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AVAILABILITY, INFORMATION RETRIEVAL SKILLS AND USE OF ELECTRONIC RESOURCES BY INFORMATION PROFESSIONALS IN ACADEMIC LIBRARIES IN SOUTH WESTERN NIGERIA

SAMSON OYENIYI AKANDE*

I.   INTRODUCTION

Research and scholarly publishing which require the use of print and electronic resources by library and information science professionals in Nigerian Universities have been regarded as major academic activities beside the discharge of the routine professional information services.   These activities have assumed such a significant dimension in the recent past that appointment and promotions, career progression, access to grants and other privileges are all attached to the quantity and quality of scholarly publications show cased in the Curriculum Vitae (CV's) of librarians from being custodian of books to facilitating access to information in an ICT rich environment has made it compulsory for the library and information professionals to develop information skills to navigate the information landscape. While the information professionals are expected to facilitate access to the electronic resources in the libraries, the demand of the profession as academics and researchers also makes it imperative for them to use the electronic resources for research and publishing. Their research findings are made known to the public basically in outlets like local and foreign journals in order to advance professionally and to demonstrate their scholarship. Corroborating this fact, Mabawonku (2005) listed books, conference papers, reports and journals as outlets for scholarly communication by library and information science professionals in Nigeria.

Printed materials, non-printed and electronic resources constitute information resources and sources for research, learning and teaching. Today, academics, including University lecturers, library and information science professionals all over the world can conduct research, teach and accomplish other academic tasks by using computers connected to the Internet to search and retrieve needed information from electronic catalogues, e-journals and large databases of digitized scholarly information (Marcum and George, 2003). Academics have found great delight in using electronic resources for research based on factors

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considered to be related to ease of use and reliability. Barret (2005) ascribed researchers' preference for electronic resources to their time saving qualities and the convenience of remote access to full-text journals.

In the recent past, there has been an increase in the provision and use of electronic resources in university libraries globally. According to Bhat (2009), large amount of money is spent on acquisition of electronic resources in university libraries. Similarly, many Nigerian university libraries spend a huge sum of money in acquisition and provision of electronic resources to augment the printed resources. This initiative is to facilitate access to global current scholarly information for learning and research. Useful research information is no longer only in print sources, they are also in electronic forms. They can now be retrieved from different types of electronic resources such as Compact Disk-Read Only Memory (CDROMS), Internet, Online Public Access Catalogue(OPACs), electronic books and electronic journals by using appropriate search strategies including Boolean operators (OR, AND, NOT), truncation, proximity features. The search for information online involves the use of appropriate search engines such as Yahoo, Google, Excite, Alta Vista and the likes and competence in navigating the information landscape.

Information retrieval skills are crucial for retrieving information for educational outcomes. Gui (2007) opines that the information retrieval skills which the university students need include those skills needed to navigate, select, evaluate and re-use information. By implication, the library and information science professionals working in university libraries need to develop information skills essential for locating and retrieving information in an information and communication technology rich environment to position themselves as real information gatekeepers and instructors in contemporary society. The information retrieval skills of information professionals may be a strong factor that could influence their use of electronic resources. This is because Wildman (2003) study of faculty's use of electronic resources shows that use was influenced by such factors as computing skills of academics. Zin et al. (2000), lend credence to this in their assertion that knowledge, skill and competence with computer technology are now vital assets for all employees in institutions and organization.

Several studies related to the use of electronic resources by different groups of researchers have been reported in the literature. The study of Torma and Vakkari (2004) has shown that the perceived availability of key electronic resources by researchers in Finnish National Electronic Library (Fin Elec Lib) was a stronger-predictor of the frequency and purpose of use of its services than users' discipline. Tenopir(2003) writing on the use of electronic resources by University faculty has shown that factors like subject discipline, status, sex and age are typical factors related to the use of electronic resources and digital libraries in these group.

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Printed materials, non-printed and electronic resources constitute information resources and sources for research, learning and teaching. Today, academics, including University lecturers, library and information science professionals all over the world can conduct research, teach and accomplish other academic tasks by using computers connected to the Internet to search and retrieve needed information from electronic catalogues, e-journals and large databases of digitized scholarly information (Marcum and George, 2003). Academics have found great delight in using electronic resources for research based on factors

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Eason et al (2000), Abels et al (1996) have expressed that the availability of relevant electronic resources affects how frequently scholars use them. One of the major factors explaining the use of electronic libraries is the scholar's discipline (Borgman, 2000; Tenopir, 2003). Also, it seems that the representatives of science and medicines use electronic resources more frequently than humanists and social scientists (Borgman, 2000; Tenopir, 2003). Torma and Vankkari (2004) citing Borgman (2000) asserted that provision of electronic resources varies among disciplines. According to them, they are most available in science and medicine and least in social sciences and humanities.

The use of electronic resources by researchers in Africa and particularly in Nigeria abounds in the literature. Ozoemelem (2009) conducted study on the use of electronic resources by postgraduate students of the department of library and information sciences in Delta State University, Abraka, Nigeria. He discovered that there is a low level of skillfulness in the use of ICT and low level of electronic resource experience amongst the postgraduate students.

Ani and Ahiazu (2008) conducted a research on effective development of electronic information resources in Nigerian university libraries. Findings of their study revealed that there is a high level of development of electronic information resources in Nigerian university libraries. The study of Oyelaran-Oyeyinka and Adeya (2004) on internet access in Africa: empirical evidence from Kenya and Nigeria is very germane to this particular study. The study has identified that internet use is constrained by structural as well as cost factors. It was also revealed that initial investment cost of end-user equipment limits the ownership of PCs, compelling academics to seek internet access in cyber cafes and other public places. In the same vein, Aramide (2010) researched on availability and use of audiovisual and electronic resources by distance learning students in Nigerian universities. He reported that lack of skill is one of the factors limiting the use of the resources by the students.

Although literature has reported a high level of usage of electronic resources by researchers and academics in various disciplines all over the world (Tenopir, 2003; Torma and Vankarri, 2004; Gui, 2007). Studies in Nigeria like Ajuwon (2003); Ureigho, Oroke and Ekruyota (2006); and Olalude (2007) have reported low usage of electronic resources especially Internet resources among the researchers and scholars. According to Olalude (2007), there is low use of scholarly electronic publications by lecturers in federal universities in Nigeria compared to their counterparts in Britain, United States, and even in Botswana and South Africa.. Information professionals in academic libraries are regarded as the gate-keepers of knowledge. In most cases, they are expected to impart information literacy skills to the library users' community especially the faculty members who basically are researchers. Their information delivery capacity is the function of availability of the resources and their competence in the use of the resources even now that many libraries in Nigeria are experiencing a transition from print to electronic collections. As provision of access to

electronic information is becoming increasingly popular in academic libraries, it is necessary to have a better understanding of the level of competence of information professionals in the use of e-resources and the level of availability of the electronic resources in the libraries. The knowledge generated will guide management decisions on issues related to staff development, capacity building, and electronic resources development in academic libraries in Nigeria. It is against this backdrop that the study is conducted to ascertain among other things the availability of electronic resources, the competence level and the level of usage of electronic resources by the library and information professionals in academic libraries in SouthWestern Nigeria.

II.   OBJECTIVES OF THE STUDY

The main objective of this study is to investigate availability, the retrieval skills and the level of usage of electronic resources by information professionals in selected academic libraries in South-Western Nigeria. The specific objectives are to.

1.   Determine the extent to which electronic resources are available for use by the information professionals;

2.   Investigate the factors influencing the use of the electronic resources;

3.   Determine the barriers to the professionals' use of electronic resources;

4.   Find out the frequency of use of the electronic resources;

5.   Investigate the level of knowledge of information retrieval skills of the information professionals.

To achieve these objectives, six research questions were raised and answered and three hypotheses were formulated and tested at 0.01 level of significance. The research questions are:

1.   What is the extent of availability of electronic resources for the use of information professionals?

2.   What are the factors influencing the use of the electronic resources?

3.   What is the frequency of use of the electronic resources?

4.   What is the level of knowledge of information retrieval skills of information professionals?

5.   What are the factors militating against the use of electronic resources?
      Hypotheses.

The hypotheses formulated for the study include:

1. There is no significant relationship between availability of electronic resources and use by information professionals in South-Western Nigeria.

2. There is no significant relationship between information retrieval skills of information professionals and use of electronic resources

3. Availability of electronic resources and information retrieval skills of the information professions when taken together will not significantly influence the use of electronic resources.

III.   RESEARCH METHODS

Survey research design was employed in the study to draw sample from the several information professionals working in academic libraries in South-Western Nigeria. A sample size of 175 information professionals were randomly selected from a population of 250 information professionals in the federal, state, and private university libraries in South-Western Nigeria using a simple random sampling technique.

One hundred and seventy-five copies of a 14-item questionnaire were distributed to the selected information professionals in the academic libraries out of which 150 copies were returned forming a return rate of 85.7%.

All the copies of the questionnaire returned were filled properly and analysed. The questionnaire analysed shows that 84 (56.0%) were males and 66 (44.0%) were females. Research Instrument.

Data for the study was collected by using a questionnaire divided into four sections. The first section elicited information on the demographic characteristics of the respondents. These include age, gender, educational qualification, length of service, professional status.

The second section of the questionnaire tagged AVAKER (Availability of key Electronic Resources) scale was designed to elicit information on the availability of the electronic resources. The scale is a 12-item inventory. The respondents responded on a four-point Likert type scale (4 = Readily Available, 3 = Available, 2 = occasionally available, 1 = Not Available). Total scores ranged from 48, indicating a high level of availability of the electronic resources for use, to 12 which would indicate not available. The third section was the information retrieval skills of Electronic Resources (INFORESER) Scale constructed by the researcher with 8-items designed to measure the level of competence of information professionals and their use of information retrievals skills. The inventory was rated on a five-point Likert type scale (5 = Very Good, 4 = Good, 3 = Average, 2 = Poor, 1 = Very Poor).

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Total scores on INFORESER ranged from 40 to 8, with 40 implying high level of competence (very good) and 8 indicating low level (very poor).

Procedures for Data Collection and Analysis

The data for the study was collected by questionnaire administered to the respondents randomly selected in the academic libraries. The questionnaire was administered with the assistance of professional colleagues who were staff in the libraries sampled for the study. The exercise took four weeks. Out of 175 copies of the questionnaire administered, 150 copies were returned completely filled representing 85.7% return rate. These were used for data analysis on the study.

Data gathered was analysed using descriptive and inferential statistics. Statistical packages for social sciences were used to run frequencies, percentages, Pearson's correlations and multiple regressions in reporting the findings.

Data Analysis Results

The results obtained from the analysis of data are as presented below.

Table 1: Demographic Information

Demographics	Frequency	Percentage
Male	84	56.0
Female	66	44.0
Total	150	100

Table 1 reveals the demographic information of the respondents on gender as 84 (56.0%) males and 66 (44.0%) females. This is an indication that more males participated in the study than females.

Table 2: Professional status of respondents

Status	Frequency	Percentage
Assistant Librarian	33	22.0
Librarian II	37	24.7
Librarian I	25	16.7
Senior Librarian	22	14.7
Principal Librarian	17	11.3
Deputy University Librarian	11	7.3
University Librarian	5	3.3
Total	**150**	**100.0**

Table 2 shows that the predominant respondents in the study were the information professionals in the category of Librarian II who were 37 (24.7%) of the respondents. This is closely followed by Assistant Librarian representing 33 (22.0%) of the respondents. The table reveals the respondents to the questionnaire in a decreasing order when the hierarchy of professional status is considered from Librarian II to the University Librarian. This implies that there are more professionals at the lower level of management than in the higher level of management.

Research Question Analyses

Research Question 1: What is the extent of availability of electronic resources for the use of information professionals?

Table 3 presents the data on the extent of availability of electronic resources.

Table 3: Availability of Electronic Resources

	Frequency	Percentage
Very well	54	36.0
Well	43	28.7
Some degree	45	30.0
Badly	8	5.3
Total	150	100.0

The responses to the question on availability of electronic resources indicate 54 (36.0%) of the respondents subscribing to Very Well Available, 43 (28.7%) Well Available while 8(5.3%) of the respondents indicated Badly Available. The table generally reveals that

electronic information resources are fairly available for the use of information professionals.

Research Question 2: What are the factors influencing the use of the electronic resources by the information professionals.

Table 4 shows the analysis of data on the factors influencing the use of electronic resources.

Table 4: Factors influencing the use of Electronic Resources

Factors	Frequency	Percentage
Ease of access	60	40.0
Usefulness	36	24.0
Quick response time	29	19.3
Ease of use	17	11.3
Reliability	8	5.3
Total	150	100.0

Table 4 is a summary of data on the factors influencing the professionals' use of electronic resources. According to Table 4, ease of access is the major factor responsible for information professional preference of the use of electronic resources to other information formats as indicated by 60 (40.0%) of the respondents. Other factors determining the use of electronic resources as shown in Table 4 are: Usefulness 36 (24.0%) and quick response time 29 (19.3%). Reliability is not a strong factor influencing the use of the electronic resources as revealed by 8 (5.3%) of the total respondents.

Research Question 3: What is the frequency of use of the electronic resources by the information professionals?

Table 5 indicates the frequency of use of the electronic resources.

Table 5: Frequency of Use of Electronic Resources

Table 5: Frequency of Use of Electronic Resources

E-Resources	Daily		Twice a week		Once a week		Twice a month		Occasion-ally		Never	
	Fr	%	Fr	%	Fr	%	Fr	%	Fr	%	Fr	%
CD-ROM Databases in Librarianshp	20	13.3	15	10.0	2	1.3	2	1.3	68	45.3	43	28.7
Internet	92	61.3	19	12.7	8	5.3	1	0.7	25	16.7	5	3.3
Electronic Catalogue (OPAC)	50	33.3	11	7.3	2	1.3	2	1.3	60	400	25	16.7
E-Books	28	18.7	11	7.3	9	6.0	2	1.3	73	48.7	27	18.0
E-Journals	41	27.3	21	14.0	16	10.7	-	-	60	40	12	8
AJOL	14	9.3	9	6.0	17	11.3	9	6.0	45	30.0	56	37.3
DOAJ	10	6.7	2	1.3	9	6.0	1	0.7	27	18.0	101	
WIKIPEDIA	26	17.3	19	12.7	15	10.0	1	0.7	64	42.7	25	16.7

Table 5: shows the pattern of use of electronic resources by the information professionals. The most frequently used e-resource on a daily basis as revealed in Table 5 is the Internet as indicated by 92(61.3%).

Table 5 also reveals that 50(33.3%) of the respondents use Electronic catalogue daily while 41(27.3%) of the subjects subscribed to using E-journals on a daily basis. Directory of open Access Journals (DOAJ) and African Journal Online (AJOL) were hardly used by respondents. Table 5 has shown that 101(67.3%) respondents had never used DOAJ while 56(37.3%) never used AJOL. DOAJ and AJOL are free e-resource /databases that information professionals could access without price, legal and technological barriers. The low use recorded for them could be attributed to lack of knowledge of the free scholarly online journals they contain.

Research Question 4:

What is the level of knowledge of information retrieval skills of information professionals? Table 6 gives the analysis of the data in answer to research question 4.

Table 6: Level of knowledge of information retrieval skills

Skills	Very Good	Good	Average	Poor	very poor
Use of Boolean Operators (OR) and (NOT)	26 17.3%	45 30.0%	41 27.3%	21 14.0%	17 113%
Access of on-line Databases	24 22.7	71 47.3	35 23.3	3 2.0	7 4.7
Scanning images	13 8.7	44 29.3	45 30.0	30 20.0	18 12.0
Download file from on-line Databases	39 26.0	66 44	33 22	1 0.7	11 7.3
Copying information into Storage devices	61 40.7	64 42.7	21 14.0	2 1.3	2 1.3
Burning information Into C'D'S	27 8.0	45 30.0	35 23.3	20 13.3	23 15.3
Searching the OPAC through The author, title, and shelf Searches	52 34.7	57 38.0	34 22.7	4 2.7	3 2.0
Use of search engines like Google, Google scholar, Yahoo, Alta Vista etc	70 49.7	49 32.7	29 19.3	- -	2 1.3

Table 6 shows that almost half of the information professionals have very good knowledge of retrieval skills in the use of search engines like Google, Scholar, Yahoo, Alta vista, as shown by 70(46.7%) respondents. Table 6 also indicates that 61 (40.7%) respondents are very good at copying information into storage devices. 71(47.3%) are good at accessing on-line databases while 23(15.3%) are very poor at burning information into CDS. Looking vividly at Table 6, one could say that professionals have a moderate knowledge of information retrieval skills. It is, however, pathetic that half (50%) of the professionals do not possess very good nor good knowledge in any of the information retrieval skills itemized in Table 6. This portend danger in information services delivery in libraries considering the fact these professionals are to facilitate access to information in the various electronic resources in their libraries since they are regarded as "gatekeepers" of information. This scenario could also be captured by a popular saying that "it is what you have you will give". Research question 5.

What are the factors militating against the use of electronic resources by the information professionals? Table 7 is a summary of the data on the factors militating against the use of e-resources.

Research question 5

What are the factors militating against the use of electronic resources by the information professionals?

Table 7 is a summary of the data on the factors militating against the use of e-resources.

Table 7: Factors Militating against Effective use of E-Resources.

	Factors	Frequency	Percentage
1.	Frequent power outage	93	62.0
2.	Slow access period	32	21.3
3.	Lack of information retrieval skills	20	13.3
4.	Difficulty in finding relevant Information	3	2.0
5.	Lack of access to internet	2	1.3
	Total	150	100.0

Table 7 gives a clear analysis of the factors militating against effective use of the electronic resources by the information professionals. Looking at Table 7, it is conspicuous that frequent power outage is the most significant factor militating against effective use of e-resources. 32(21.3%) respondents identified slow access period as a critical factor militating against information professionals' use of electronic resources while 20(13.3%) respondents subscribed to lack of information retrieval skills.

The broad objective of this study is to determine the factors influencing the use of electronic resources by information professionals in South-Western Nigeria. Using descriptive statistics of simple percentages, the study reveals that factors like: Ease of Access; Usefulness; Quick Response Time, Ease of Use and Reliability are factors influencing the use of e-resources by the professionals in decreasing order of importance. To have a better and deeper understanding of the usage pattern of the resources, it is essential to determine the influence of the users' factor (information retrieval skill of the users) and institutional factor (availability of resources) on the actual usage of the electronic resources.

To achieve this goal, 3 hypotheses were formulated.

Hypothesis 1:

There is no significant relationship between availability of electronic resources and use by information professionals.

Table 8 shows the summary of test of significance of relationship between availability of electronic information resources and use by information professionals in South Western Nigeria.

Table 8: Summary of Test of significant relationship between Availability and Use of Electronic Resources.

Variable	n	X	SD	r	P	Remark
Availability of E-Resources	150	30.29	8.85	0.596	0.000	Significant
Use of E-Resources	150	38.83	15.32			

Correlation is significant at the 0.01 level (2-tailed).

As presented in Table 8, data collected were statistically analyzed using Pearson Correlation Coefficient. As shown by the Table, the mean score of availability of electronic resources for the information professionals (X=30.29, SD=8.35) and the mean score of their use of electronic resources is (X=38.83, SD=15.32). The test of the hypothesis shows that there is a significant positive relationship between availability of electronic resources and their use by the information professionals (r=0.596, P< 0.01). The hypothesis is therefore rejected. This implies that the frequency of use of the electronic resources by the information professionals for research publications would improve if more electronic resources are provided and all impediments to access are removed.

Hypothesis 2

There is no significant relationship between information retrieval skills of information professionals and their use of electronic resources.

Table 9 presents the summary of test of significance of the relationship between information retrieval skills and use of electronic resources by information professionals.

Table 9: Relationship between information Retrieval skills and use of Electronic Resources.

Variables	n	X	SD	r	P	Remark
Information Retrieval skills	150	29.59	5.47	0.531	0.00	Significant
Use of Electronic Resources	150	38.83	15.32			

Correlation is significant at the 0.01 level (2-tailed).

To determine the relationship between information retrieval skills and use of electronic resources, Pearson Product Moment Correlation statistical analysis was employed. As depicted in Table 9, the mean score of information retrieval skills possessed by the professionals is (X= 29.59, SD=5.47) while the mean score of their use of electronic resources is (X=38.83, SD=15.32). The result of Table 9 has shown that there exists a positive correlation between information retrieval skills acquired by the information professionals and their use of electronic resources for research publications (r=0.531, P<0.01). The hypothesis is thus rejected. The implication is that as the level of acquired information skills increases, the frequency of use of electronic resources will increase. It is therefore imperative that training and self development in ICT skills acquisition should be encouraged in the libraries.

Hypothesis 3

Availability of electronic resources and information retrieval skills of information professionals when taken together will not significantly influence their use of electronic resources.

Table 10 gives the data concerning hypothesis 3 using multiple regression analysis. This statistical tool was used because there are more than two variables involved i.e. the hypothesis is a multivariate hypothesis. Table 10: Summary of Regression Analysis of Availability and Information Retrieval Skills on Use of Electronic Resources by information professionals.

Table 10: Summary of Regression Analysis of Availability and Information Retrieval Skills on Use of Electronic Resources by information professionals.

R = 0.692
R square = 0.480
Adjustment R2 = 0.472
Standard Error of Estimate SEE = 11.13900

Analysis of variance

Source of Variation	Sum of Squares	DF	Mean Square	F - ratio	Significance
Regression	16747.498	2	8373.794	67.488	0.000
Residual	18239.335	147	24.077		
Total	34986.833	149			

Looking at Table 10, the multiple correlation coefficients, R (the regression value) is 0.692. This shows that the two independent variables when taken together correlate positively with use of electronic resources. Based on these findings, the two variables have proved relevant in the determination of information professionals' use of electronic resources. Also, the coefficient of determination R^2 of 0.480 shows that 48.0% of the total variance in the dependent variable (use of electronic resources) is due to the combination of the two independent variables (availability of E- resources and information retrieval skills), while 52 % of the variance is accounted for by other factors. In addition, Table 10 also reveals the summary of the test of significance of the R value. From table 10, the ANOVA of regression analysis shows that the R value of 0.692 is significant (F=67.488; df=2, 147,p<.01). Therefore, the adjusted R value is not due to chance. From the results presented, it can be concluded that the use of electronic resources by the information professionals for research publications is significantly influenced by the availability of the resources and their ability to retrieve useful information from the resources using the skills they have acquired. Hypothesis 3 is thus rejected.

IV.   FINDINGS AND DISCUSSION

The results revealed that electronic resources are fairly available for the use of information professionals because only 54(36%) of the respondents indicated that they are very well available. Lack of relevant electronic resources that offer recent online research information for the use of professionals could negatively affect their research endeavour, intellectual productivity and research output. This assertion supports Eason et.al. (2000) claim that the availability of relevant electronic resources affects how frequently scholars use them. The most important factor influencing the use of the electronic resources by the information

professionals as revealed in Table 4 is ease of access to the resources. The findings of this study corroborate Barret (2005) view that researchers have preference for electronic resources because of their time saving qualities and the convenience of remote access to full-text journals.

It was evident from the investigation that internet is heavily used by the information professionals. Table 5 revealed that 92(61.3%) of the professionals use the Internet on a daily basis. This finding reveals a high degree of improvement over Ajuwon (2003); Oroke and Ekruyota (2006) and Olalude (2007) findings of low usage of electronic resources especially Internet resources.

Another important finding of the research is the moderate knowledge of information retrieval skills possessed by the professionals. The finding is in line with that of Ezeani (2005) who discovered in her study that librarians in academic libraries surveyed in southern Nigeria had limited computer and Internet skills as majority of them have only basic knowledge of computer and Internet navigating skills.

Frequent power outage was revealed as the most significant factor militating against effective use of electronic information resources by information professionals in SouthWestern Nigeria. To solve this problem, Ezeani and Eke (2010) advocate for provision of stable power supply to enhance librarians' use of new and emerging Internet tools. According to them, when the power is unstable, librarians become discouraged in using Internet tools and resources.

The investigation has established a strong positive correlation between availability of electronic resources and use by information professionals (r=0.596, p<0.01). This finding agrees with Torma and Vakkari (2004) that the perceived availability of key electronic resources by researchers in FinElib was a stronger predictor of the frequency and purpose of use of its services.

The study also indicates a positive linear relationship between information retrieval skills of information professionals and use of electronic information resources (r=0.53, p<0.01). This finding supports Gifty (2003) which revealed a correlation between the level of usage of Internet and the Internet searching skills of faculty members of universities in Ghana. The study pointed out lack of training as one of the reasons for low use of Internet by the faculty members in spite of the benefits of the Internet. This implies that improvement in the level of competence in retrieving information online would lead to improvement in the level of usage of electronic resources.

The joint association of the independent variables (availability of the resources and information retrieval skills) is shown to influence the use of the electronic information resources in the study. The combination of the two independent variables has been shown to account for 48.0% of the total variance in the dependent variable (i.e. use of electronic resources). This indicates that the combination of the two variables was more strongly associated with the frequency of use of electronic resources. The tendency therefore is that, the frequency of use of the electronic resources would increase if the information professionals are well skilled in information retrieval and the electronic resources are readily available for their use.

V.   CONCLUSION AND RECOMMENDATIONS

Library and information professionals have a dual statutory and professional assignment of providing information services to the user community and conducting research to qualify for promotion. Apart from these popular professional and academic tasks, the information professionals are mandated by virtue of their training to contribute to growth of knowledge by providing access to information. There is need for library and information professionals to develop a good and better understanding of the content and usage of electronic resources in their custody to enhance their capacity in helping their users to locate and retrieve online information for teaching and research purposes.

This study has revealed that availability of e-resources (institutional factor) and information retrieval skills (individual characteristics) are strong factors that could determine the use of electronic resources by information professionals. While the study has shown that each of the factors is a strong predictor of use of the electronic resources, the study also revealed that the combination of the two factors could greatly enhance the usage of the electronic information resources by the information professionals.

Based on the findings of the study, the following recommendations were made:

i.   Information professionals should embark on continuous ICT training and self development to enhance their competence in information literacy skills.

ii.   The Library management should encourage and promote staff training and capacity building to improve the skill acquisition of their work force

iii.   Enabling ICT and research environment enhanced by constant supply of power should be provided to maximize the use of electronic resources by the staff.

iv.   Relevant electronic resources for teaching and research purposes should be made available for the user community of the libraries.

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