be no significant composite effect of homophily- heterophily, staff quality, information literacy and availability of resources on effective reference services.

Table 6 showed that the composite/combined effect of the independent variables (homophily-heterophily concept, staff quality, information literacy and availability of information resources) were such that these factors have positive multiple correlations with the dependent

variable (R = .577). This however, showed that these factors are quite relevant and important in predicting effective reference services. This is in line with the result earlier obtained on each of the four factors in their bivariate correlations with effective reference service. Also, the four factors combined could explain 76% of the total variance in effective reference service ($R^2 = 0.575$). The remaining 24% was due to other factors and residuals not included in this study.

The Table 6 also showed that the adjusted R^2 value of 0.575 obtained is not due to chance as it was found to be significant ($F_{(4,1495)} = 1930845.959$; $P < .05$). Consequently, the hypothesis which states that there will be no significant composite effect of the independent variables on the dependent variable was therefore not accepted.

The findings are in line with that of Lancaster (1988), Hermon and Nitech (2009) and Herman and Shafiq (2011). They posited that libraries are service organisations and it is the information resources that determine their quality. Service quality includes three areas (a) resources, information resources/content which bothers on availability of information resources, (b) service environment and resource delivery, this bothers on effectiveness like reference services effectiveness; (c) service delivered by staff, which bothers on staff quality; and a good quality staff that is information literate and takes into recognition homophily–heterophily consciousness in communication transaction.

Hypothesis 4: There is no significant relative contribution effect of the independent variables (homophily-heterophily concept staff quality, information literacy and availability of information resources) on the dependent variable (effective reference services in the university libraries)

Table 7 showed positive value of the effects of staff quality, information literacy and availability of information resources implies that the effective reference services of undergraduate students is actually determined by reinforcement of these four variables. Using the standardized regression coefficient to determine the relative contributions of the independent variables to the explanation of the dependent variables staff quality (ß = 0.820, t= 64.373, P < .05) is the most potent contributor to the prediction followed by homophily-heterophily factor (ß = 0.006, t = 3.320, p < 0.05) .

So it can be seen that relatively the independent variables have significant contribution with effective reference services. For homophily–heterophily all the questionnaire statements revealed unconsciousness or non practice of homophily- heterophily concept in reference transactions, hence the high positive correlation to show that any unconsciousness or non

practice of it in reference services should be addressed because reference staff should even undergo trainings on how to practice it especially for empathy.

Staff quality is very essential for effective reference services delivery because it is only a good quality staff that can empathize.

Conclusion

The study shows that all the independent variables namely homophily-heterophily, staff quality, information literacy and availability of information resources showed strong positive and significant relationships both individually(relatively) and collectively (jointly or compositely) to the dependent variable which is effective reference services. Therefore for effective reference services in university libraries all the independent variables need to be taken into consideration, that is they need to be in existence for effective reference services.

Recommendations

Based on the findings of this research, the following recommendations are proffered to improve effective reference services to university undergraduates in North Central Nigeria. It is essential for Nigerian universities to produce high academic quality graduates needed for socioeconomic development. Under utilization of the reference services section of the Nigerian university libraries because of unsatisfactory and ineffective reference services has serious negative implications for the quality of graduates churned out in particular, and for the Nigerian polity in general, therefore,

1   There is need for parents and all stake holders in the education industry, university's administration, university's library administration, government at all levels or tiers, in Nigeria to ensure that all the independent variables that were duly investigated and found to have significant relationships with effective reference services are adequately provided in Nigeria's university libraries in general and that of North Central Nigeria in particular.

2   .For effective reference services, there should be deliberate consciousness of the homophily- heterophily concept in communication and reference transactions as it engenders effectiveness in reference transactions. With the consciousness of homophily- heterophily in reference services transactions, the reference staff would show respect for the ideological leanings of the undergraduate students, be friendly, cooperate and empathise with them for smooth reference transactions, there would be influx of the students in the reference section seeking direct personal assistance that would help them in knowledge acquisition.

3   Librarians that should be deployed to the reference section are the ones that respect the existence and principle of homophily- heterophily concept. There should be adequate training about the homophily- heterophily concept for librarians and other workers that render services. Once employees become conscious of it in libraries or any organization, people would begin to respect each other's ideologies and feelings, people would employ empathy when dealing with others. Workers who are conscious of it would respect the likes and dislikes of others. This homophily- heterophily is a necessity for effective reference services delivery, be it effective reference services or any other services delivery in any organisation. It is a package that should be made popular to others by training and intensive sensitization. University library's management and university authorities should post staff that are homophily-heterophily compliant to the reference section. In employment generally, employees that are homophily –heterophily compliant should be given employed so that services would go on smoothly. This would make all customers to be satisfied with the organization and would result in profit maximization.

4   High quality staff is a sine qua non for effective reference services because it is high staff quality that has high cognitive competence. The reference staff should exhibit high cognitive skills and competencies in reference transactions, they should be resourceful and should show high degree of bibliographical knowledge, they should show innovation in thedischarge of their duties and should be desirous to help the students in their information search. The implication of this is that staff with high cognitive capabilities should be employed, to help the undergraduate students by giving them direct personal assistance for smooth reference transactions. This will make them independent learners for lifelong learning.

5   Staff quality from the findings significantly influence effective reference services, therefore managers of organizations, universities and university libraries should employ good quality staff with high cognitive competence to handle all complex queries and challenges. Afterall, Hammid and Nayan (2005) opine that the success of any university library will depend on their ability to utilize the knowledge of their staff, to serve their users. In the same vein, the success of any organization depends on how they utilize the tacit and

explicit knowledge of their staff to improve their goods and services towards profit maximization, and attainment of organizational goals and objectives.

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