UNIVERSITY OF GHANA
DEPARTMENT OF INFORMATION STUDIES

USE OF ELECTRONIC RESOURCES BY UNDERGRADUATE STUDENTS OF THE GHANA INSTITUTE OF MANAGEMENT AND PUBLIC ADMINISTRATION (GIMPA)

BY

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THIS DISSERTATION IS SUBMITTED TO THE UNIVERSITY OF GHANA, LEGON IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF M.A. INFORMATION STUDIES DEGREE

DECEMBER, 2014
DECLARATION

I, hereby declare that with exception of references to other people’s work, which I have duly acknowledged, this work is the result of my own research work and that it has neither in part nor whole been submitted elsewhere for another degree.

I take responsibility for any inaccuracies and shortcomings, which may be detected in this work.

..................................................

Prince Baffour Amankwah
(Student)

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(Supervisor)

Date: .................................. Date: .....................................
DEDICATION

This dissertation is dedicated to my dear mother and mentor, my wife Linda Otubea Tieku and my son Nana Yaw Adjei Amankwah for their sacrifice.
ACKNOWLEDGEMENT

To God be the glory, great things He has done. My sincere and deepest gratitude is to God Almighty for guiding me through my studies and this dissertation, when all hopes were gone.

My sincere appreciation goes to my tolerant supervisor Dr. Mrs. Evelyn Markwei for her extreme patience, good counsel, constructive criticism, and direction which enabled me to successfully complete this project.

Many thanks go to Papa Fynn who showed lots of concern and interest in diverse ways to achieve this height.

I want to extend my warmest gratitude to all the undergraduate students of the Ghana Institute of Management and Public Administration (GIMPA)

To all who have been there for me in the course of this project, I say thank you, though I remain responsible for weaknesses and shortcomings in this study.
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ABSTRACT

The study investigated use of electronic resources by undergraduate students of the Ghana Institute of Management and Public Administration (GIMPA) to find out if students utilize electronic resources. It specifically targeted the level 300 students of GIMPA. Awareness, usage, training, access, usefulness and importance and problems of use were explored. A survey method was employed and structured questionnaire were utilized to solicit data for the study.

The findings revealed that, though students are aware of electronic resources, they do not fully utilize them to support their academic pursuit due to poor level of information literacy skills. However, few students had not participated at all in information literacy skills training organized by the library. Results from the study also showed that, significant number of students do access electronic resources when on campus and off campus and mostly used electronic devices such as laptops, ipad, desktop computers, and mobile phones. The findings indicated that students used the electronic resources to: complete assignments, write project work, to update lessons notes, for research, and up-date themselves on new information in their fields of study.

Some of the major problems respondents indicated using electronic resources includes: inadequate computers in the library, poor internet connectivity, power outages, insufficient search skills, etc.

In conclusion, the use of electronic resources in GIMPA has enhanced research, teaching and learning. This implies the need to plan and develop strategies for effective and efficient use of Information and Communication Technology infrastructure for the utilization of electronic resources to support academic study in GIMPA.
CHAPTER ONE
INTRODUCTION

1.1 BACKGROUND OF THE STUDY

Electronic resource is digitized information, facilitated by computers, network connectivity, electricity, other peripheral components and most importantly human beings. It comes in different format including text, videos, audio, maps, graphics, tables, pictures, etc.

The use of electronic resources or e-resources in libraries began with the development of the machine-readable cataloguing (MARC) format in the mid-1960s, 30 years before the introduction of the World Wide Web (Hawthorne, 2008).

McDonald, cited in Harper, et al. (2006), observed that, library 1.0 was made up of books and other print resources. Its’ primary functions were the acquisition and storage of physical materials, and finding information for users. Library 2.0 on the other hand, is a “network” – primarily broadcasting and “mashing up” or “creating” new content, with secondary functions of acquisition and storage, mostly of electronic data. Since the advent of electronic resource in the mid-1960’s, most libraries and information repository had made strides in building e-resources as an alternative to print documents and other forms of information delivery (Hawthorn 2008). Wu and Shih-Chuan-Chan (2010) report the cancelation of print journal subscriptions and the reduction of books purchase by some libraries in favor of electronic collection. Widespread use of information and communication technologies, especially Intranet, internet, extranet and the World Wide Web (www), has brought significant changes in the way information is generated, stored and accessed. With the rapid development and use of the electronic network technologies, publishing and distribution of information resources in digital format has become widespread (Ahmed, 2013).

Foasberg (2014) observed that, more materials presently are available electronically, and for those who want to read something in an electronic format, there are often many options.
available. One may read from a standard computer screen, a tablet computer, a small-form device such as a cell phone, a reading-specific digital device or one may simply print out the relevant material to read offline.

There are also several electronic databases available in the market in recent times. Some are skewed to particular subject areas, while others are general or project more than one specialized subject area of study.

The use of electronic resource is widespread in all areas of human endeavor including commerce, governance and education.

Electronic resource for academic pursuits has become indispensable due to its overwhelming advantages such as ease of accessibility, flexibility, real time delivery, content, and largely remote access.

Majority of universities and other tertiary institutions have embraced and integrated electronic sources in their library collection. For example the Balm library of the University of Ghana, with the support of Carnegie fund has started the digitization of its collection. The goal of this project is to make its resources accessible to a wider audience beyond the university community. The emergence of e-resources according to Ani and Ahiauzu (2008) has tremendously transformed information-handling and management in Nigerian academic environments and university libraries in particular.

Ahmed (2011), Madhunsundhan (2009), also enumerate the use of electronic resources by students and researchers of some universities in India and Bangladesh. The study reports that researchers and scholars in both countries see electronic resources as very important tool in accessing information. According to Van and Cason (2006), the prevalent use of electronic resources in academic institutions is as result of the increasing demand by students, faculty
and researchers for alternate ways of seeking information and the development of information and communication technology.

Students from the Ghana Institute of Management and Public Administration (GIMPA) study various programs in Management and Information Technology that lead to the award of Certificate and Degree. With the changing trend in students information needs (hardcopy to softcopy) it is important they acquire the right skills in accessing electronic resources.

1.2 STATEMENT OF THE PROBLEM

Traditionally, academic institutions have provided more (print) than electronic resources. However, technological advancement has brought in its wake new ways of accessing information such that increasing number of users turn solely to electronic resources rather than print resources to satisfy their information needs. Academic institutions are therefore, obliged to provide electronic resources to faculty and students for teaching and research.

Electronic resources have become important additions to academic library resources and Universities are increasingly allocating huge sums of money for their acquisition and access. For example, Booker, Detlor and Serenko cited in Phan, Schelells and Davis (2009), observed that, in 2008, academic libraries in the United States spent approximately $1 billion on subscriptions to electronic serials and $133.5 million on electronic books, serials back files, and other electronic materials. The question is whether the extent of use of these e-resources by faculty justify’s the huge sums of money invested by academic institutions.

Research findings on ‘use of electronic resources’ by academic library clientele is mixed. A report of a web-based survey of use of electronic resources involving 34,776 respondents at Ontario Council of University library institutions (OCUL) showed that electronic resources are heavily used by both faculty and students in all OCUL institutions. Majority of users are from the health and medical sciences. The study reported coursework as the main purpose for
use of e-resources (Association of Research Libraries 2011). However, despite its benefits an Asian study of the use of e-resources at the University of Karachi, by Ansari and Zuberi (2010), showed that, majority of the respondents have no access to training to facilitate effective use. Purposes for use include research and preparation of lecture notes. Reasons for lack of use include lack of knowledge, time, and networking problems. (Shuling, 2006).

In Africa, Bankole (2012), studied the use of electronic database by scientists at Olabisi Onabanjo University, Nigeria. The results showed that, most of the respondents do not use the library’s free online databases such as AGORA and HINARI due to lack of awareness of these resources.

The Ghana Institute of Management of Public Administration (GIMPA) allocates huge sum of money every year for the provision of electronic resources to support teaching, learning, and research. However, a review of the literature on the use of electronic resources in academic institutions showed that no study has investigated nor evaluated the use of e-resources at GIMPA, such a study is important because it would inform management about the use of e-resources and whether they are getting value on the investment they have made into e-resources.

1.3 PURPOSE OF STUDY

The purpose of this study is to find out the awareness, use, and knowledge and problems associated with the use of electronic resources among students at GIMPA in order to make recommendations for effective provision and access to electronic resource based on the findings.
1.4 OBJECTIVES OF THE STUDY

The main objectives of the study are to investigate:

1. The level of awareness of electronic resources among undergraduate students
2. The extent of use of electronic resources by students.
3. The extent of training provided by the Library
4. The mode of access to electronic resources
5. The usefulness and importance of electronic resources to the user population
6. Problems encountered in the use of electronic resources by students.

1.5 RESEARCH QUESTIONS

1. Are undergraduate students aware of electronic resources?
2. What is the extent of use of electronic resources by students?
3. What level of training is provided by the Library?
4. How do students access electronic resources?
5. What are the usefulness and importance of electronic resources to the user population?
6. What problems are encountered in the use of electronic resources by students?

1.6 THEORETICAL FRAMEWORK

Various theories have been propounded to explain the use and acceptance of technology. They include Diffusion of Innovation theory and the Technology Acceptance Model (TAM). The understanding of the factors that influence the acceptance of technology by users is important to both researchers and the organizations that procure the technology. Academic institutions for example will like to know the extent to which their huge expenditures on technologies such as electronic resources have benefited faculty and students. User
acceptance refers to the evidence of the willingness of a user group to use information technology to support a designated task (Dillon and Morris, 1996).

1.6.1 DIFFUSION OF INNOVATION

Rogers (1995) describes the diffusion of innovation as a theory of how, why and at what rate new ideas and technology spread through cultures. The four main factors which interact to influence the diffusion of an innovation are: the innovation itself; the mode of information communication, time, and the nature of the social system into which the innovation is being introduced (Rogers, 2003). He differentiates the adoption process from the diffusion process. The diffusion process, he explains, occurs within society or an organization, as a group process; whereas, the adoption process pertains to an individual. He defines the adoption process as mental process through which an individual passes. This includes five stages, namely, awareness, interest, evaluation, trial, and finally, adoption. In the awareness stage, the individual is exposed to the innovation but lacks complete information about it. At the interest stage, the individual becomes interested in the new idea and seeks additional information about it. At the evaluation stage, the individual mentally applies the innovation to his present and anticipated future situation and decides whether to try it or not.

During the trial stage, the individual makes full use of the innovation and at the adoption stage the individual decides whether to continue the full use of the innovation. Diffusion theory posits five characteristics of innovations that affect their diffusion:

a) relative advantage (the extent to which an innovation offers improvements over currently available tools)

b) compatibility (its consistency with social practices and norms among its users)

c) complexity (its ease of use or learning)

d) trial ability (the opportunity to try an innovation before committing to use it)
e) observability (the extent to which the technology’s outputs and its gains are clear to see)

Each of these characteristics on its own is insufficient to predict either the extent or the rate of diffusion, but diffusion studies have demonstrated that innovations affording advantages, compatibility with existing practices and beliefs, low complexity, potential trial ability and observability will be more extensively and rapidly diffused than innovation with a cluster of opposite characters Rogers (2003).

The theory also suggests that factors at the level of the individual user are also important. Rogers divides innovation of technology adopters into five categories based on their speed of uptake as:

Innovators, early adopters, early majority, late majority and laggards.

Rogers plots these category over a normal distribution where each major category (innovators and early adopters are combined into one for this purpose) represent standard deviation of dispersion.

This approach seems to have relevance to studies of IT acceptance in organizations. Thus organizations evaluating technology for use in their organization must be cognizant of the user-base for which the tool is both designed and purchased. According to Rogers, for a tool that will be used throughout the organization, it is reasonable to expect that a protracted period of time may be required before all users are able to use the tool effectively.

The use and effect of these relatively new technologies can be understood in terms of their human factors, their utility in supporting scholarship, their usability in making this support simply available and their likeability in making it an attractive task (Gaines, Chen and Shaw, 1997)
1.6.2 TECHNOLOGY ACCEPTANCE MODEL (TAM)

TAM is the most influential, empirically tested, widely used model of technology acceptance. It was developed by Davis (1993) and its concept is derived from the Theory of Reasoned Behavior (TRA) proposed by (Priyanka and Kumar, 2013). The basic concept of TRA is that, individual behaviors are determined by their intentions to execute those behaviors. These intentions are in turn influenced by two factors, their attitudes and beliefs about the consequences of the behavior; that is, what the important people in the life of these individuals will think about their behaviors. TRA has been successfully used to predict the choices made by people in diverse situations (Dillon and Morris, 1996).

The purpose of TAM is to predict user acceptance of technology by using two technology related factors, perceived usefulness and perceived ease of use. Perceived usefulness (U) in TAM is the extent to which a user believes that the use of a system will enhance his or her performance. Perceived ease of use (EOU) is the extent to which a user believes that using the system will be effortless. According to TAM, both U and EOU significantly influence a person’s attitude towards using the system (A). Behavioral intentions (BI) to use the system is determined by A and U. One of the main differences between TAM and TRA is that perceived usefulness directly influences the intention to use a technology. Beliefs do not play any role in the intention to use a system. Davis et al. (cited in Dillon and Morris, 1996) explained that in a job situation, an employee’s intention to use a system will be strictly based on the impact of the system on his or her work performance, irrespective of his or her attitude towards the system. In other words, an employee may dislike a system but may use it based on perceived increase in his or her job performance.
This study adopts TAM as a theoretical framework because according to Dillon and Morris (1996), the diffusion theory offers little information on the factors that influence user acceptance. It rather focuses on characteristics that influence individual decisions in adopting a technology, such as compatibility and perceived complexity and the strategies used to market the technology to specific groups and organizations. TAM has been successfully tested on a wide variety of technologies including information systems computer applications. The TAM theory is therefore appropriate for investigating the use of electronic resources by undergraduate students of the Ghana Institute of Management and Public Administration.

1.7 SIGNIFICANCE OF THE STUDY

The study is significance in many ways. Even though there has been many researched conducted on ‘use of electronic resources’, there is no known investigation of the problem at the Ghana Institute of Management and Public Administration. Therefore, the study is expected to add to knowledge by filling the gap.

The findings are expected to inform management in decision making about effective electronic resources provisions. The report will also serve as reference materials for the formulation and implementation of policies and directions on the use of electronic resources at GIMPA and other tertiary institutions in Ghana.

1.8 SCOPE OF THE STUDY

The study will investigate the use of electronic resources, namely OPAC, CD-ROM and academic databases (subscribed databases) by undergraduate students of the Ghana Institute of Management and Public Administration.
1.9 LIMITATION OF THE STUDY

There are three main categories of student at GIMPA; certificate, undergraduate and postgraduate students pursuing different programs. The study is focused on undergraduate students only because of the limited time available for its completion.

1.10 ORGANIZATION OF THE STUDY

The study is organized into five main chapters:

Chapter One is the background of the study and includes the statement of the problem, objectives and research questions theoretical framework, purpose, limitation and organization of the study.

Chapter Two is the literature review relevant to the study. It discusses the concept of electronic resources, awareness and use of electronic resources by students in institutions of higher learning, and problems associated with student’s use of electronic resources.

Chapter Three is the methodology. It describes the research design, population and sampling techniques, data collection, instruments and data analysis procedures.

Chapter Four is data analysis and discussion of the literature.

Chapter Five provides the summary, conclusions and recommendations based on the findings of the study.
REFERENCE


http://arizona.openrepository.com/arizona/handle/10150/105584.


Retrieved from: http://www.irma.international.org/view_title/10025


CHAPTER TWO
LITERATURE REVIEW

2.1 INTRODUCTION
The overall purpose of the literature review is used to identify, locate, and produce completed research reports and other materials that are relevant to a research problem. This chapter discusses developments in electronic resources in academic institutions, with emphasis on thematic areas that reflect the objectives of the study. The following themes are reviewed; concept of electronic resources, research on awareness and use of electronic resources by students in academic institutions, training, purpose of use and problems associated with the use of electronic resources.

2.2 CONCEPT OF ELECTRONIC RESOURCE
The AACR2 Rule 9.0A1 refers to electronic resource as a combination of data and programs. The data include text, images, graphics, maps, music, graphics, moving images etc., and the programs are the instructions that process the data and make them available for use (AACR2 Rule 9.0A1, cited in Lang, 2008).

Electronic resource according to AACR2 (2002) is any encoded work that can be accessed through the use of the computer. It can be accessed remotely via computer networks or directly via carriers such as discs, cassettes etc, by inserting them into a computer or computerized device (AACR2, 2002, cited in Library of Congress Collection Policy Statement, 2008). The Library of Congress identifies four categories of electronic resources in a library as:
• “Acquire” electronic resources that are received through licenses or other agreements, and acquisition processes such as gifts, copyright deposits, exchange, ISSN requests etc.

• “Collect” electronic resources which are permanently owned by the library and for which the library has permanent ownership.

• “Link” electronic resources which are remotely accessed through links from the library’s web resources, and

• “Archive” electronic resources which are a permanent digital repository managed and maintained by the library or for the benefit of the library (Library of Congress Collection Policy, 2008).

Tsakonas and Papatheodorou (2006) also indicate that electronic resources include full text documents, CD-ROMs, resources available on the internet such as E-journals, Online Public Access Catalogues (OPAC) and other computer based electronic networks. For the purposes of this study, electronic resources refer to OPAC, CD-ROM, Dspace and academic databases subscribed by the Ghana Institute of Management and Public Administration library.

2.3 AWARENESS OF ELECTRONIC RESOURCES

For the purpose of this study, awareness means possession of knowledge and skills for accessing and using available electronic resources.

Though electronic resources were first introduced into libraries in the mid 60’s, there is still lot more to be done in creating awareness through knowledge and skills development for effective and efficient access (Hawthorn, 2008). In creating awareness however, information literacy programs requires individual to be able to define a problem and initiate a plan to access information (Ojedokun, 2007). Several studies have investigated the awareness of
electronic resources in academic institutions in developing countries. For example, Kinengyere (2006), conducted a study to investigate four academic and research institutions in Uganda. The findings showed that available resources were not utilized because users were not aware of the resources, do not know how to access them, or they do not know what the resources offer. The study concluded that availability of information does not necessarily mean usage. Baro, Endouware, and Ubogu (2011) in a study to investigate 244 medical students of Delta State University of Nigeria, on awareness of electronic resources, reported that, majority of the students were not aware of some electronic databases that the university had subscribed to. For example, over 70% of respondents were unaware of Medline, and CINAHL (79.9%). Others are HINARI (60.3%) and EBSCOHOST (57.1%). A comparative study of three universities in Iran, involving 300 medical students on Integrated Digital Library portal (IDL) by Anaraki and Babalhavaeji (2013) on awareness of electronic resources, revealed that only 16 percent of students from Iran University of Medical Science (IUMS) were well aware of IDL and its resources while more than 52 percent of the students were not aware. At Tehran University of Medical Science (TUMS), 28 percent were much aware as against 42 percent who were not aware. The findings for Shahid Beheshti Medical University (SBMU) showed only 10% awareness.

A study by Ajuwon et al. (2003) on health science students at the university college hospital, Ibadan revealed that 57.4% of students sampled could not use a computer. They also found out that use of database was poor, due to lack ICT literacy. However, Dadzie (2005), acknowledged the contribution of orientation section, E-mail communication, newsletter and brochures in creating awareness of the library electronic resources at Ashesi University Library. The study revealed that 85% of students prefer to use the internet for accessing information as a result of the above library activities. .
2.4 USE OF ELECTRONIC RESOURCE

The emergence of electronic resources has transformed information access, use, and management. With the rapid development of information and communication technologies (ICT) electronic resource is increasingly becoming readily available and easy to use (Liew & Foo, 1999). Electronic resources present users with opportunities not available to traditional and early generation of information seekers. In a survey conducted by Ani and Ahiauzu (2008) it was found out that the internet has been a major source of developing electronic resources in twenty (20) Nigerian public university libraries. In this survey, 17(89.5%) of the 20 universities investigated for usage of electronic resources had internet connectivity. The study further found out that 13(68.4%) subscribe to online databases, 11(57.9%) use CD-ROMs, 10(52.6%) use E-journals whiles digitization of the library material constitute 3(15.8%).

Another study by Majid and Tan (2002) investigated use of electronic resources by computer engineering students of Nanyang Technology University (NTU) in Singapore. The study sought to investigate the use of different engineering databases through the NTC library within a six months period. A total of 200 questionnaires were distributed to randomly selected computer engineering undergraduate students in June 2001. One hundred and two questionnaires were completed with a response rate of 51 percent. The results showed that the most used database was the Institute of Electrical and Electronic Engineers (11.9%) followed by Association of Computer Machinery (6%) and DATAPRO IT which was accessed two to five times by two respondents and more than five times by only one respondent.

Another study to investigate the perception, use, and management of electronic resources among 18 graduates from the humanities, social science, and science and technology of
National Taiwan University (NTU) revealed that, 70 to 95 percent of the respondents use the NTC electronic resource (Wu, and Chen, 2012).

In a survey of libraries at university of Nevada, USA, also reported that the print-only subscriptions have decreased from 59% in 1990 to 20% in 2004, while electronic journals have increased from 35% to 75%. The library’s acquisition budget on electronic resources consistently rose by 10% each year since 1999 (Zhang and Haslam 2005). A study by Atkinson and Figueroa (1997), on information seeking behavior by 159 business students from California State University, also reported a preference for electronic resources. Reasons for this preference by half of the respondents included speed, ease of use, and convenience. In the same vane Tenopir’s (2003) in a review of related research studies concluded that electronic library resources were both used and favored by professors and students alike and they perceived electronic format as convenient and time saving. Another reason for preference to electronic resources by quarter of the respondents was familiarity.

2.5 PURPOSE FOR USE

The purposes for students’ use of electronic resources revealed in the literature are mostly academic. They include: for research and completion of assignments. In a study to investigate the purpose of use of electronic resources by 200 computer engineering students of the Nanyang Technology University (NTU), by Majid and Tan (2002) reported that students use e-resources for coursework, (56.7%), project work (43%) and assignments (34.4%).

Another study by Zhang, Ye and Rao (2011) indicate that, the purpose of using the National Science and technology Library (NSTL) electronic resources include scientific research, teaching and self-development. Zhang and Haslam (2005) also mentioned that electronic resources are used for enhancing and promoting academic pursuit of students and faculty.
Thus institutions spend a lot of their library’s budget in acquiring resources and infrastructure to achieve this effort.

2.6 TRAINING IN THE USE OF ELECTRONIC RESOURCES

Training is the process of acquiring knowledge and skills for the exploitation of information or subject to: develop, live, work and communicate in an information society (Hepworth, 1999). There are various training for specific objective, and for this study, training will be the process of acquiring information literacy (IL) skills rooted in the concept of library and bibliographical instruction.

Information-literate has been defined as “having the ability to recognize when information is needed, then to be able to locate and evaluate the appropriate information and use it effectively” (American Library Association, 1989). It is also the ability to make efficient and effective use of information sources which include the ability to access, select appropriate search terminology, construct search terms, and evaluate information appropriately (Julien, 2002). These definition of information literacy as the ability to access, evaluate, and use information helps us see IL as both a combination of learning competencies and as a mixture of ways of experiencing information use. There have been lots of challenges for librarians in academic institutions to achieve the goal of information literacy awareness among students and faculty members due to issues of competency of the librarian, willingness to teach, support from faculty, students do not perceive their deficiencies, general perception of librarianship by academic professions for example; medicine and law et cetera.

Idiodi (2005) in her study, ‘Approaches to information literacy acquisition in Nigeria’, observed that, one of the major factors militating against promoting higher levels of information literacy in Nigeria academic libraries is the lack of concerted effort in consistent pursuit of IL programme. Another factor is the level of computer illiteracy among librarians.
In another dimension as posited by Kolner, Dalrymple and Christiansen (1986) from their study, ‘Teaching Skills in Medical Information Retrieval’ to second year medical students from University of Illinois college of medicine, revealed that, impediment to successful instruction program on information retrieval to students include:

- Medical students has received little or no training in information retrieval prior to admission;
- Students do not perceive their deficiencies in information retrieval;
- Medical students curriculum are so demanding that competition for students time is considerable;
- Medical students tend to be most strongly motivated by experiences that constitute to their test-taking or clinical skills and tent not to value information retrieval skills in clinical contexts unless their utility is demonstrated;
- Medical faculty members tend to understate the importance of library and information retrieval skills a factor that contribute to students negative perception;
- Library or academic faculty members capable of teaching information retrieval are not part of medical faculty, and those responsible for planning the overall medical curriculum may be unaware of these and,
- Students find it difficult to develop specific skills in information retrieval through lectures.

2.7 PROBLEM OF USE

Several factors have been identified in the literature that hinders students from using electronic resources effectively. They include: information literacy skills, awareness, availability of electronic resources, access to electronic database, cost of acquisition/subscription, infrastructure, internet connectivity etc...
For example, problems identified by postgraduate students in accessing electronic resources in Makerere University, Uganda include slow internet connectivity, inadequate computers and opening hours, unwillingness of library staff to assist them in the lab and cost of printing (Okello-Oburu, 2010).

According to Hartmann (2001), due to difficulty in understanding retrieval process, undergraduate students of the University of Ballarat, Australia, found it difficult to locate electronic resources from the library. The findings of a study conducted by Madhunsudhan (2010) involving 60 research scholars at Kurukshetra University, New Delhi also revealed lack of proper IT skills, slow internet connectivity and difficulty in getting relevant information as hindrances to using electronic resources.

2.8 SUMMARY OF THE LITERATURE

The purpose of this study is to investigate use of electronic resource by undergraduate students of the Ghana Institute of Management and Public Administration.

The literature reviewed has shown that, indeed electronic resources are a valuable information resource actively being used by students. Academic institutions are spending much of their library’s budget in acquiring electronic databases to enhance teaching, learning, and research to meet the information needs of students and faculty.

The studies on use of electronic resources have concentrated among others, on the concepts of electronic resources, use, awareness, access, purposes of use, and problems of use of electronic resources. The present study is focus on awareness, use, training and skills, access to electronic resources, usefulness and importance, training, as well as problems associated in the use of electronic resources.

The main purpose for which students use academic databases is to seek information for: coursework, project work, and research. However, information literacy skills play a major
role in appreciating and accessing electronic resources. The main problems identified in the literature includes: poor internet connectivity, inadequate computers, lack of awareness of e-resources, and insufficient skills in retrieving information from e-resources.
REFERENCE


Hartmann, E. (2001). understanding of information literacy: the perception of first year graduate students at the University of Ballarat. Australian Academic and research Libraries, 33(2), 33-43.
Retrieved from: http://www.igi-global.com/chapter/history-electronic-resources/10025

 http://www.ifla.org/ifla65/papers/107-124e.htm

 http://dx.doi.org/10.1108/00242530510593416


Liew C. L. and Foo, S. (1999). Derivation of interaction environment and information object properties for enhanced integrated access and value –added to digital documents. Aslib proceedings, 51(8), pp. 256-268,


CHAPTER THREE

METHODOLOGY

3.1 INTRODUCTION

This chapter discusses the methodology used for the study of student’s use of electronic resources at the Ghana Institute of Management and Public Administration (GIMPA). According to Kitchin and Tate (2000), methodology is a coherent set of rules and procedures which can be used to investigate a phenomenon or situation. It is also referred to as the philosophy of the general principles that guides a research (Dawson 2002). The rest of the chapter discusses the research design, population, sampling procedures, sample technique, data collection instruments, administration of questionnaire, mode of data collection and data analysis of the study, problem of data collection and ethical consideration.

3.2 RESEARCH DESIGN

Research design refers to the plan or specific strategy employed by a researcher in collecting, analyzing and reporting the research. It specifies the sources of data for the research (Saunders, Lewis, and Thornhill, 2007). Cooper and Schindler (2006), define research design as the plan and structure of investigation to obtain answers to research questions. Research design also covers issues such as the study area and the specific profile of respondents, how they will be selected and what information will be gathered from or about them (Sullivan, 2001).

This study used a quantitative approach that emphasizes on objective, measurements and numerical analysis of data collected through questionnaires. It focuses on gathering data and forming conclusive opinion across groups of people (Babbie, 2010).
Survey methodology was adopted for this study. This methodology provides quantitative or numeric description of trends, attitudes or opinions of a population by studying a sample of that population (Creswell, 2014).

### 3.3 POPULATION

In social research, population may be defined as the group of persons or objects for which the researcher considers for investigation and analysis. It is every possible case that could be included in a study and defines the nature of enquiry (David and Sutton, 2011). Saunders, Lewis, and Thornhill (1997), also defined population as a set of cases from which sample is taken. According to Fraenkel and Wallen (2003), population can be any size that will have at least one or several characteristics that are unique from any other population.

The target population for this study (80) is the level 300 undergraduate students of the Ghana Institute of Management and Public Administration studying various courses form Accounting, Finance, Business Administration, Economics et cetera. There are 802 level 300 students at the time of the study (2014, students records, academic registry). Peil (1995) however, made it clear that elements which make up the population should be identical, either by living together in a defined territory or having a common nationality. The undergraduate students of Ghana Institute of Management and Public Administration are unique segment of the student population. They are engaged more in Information Literacy Skills training (ILS) in preparation for research work in their final year and thus considered by the researcher likely to exploit the library e-resources to complete their research work.

Table 1, is the breakdown of the population by their program of study.
Table 1: Programs and number of students

<table>
<thead>
<tr>
<th>Program</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting</td>
<td>170</td>
</tr>
<tr>
<td>Finance</td>
<td>24</td>
</tr>
<tr>
<td>Hospitality and Tourism Management</td>
<td>64</td>
</tr>
<tr>
<td>Human Resource</td>
<td>77</td>
</tr>
<tr>
<td>Marketing</td>
<td>76</td>
</tr>
<tr>
<td>Project Management</td>
<td>63</td>
</tr>
<tr>
<td>Business Administration</td>
<td>200</td>
</tr>
<tr>
<td>Operations and Supply Chain Management</td>
<td>25</td>
</tr>
<tr>
<td>Economics</td>
<td>9</td>
</tr>
<tr>
<td>Procurement Management</td>
<td>94</td>
</tr>
<tr>
<td>Total</td>
<td>802</td>
</tr>
</tbody>
</table>

Source: Academic Registry 2014

3.4 SAMPLE SIZE

Sample is a subset of the population under investigation (McBurney, 2001). Everitt (2006) also defined it as a selected set of a population chosen by some process usually with the objective of investigating particular properties of the parent population. Fraenkel and Wallen (2003) described it as the group on which information is obtained or the number of individuals to be included in the investigation. With regards to sampling size, Alreck and Settle (1985) have indicated that a sample size of 10% of a population is enough to obtain adequate confidence. This is corroborated by Neuman (2007) who also indicate that for a moderately large population of about a 1000, a sampling ratio (10%) is enough to ensure accuracy. Based on the preceding information the researcher chose a sample size of ten percent (10%) out of the population of 802 to select 80 participants for the study. This was used in order to obtain adequate confidence in the population. The breakdown of the sample size is shown in the table 2 below.
Table 2: Programs and number of students

<table>
<thead>
<tr>
<th>Program</th>
<th>Sample size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting</td>
<td>17</td>
</tr>
<tr>
<td>Finance</td>
<td>2</td>
</tr>
<tr>
<td>Hospitality and Tourism Management</td>
<td>6</td>
</tr>
<tr>
<td>Human Resource</td>
<td>8</td>
</tr>
<tr>
<td>Marketing</td>
<td>8</td>
</tr>
<tr>
<td>Project Management</td>
<td>6</td>
</tr>
<tr>
<td>Business Administration</td>
<td>20</td>
</tr>
<tr>
<td>Operations and Supply Chain Management</td>
<td>3</td>
</tr>
<tr>
<td>Economics</td>
<td>1</td>
</tr>
<tr>
<td>Procurement Management</td>
<td>9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>80</strong></td>
</tr>
</tbody>
</table>

Source: Academic Registry 2014

3.5 SAMPLING TECHNIQUE

The random sampling technique was adopted for the selection of the study participants. Creswell (2014), supporting Fowler (2009), observed that the researcher using the random sampling approach start on a list and select every X numbered person or object on the list. This X number is based on the fraction of the sampling size of the potential representative of the population size. In quantitative research random sampling is more desirable than non-probability or convenient sampling (Creswell, 2014). This is because in random sampling there is high probability of each person having equal chance of being selected for analysis and as such it is highly representative. The researcher adopted the systematic random sampling method. The researcher obtained the class list of the selected courses from their departments and assigned numbers to each student. He wrote the numbers on pieces of papers, folded, and put them in a box for a draw. After shaking the box, the appropriate numbers for each class were drawn out. The names of the students bearing those numbers were identified and included in the study.
3.6 DATA COLLECTION INSTRUMENT

Data collection constitutes the basic observation from which analysis and conclusions are drawn, Sullivan (2001). This study made use of primary data (questionnaire) and secondary source of data including print source, journal articles, reports, web-based sources. Secondary data however, refers to data used for research project that was originally collected for other purposes (such as literature review) (Saunders and Thornhill, 2009)

This study used structured questionnaires as the main data collection instrument. A questionnaire is a research instrument consisting of a series of questions and other prompts, for the purpose of gathering information from respondents. It was used as a data collection instrument because of its unique characteristics. It gives respondents time to consider their responses carefully without interference from the researcher. It is cost effective since it is possible to provide questionnaires to large numbers of people simultaneously. They produce uniformity in the sense that respondents receive one and the same set of questions. With closed-ended questions, responses are standardized, which can facilitate interpretation of data from large numbers of respondents. They can address a large number of issues and questions of concern in a relatively efficient way, with the possibility of a high response rate. Often, questionnaires are designed so that answers to questions are scored and summed to obtain an overall measure of the attitudes and opinions of the respondents. They permit anonymity that usually increases the rate of response and the likelihood that responses reflect genuinely held opinions.

The researcher used structured questionnaire to collect data from respondents with the intent of generalizing from a sample to a population. Babbie (1992) mentioned that, the most common data collection method used in the social science is the administration of a questionnaire, either by interview or through the mail to a sample of respondents in the study. A central element in survey research is the standardization of questionnaire. In terms of the
fundamental issue of measurement, the researcher employed the use of questionnaire to ensure that the same observation technique is used with each and every respondent in the study.

The questionnaire was in seven parts. Part one covers Personal Data of respondents and parts two to seven covered the objectives of the research. Part two probe the issue of Awareness of Electronic Resources, part three on the Use of Electronic Resources, four, Training, five Access, six, Usefulness and Importance of Electronic Resources and, seven, Problems using electronic resources.

The questionnaire (Appendix A) was designed to collect biographical data of study participants and data based on the research objectives that are the awareness, use of electronic resources, and training in the use of electronic resources. Others are access to electronic resources, usefulness and importance of electronic resources and last but not the least, problems associated with the use of electronic resources.

3.7 ADMINISTRATION OF QUESTIONNAIRE

The questionnaire was self administered by the researcher. Prior to the administration of the questionnaire, the researcher first sought permission from the lecturer prior to the class. In the class he explained the purpose of the study and the selection process and informed the students that participation in the study was voluntary, those selected could opt out of the study if they chose to. They were also assured of confidentiality of their response and unclear questions were clarified. The questionnaire was distributed to the selected students who agree to participate in the study.
3.8 DATA ANALYSIS

The purpose of data analysis is to obtain meaning from the collected data. The Statistical Package for Social Sciences (SPSS) Version 2.0 was used to analyze the data. SPSS is a common computer program that performs statistical calculations and is widely used in data analysis, (Gravetter and Forzano, 2006). Data from the questionnaire was coded and entered into “variable view” and answers generated and viewed in descriptive. The data was presented using frequency tables and charts.

3.9 PROBLEM OF DATA COLLECTION

Though the questionnaire was easy to read and understood, some respondent needed further clarification on some specific questions. This is because, they were not familiar with one particular database or the other included in the questionnaire. Others also needed to be given more time to complete the questionnaire and others were simply not cooperative.

3.10 ETHICAL CONSIDERATION

Ethical issues in a research work are mainly the codes of conduct of the researchers. Creswell (2014) identifies some ethical considerations that need to be observed by researchers in collecting data as following:

- a) Respect the site and disrupt as little as possible,
- b) Make sure that all participants receive the benefit,
- c) Avoid deceiving participants,
- d) Respect potential power imbalances,
- e) Avoid exploitation of participants,
- f) Avoid collecting harmful information.
The ethical issues considered for this study, were informed consent, anonymity and confidentiality, respecting the privacy of respondents in conformity to the codes of conduct of the University of Ghana.

It was anticipated that by providing respondents with accurate information, they would appreciate the aims and procedures of the research and consciously or freely decide to participate.
REFERENCES


CHAPTER FOUR
DATA ANALYSIS AND DISCUSSION

4.1 INTRODUCTION

Chapter four focuses on data analysis, interpretation and discussion of findings based on the objectives of the study. In all eighty (80) questionnaires were administered and 79 responded giving a response rate of 98.75% The questionnaire was designed to seek information on personal data, awareness of electronic resources, use of electronic resources, training in the use of electronic resources, access to electronic resources, usefulness and importance of electronic resources, and problems associated with the use of electronic resources.

The Statistical Package for Social Sciences (SPSS) was used to analyze the responses gathered with the questionnaire and the results are presented below.

4.2 DEMOGRAPHIC DATA OF RESPONDENTS

Information sought from respondents covered the areas of gender, age, and program offered. Gender distributions (figure 4.1) among the respondents were; 44 (50.4%) males and 35 (49.6%) females.
4.2.1 AGE DISTRIBUTION

The age distribution was set from a minimum of 18 years to as old as can be envisaged (18, 48...). This was set based on the fact that the research site is a tertiary institution and one can access it after secondary education where most students had attained age 18 and above. The age range is five years interval. The results (Table 4.1) shows that most of the respondents (44.3%) are between the ages of 30 and 35 years, 24-29, the least recorded age range (5.06%) are 18 and 23 years.
### Table 4.1. Age Distribution

<table>
<thead>
<tr>
<th>Age</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-23</td>
<td>4</td>
<td>5.06</td>
</tr>
<tr>
<td>24-29</td>
<td>32</td>
<td>40.51</td>
</tr>
<tr>
<td>30-35</td>
<td>35</td>
<td>44.30</td>
</tr>
<tr>
<td>36.41</td>
<td>8</td>
<td>10.13</td>
</tr>
<tr>
<td>42-47</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>48+</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>79</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Field work, 2014  
N=79

#### 4.2.2 PROGRAM OF STUDY

With regard the program of study of respondents (Table 4.2) 17 or 21.5% offered Accounting, 2 or 2.5% offered Finance, 6 or 7.6% offered Hospitality and Tourism Management, 8 or 10.1% offered Human Resource, 8 or 10.1% offered Marketing, 6 or 7.6% offered Project Management, 19 or 24.1% offered Business Administration, 3 or 4.0% offered Operations and Supply Chain Management, 1 or 1.2% offered Economics and 9 or 11.3% offered Procurement Management.
Table 4.2. Program of Study

<table>
<thead>
<tr>
<th>Program</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting</td>
<td>17</td>
<td>21.5</td>
</tr>
<tr>
<td>Finance</td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td>Hospitality and Tourism</td>
<td>6</td>
<td>7.6</td>
</tr>
<tr>
<td>Human Resource</td>
<td>8</td>
<td>10.1</td>
</tr>
<tr>
<td>Marketing</td>
<td>8</td>
<td>10.1</td>
</tr>
<tr>
<td>Project Management</td>
<td>6</td>
<td>7.6</td>
</tr>
<tr>
<td>Business Administration</td>
<td>19</td>
<td>24.1</td>
</tr>
<tr>
<td>Operation and Supply Chain</td>
<td>3</td>
<td>4.0</td>
</tr>
<tr>
<td>Economics</td>
<td>1</td>
<td>1.2</td>
</tr>
<tr>
<td>Procurement Management</td>
<td>9</td>
<td>11.3</td>
</tr>
<tr>
<td>Total</td>
<td>79</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Field work, 2014  N=79

4.3 AWARENESS OF ELECTRONIC RESOURCES

One of the objectives of the study is to access the level of awareness of electronic resources. Respondents were asked to indicate which electronic resources they were aware of. The responses are as follows: 67 or 84.8% were aware of CD-ROM, 24 or 30.4% were also aware
of OPAC, 73 or 94.4% were aware of Academic Database and further 64 or 87.3% were aware of Dspace (Institutional Repository). This is represented in Fig. 4:2.

![Graph: Awareness of E-resource](image)

**Figure: 4:2. Awareness of E-resources**  
N=79

**Source: Field work, 2014**

### 4.3.1 CHANNEL OF AWARENESS

The researcher went on to find out how respondents got to know of the e-resources. Forty nine 49 or 62% got to know it from notices, 8 or 10.1% through flyers, 17 or 21.5%, through display, 2 or 2.5% through newsletters, 43 or 54.4% through posters and 73 or 92.4% through library guide. The results are shown in fig. 4:3.
4.3.2 ADEQUACY OF PUBLICITY

Respondents were asked to rate the adequacy of publicity of e-resources. The responses suggested low publicity rating by respondents. 3 or 3.8% said it was very adequate, 44 or 55.6% said it was adequate, 22 or 28% said it was fairly adequate, 7 or 8.8% said it was not adequate and 3 or 3.8% said they had no opinion. These responses are represented in fig.4:4.
Another objective of the study was to find out use of electronic resources. To enable the researcher achieve this objective, respondents were asked to indicate how often they used the electronic resources. The results (Table 4.3) show an infrequent use of the resources. For example, only few respondents used the resources daily with majority using them occasionally or once a month. For CD – ROM, 1 or 1.2% indicated daily, no respondent indicated twice a week, 3 or 3.7% indicated once week, 40 or 50.6% indicated once a month, and 35 or 44.3% indicating not at all.

On the use of OPAC, none of the respondent indicated daily and twice a week, 10 or 12.6% indicated once a week, 11 or 13.9% indicated once a month with 52 or 65.8% indicating not at all.

With regard to Dspace, 24 or 30.3% indicated twice a week, 20 or 25.3% indicated once a week, 13 or 16.4% indicated once a month and 15 or 18.9% not at all.
On the use of academic databases, respondents were asked to indicate the number of times they used the following databases: EBSCOHOST, EMERALD, SAGE, PROJECT MUSE, OUP, JSTOR, and ALUKA.

With Ebscohost, 7 or 8.8% indicated once a week, 35 or 44.3% indicated once a month and 43 or 54.4% indicated not at all.

The responses on the use of EMERALD were as follows: 2 or 2.5% indicated twice a week, 42 or 53.1% once a week, 17 or 21.5% indicated once a month while 24 or 30.3% indicated not at all. Again, respondents were asked to indicate their use of SAGE. Out of the 79 respondents, none had used it daily, 1 or 1.2% indicated twice a week, 9 or 11.3% indicated twice a week, 26 or 32.9% indicated once a month, and 46 or 58.2% indicated not at all.

On PROJECT MUSE, 2 or 2.5% indicated once a month and 74 or 93.6% indicating not at all. For OUP, none had used it daily and twice a week, 21 or 8.4% indicated daily, 31 or 12.4% indicated twice a week, 1 or 1.2% indicated once a week, 2 or 2.5% indicated once a month, and 72 or 91.1% indicating not at all.

On JSTOR, 3 or 3.7% indicated twice a week, 32 or 40.5% indicated once a week, 24 or 30.3% indicated once a month, 16 or 20.2% indicated not at all.

The ALUKA, database was the least used. Majority of the respondents 76 or 96.2% indicated they had not used it at all.

These responses are captured in Table 4:3
Table 4:3. Frequency of use of electronic resources

<table>
<thead>
<tr>
<th>E-resource</th>
<th>Daily N (%)</th>
<th>Twice a week N (%)</th>
<th>Once a week N (%)</th>
<th>Once a month N (%)</th>
<th>Not at all N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD-ROM</td>
<td>1(1.2)</td>
<td>0(0)</td>
<td>3(3.7)</td>
<td>40(50.6)</td>
<td>35(44.3)</td>
</tr>
<tr>
<td>OPAC</td>
<td>0(0)</td>
<td>0(0)</td>
<td>10(12.6)</td>
<td>11(13.9)</td>
<td>52(65.8)</td>
</tr>
<tr>
<td>DSPACE</td>
<td>0(0)</td>
<td>24(30.3)</td>
<td>20(25.3)</td>
<td>13(16.4)</td>
<td>15(18.9)</td>
</tr>
</tbody>
</table>

ACADEMIC DATABASES

<table>
<thead>
<tr>
<th>E-Resource</th>
<th>Daily N (%)</th>
<th>Twice a week N (%)</th>
<th>Once a week N (%)</th>
<th>Once a month N (%)</th>
<th>Not at all N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EBSCOHOSS</td>
<td>0(0)</td>
<td>0(0)</td>
<td>7(8.8)</td>
<td>35(44.3)</td>
<td>43(54.4)</td>
</tr>
<tr>
<td>EMERALD</td>
<td>0(0)</td>
<td>2(2.5)</td>
<td>42(53.1)</td>
<td>17(21.5)</td>
<td>24(30.3)</td>
</tr>
<tr>
<td>SAGE</td>
<td>0(0)</td>
<td>1(1.2)</td>
<td>9(11.3)</td>
<td>26(32.9)</td>
<td>46(58.2)</td>
</tr>
<tr>
<td>PROJECT</td>
<td>0(0)</td>
<td>0(0)</td>
<td>0(0)</td>
<td>2(2.5)</td>
<td>74(93.6)</td>
</tr>
<tr>
<td>MUSE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OUP</td>
<td>0(0)</td>
<td>0(0)</td>
<td>1(1.2)</td>
<td>2(2.5)</td>
<td>72(91.1)</td>
</tr>
<tr>
<td>JSTOR</td>
<td>0(0)</td>
<td>3(3.7)</td>
<td>32(40.5)</td>
<td>24(30.3)</td>
<td>16(20.2)</td>
</tr>
<tr>
<td>ALUKA</td>
<td>0(0)</td>
<td>0(0)</td>
<td>0(0)</td>
<td>0(0)</td>
<td>76(96.2)</td>
</tr>
</tbody>
</table>

Source: Field Work, 2014

N=79

4.4.1 CONDUCTING A SEARCH

Respondents were asked to indicate how they conducted their search with e-resources. The results (Table 4.4) are as follows; 25 or 31.6% indicated they did it themselves, 6 or 7.6% indicated they were assisted by a library officer and 43 or 54.4% indicated being assisted by a colleague/friend. Thus majority of respondents were assisted by their friends in searching the e-resources.
Table 4:4. Conducting Search

<table>
<thead>
<tr>
<th>E-searching</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>I do them myself</td>
<td>25</td>
<td>31.6</td>
</tr>
<tr>
<td>I am assisted by library officer</td>
<td>6</td>
<td>7.6</td>
</tr>
<tr>
<td>I am assisted by colleague/friend</td>
<td>43</td>
<td>54.4</td>
</tr>
</tbody>
</table>

Source: Field Work, 2014

4.4.2 PURPOSE FOR SEARCHING E-RESOURCES

Respondents were asked to indicate the purposes for which they searched the e-resources. The results (Figure 4.5) indicate that 63 or 79.7% of respondents said they search to complete assignment, 24 or 30.3% of respondents searched for research, 56 or 70.8% of respondents said they searched to write project, 52 or 65.8% of respondents said they searched to update lesson notes and 10 or 12.6% of respondents said they searched for new information in their field.
4.4.3 LEVEL OF PROFICIENCY

This study also sought to investigate student’s level of proficiency in use of e-resources. When the respondents were asked how proficient they are; the results (Figure 4.6) show that most of the respondents are not very proficient in searching e-resources. For example none of the respondents rated themselves as excellent and only 3 or 4.0% of respondents rated their proficiency as very good. Indicated they were excellent, 3 representing 4.0% of respondents rated their proficiency very good, about a third of the respondents, that is 24 or 30.3% of respondents rated themselves as good, and as many as 36 or 45.5% of respondents rated themselves as fair, and 16 or 20.2% of respondents rated poor.
4.5 TRAINING IN THE USE OF ELECTRONIC RESOURCES

Another objective of the study was to assess the training respondents knowledge about the library’s training in the use of e-resources Respondents were asked whether the library has provided any training on E-Resources. The results in (Table 4.5) show that more than half of the respondents are aware of the library’s training program in the use of e-resources. Sixty-one or 77.2% said the library had provided training on the use of CD-ROM, while 20(25.3%) said the library had not provided training on CD-ROM, 55(69.6%) said the library had provided training on the use of OPAC while 21(26.5%) said the library had not provided training on use of OPAC, 70(88.6%) said the library had provided training on the use of Academic databases while 7(8.8%) said the library had not provided training on using...
Academic databases, 68(81.0%) said the library had provided training on the use of Dspace while 9(11.3%) said the library had not provided training on the use of Dspace.

Table 4:5. Provision of Training

<table>
<thead>
<tr>
<th>Training</th>
<th>Yes [F] [%]</th>
<th>No [F] [%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD-ROM</td>
<td>61(77.2)</td>
<td>20(25.3)</td>
</tr>
<tr>
<td>OPAC</td>
<td>55(69.6)</td>
<td>21(26.5)</td>
</tr>
<tr>
<td>Academic Database</td>
<td>70(88.6)</td>
<td>7(8.8)</td>
</tr>
<tr>
<td>Dspace</td>
<td>68(81.0)</td>
<td>9(11.3)</td>
</tr>
</tbody>
</table>

Source: Field Work, 2014  N=79

4.5.1 PARTICIPATION IN TRAINING

The results in (Table 4.6) show that over 50% of the respondents participated in training in the use of academic databases and Dspace and only few of the respondents participated in the OPAC and CD-ROM training. For example 58(73.4%) said they had participated in Academic databases training while 19(24.0%) said they had not participated in any training in Academic databases, 56(70.8%) said they had participated in Dspace training while 21(26.5%) said they had not participated in any Dspace training. Over 50% of the respondents, that is 52(60.8%) and 64(81.0%) indicated non-participation in CD-ROM and OPAC training respectively. The findings suggest that students are more interested in learning how to search the Dspace and academic databases than other e-resources.
Table 4:6. Participation in Training

<table>
<thead>
<tr>
<th>E-Resource</th>
<th>Yes [F] [%]</th>
<th>No [F] [%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD-ROM</td>
<td>26 (32.9)</td>
<td>52 (65.8)</td>
</tr>
<tr>
<td>OPAC</td>
<td>10 (12.6)</td>
<td>64 (81.0)</td>
</tr>
<tr>
<td>Academic Database</td>
<td>58 (73.4)</td>
<td>19 (24.0)</td>
</tr>
<tr>
<td>Dspace</td>
<td>56 (70.8)</td>
<td>21 (26.5)</td>
</tr>
</tbody>
</table>

Source: Field Work, 2014  
N=79

4.5.2 EFFECTIVENESS OF E-RESOURCES TRAINING

Respondents were asked to rate the effectiveness of training they have received as Excellent, Very Good, and Fair or Poor, the results (Table 4.7) show that generally those who participated in the Dspace and academic databases training thought they were effective. For example with regards to the academic database training, 13(16.4) indicated the training was Very good, 42(53.1%) indicated the training was Good, 4(5.0%) indicated the training Fair. With Dspace, 15(18.9%) indicated the training was Very Good, 39(49.3%) indicated the training was Good, 3(3.7%) indicated the training was Fair. With regards to CD-ROM, 18(22.7%) indicated the training was Good and only 3(3.7%) rated OPAC training as Good.
Table 4.7. Effectiveness of the Training

<table>
<thead>
<tr>
<th>E-resources</th>
<th>Excellent F (%)</th>
<th>Very good F (%)</th>
<th>Good F (%)</th>
<th>Fair F (%)</th>
<th>Poor F (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD-ROM</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>18 (22.7)</td>
<td>8 (10.1)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>OPAC</td>
<td>0(0)</td>
<td>0(0)</td>
<td>3(3.7)</td>
<td>4(5.0)</td>
<td>0(0)</td>
</tr>
<tr>
<td>Academic Database</td>
<td>0(0)</td>
<td>13(16.4)</td>
<td>42(53.1)</td>
<td>4(5.0)</td>
<td>0(0)</td>
</tr>
<tr>
<td>Dspace</td>
<td>0(0)</td>
<td>15(18.9)</td>
<td>39(49.3)</td>
<td>3(3.7)</td>
<td>0(0)</td>
</tr>
</tbody>
</table>

Source: Field Work, 2014  N=79

4.5.3 ADEQUACY OF THE TRAINING

On the adequacy of the training, no respondent indicated either the training was Very Adequate nor Poorly Adequate for CD-ROM, 2 or 2.5% respondents indicated the training was adequate, 26 or (32.9%) indicated the training was Fairly Adequate, 1 or1.2% indicated the training was Not Adequate.

On OPAC no respondent indicated Very Adequate, or Adequate, 5 or 6.3% indicated Fairly Adequate, 1 or 1.2% indicated Poorly Adequate and 1 or1.2% indicated Not Adequate. For Academic Database 1 or1.2% indicated Very Adequate, 29 or 36.7% indicated Adequate, 28 or 35.4% indicated Fairly Adequate, 1 representing 1.2% indicated Poorly Adequate, and none indicated Not Adequate. None indicated Very Adequate and Not Adequate for Dspace, 28 or 35.4% indicated Adequate, 27 or 34.1% indicated Fairly Adequate and 2 or 2.5% indicated Poorly Adequate. Table 4.8 represents respondent’s views.
### Table 4.8. Adequacy of the Training

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CD-ROM</td>
<td>0 (0)</td>
<td>2 (2.5)</td>
<td>26 (32.9)</td>
<td>0 (0)</td>
<td>1 (1.2)</td>
</tr>
<tr>
<td>OPAC</td>
<td>0(0)</td>
<td>0(0)</td>
<td>5(6.3)</td>
<td>1(1.2)</td>
<td>1(1.2)</td>
</tr>
<tr>
<td>Academic Database</td>
<td>1(1.2)</td>
<td>29(36.7)</td>
<td>28(35.4)</td>
<td>1(1.2)</td>
<td>0(0)</td>
</tr>
<tr>
<td>Dspace</td>
<td>0(0)</td>
<td>28(35.4)</td>
<td>27(34.1)</td>
<td>2(2.5)</td>
<td>0(0)</td>
</tr>
</tbody>
</table>

Source: Field work, 2014  
N=79

#### 4.5.4 HELPFULNESS OF THE TRAINING

Respondents were asked to indicate whether the difference e-resources had been helpful to their academic work. The results (Table 4.9) shows that more respondents rated Dspace and academic databases helpful than CD-ROM and OPAC. For example 44 or 55.6% and 42 or 53.1% indicated Helpful academic databases and Dspace respectively compare to 14 or 17.72% who indicated CD-ROM is helpful and only 4 or 5.0% who said OPAC is helpful. These findings suggest that students use Dspace and academic databases more than CD-ROM and OPAC for their academic work.
Table 4.9. Helpfulness of Training

<table>
<thead>
<tr>
<th>E-resources</th>
<th>V/H [F] (%)</th>
<th>H [F] (%)</th>
<th>F/H [F] (%)</th>
<th>N/H [F] (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD-ROM</td>
<td>0 (0)</td>
<td>14 (17.72)</td>
<td>12 (15.1)</td>
<td>1 (1.2)</td>
</tr>
<tr>
<td>OPAC</td>
<td>0(0)</td>
<td>4(5.0)</td>
<td>2(2.5)</td>
<td>2(2.5)</td>
</tr>
<tr>
<td>Academic Database</td>
<td>1(1.2)</td>
<td>44(55.6)</td>
<td>13(16.4)</td>
<td>0(0)</td>
</tr>
<tr>
<td>Dspace</td>
<td>2(2.5)</td>
<td>42(53.1)</td>
<td>13(16.4)</td>
<td>1(1.2)</td>
</tr>
</tbody>
</table>

Source: Field work, 2014  
N=79

4.5.5 NON-PARTICIPATION OF TRAINING

The researcher seeks to found out from respondents why they had not participated in e-resources training. The results (Table 4.10) show that the main reasons for non-participation by a few of the respondents are lack of awareness and time. Ten or 12.6% indicated lack of awareness while 5 or 6.3% indicated they did not have time.

Table 4:10. Non-participation of Training

<table>
<thead>
<tr>
<th>Responses</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Was not aware</td>
<td>10</td>
<td>12.6</td>
</tr>
<tr>
<td>Did not have time</td>
<td>5</td>
<td>6.3</td>
</tr>
<tr>
<td>Was not interested</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Unsuitable time</td>
<td>1</td>
<td>1.2</td>
</tr>
</tbody>
</table>

Source: Field work, 2014  
N=79
4.6 ACCESS TO E-RESOURCES

Another objective of the study was to find out respondent’s access to electronic resources. The results (Table 4.11) indicated that majority of the respondents that is 63(79.7%) access e-resources both on and off campus. Others are campus only 6(7.6%) and only off campus 1(1.2%).

Table 4:11. Place of Access

<table>
<thead>
<tr>
<th>Place of access</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campus</td>
<td>6</td>
<td>7.6</td>
</tr>
<tr>
<td>Off campus</td>
<td>1</td>
<td>1.2</td>
</tr>
<tr>
<td>On and Off Campus</td>
<td>63</td>
<td>79.7</td>
</tr>
</tbody>
</table>

Source: Field work, 2014  
N=79

Table 4:12 shows that respondents generally rate e-resources on campus as good. Over 60% or 48 respondents indicated e-resources access on campus as good compare to 32(40.5%) who indicated access off campus as good.

Table 4:12. Compare location

<table>
<thead>
<tr>
<th>Location</th>
<th>Excellent[F][%]</th>
<th>Very good[F][%]</th>
<th>Good[F][%]</th>
<th>Fair[F][%]</th>
<th>Poor [F][%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>campus</td>
<td>1[1.2]</td>
<td>0[0]</td>
<td>48[60.7]</td>
<td>19[24.0]</td>
<td>0[0]</td>
</tr>
<tr>
<td>Off campus</td>
<td>2[2.5]</td>
<td>10[12.6]</td>
<td>23[29.1]</td>
<td>32[40.5]</td>
<td>0[0]</td>
</tr>
</tbody>
</table>

Source: Field work, 2014  
N=79
4.6.1 TYPES OF ELECTRONIC DEVICE USE TO ACCESS E-RESOURCES

Respondents were asked to indicate the electronic device they used in accessing the electronic resources. The results (Table 4.13) show that they mostly access the e-resources using their desktop (46 or 58.2%) and their laptops (61 or 77.2%) others are I pad (33 or 41.7%) and mobile phone (4 or 5.0%)

Table 4:13. Types of Electronic Device used to access the Internet

<table>
<thead>
<tr>
<th>Electronic devices</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desktop</td>
<td>46</td>
<td>58.2</td>
</tr>
<tr>
<td>Laptop</td>
<td>61</td>
<td>77.2</td>
</tr>
<tr>
<td>Ipad</td>
<td>33</td>
<td>41.7</td>
</tr>
<tr>
<td>Mobile phone</td>
<td>4</td>
<td>5.0</td>
</tr>
</tbody>
</table>

Source: Field work, 2014 N=79

4.7 USEFULNESS OF ELECTRONIC RESOURCES

On the usefulness electronic resources, over 40% of respondents (Table 4.14) indicated academic databases and Dspace as useful. Others are CD-ROM, 22(27.8%) and OPAC, 12(12.1%) as useful. Thirty-six or 45.5% and 48(60.7%) of the respondents could not rate the usefulness of CD-ROM and OPAC respectively. The implication of these findings is that not many of the respondents use CD-ROM and OPAC and thus could not rate their usefulness.
Table 4.14. Usefulness of Electronic Resources

<table>
<thead>
<tr>
<th>Usefulness</th>
<th>Very useful</th>
<th>Useful</th>
<th>Not useful</th>
<th>Do not know</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD-ROM</td>
<td>6(7.5)</td>
<td>22(27.8)</td>
<td>10(12.6)</td>
<td>36(45.5)</td>
</tr>
<tr>
<td>OPAC</td>
<td>4(5.0)</td>
<td>12(12.1)</td>
<td>10(12.6)</td>
<td>48(60.7)</td>
</tr>
<tr>
<td>A-D-base</td>
<td>28(35.4)</td>
<td>33(41.7)</td>
<td>3(3.7)</td>
<td>10(12.6)</td>
</tr>
<tr>
<td>Dspace</td>
<td>26(32.9)</td>
<td>33(41.7)</td>
<td>0(0)</td>
<td>13(16.4)</td>
</tr>
</tbody>
</table>

Source: Field work, 2014

4.7.1 IMPORTANCE OF E-RESOURCES

Respondents were asked to indicate the importance of electronic resources. Table 4.15 shows that the most important e-resources are again academic databases and Dspace. With regard to academic database, 25(31.6%) of the respondents said Academic Databases were Very Important, 36(45.5%) while 36(45.4%) of respondents said they are Important. With respect to Dspace 25(31.6%) of respondents said it is very important, and 36(45.4%) of respondents said it is important. Comparatively, 6(7.6%) of respondents said CD-ROM is Very important, and 21(26.5%) of respondents said CD-ROM is important. With regard to OPAC, 3(3.7%) of respondents said OPAC is very important, and 13(16.4) of respondents said OPAC is important.
Table 4:15. Importance of E-Resources

<table>
<thead>
<tr>
<th>Importance</th>
<th>Very important</th>
<th>important</th>
<th>Not important</th>
<th>Do not know</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD-ROM</td>
<td>6(7.6)</td>
<td>21(26.5)</td>
<td>11(13.9)</td>
<td>35(44.3)</td>
</tr>
<tr>
<td>OPAC</td>
<td>3(3.7)</td>
<td>13(16.4)</td>
<td>7(8.8)</td>
<td>48(60.7)</td>
</tr>
<tr>
<td>A-D-base</td>
<td>25(31.6)</td>
<td>36(45.5)</td>
<td>3(3.8)</td>
<td>9(11.4)</td>
</tr>
<tr>
<td>Dspace</td>
<td>25(31.6)</td>
<td>36(45.5)</td>
<td>0(0)</td>
<td>12(15.1)</td>
</tr>
</tbody>
</table>

Source: Field work, 2014 N=79

4.8. PROBLEMS ASSOCIATED WITH THE USE OF ELECTRONIC RESOURCES

Another objective of the study was to find out the problems associated with the use of electronic resources. Fifty-seven 57(72.1%) (Table 4.16) indicated inadequate computers in the library, 37(46.8%) said Lack of Information on how to use Electronic Resource, 46(58.2%) indicated insufficient search skills, 68(86.0%) said Poor Internet Connectivity, 58(73.4%) indicated Inadequate Access Location, 65(82.2%) indicated Power Outages and 5(6.3%) of respondents said, Limited Subscribed Titles.
Table 4: Problems in using E-resources

<table>
<thead>
<tr>
<th>Problems</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inadequate computers in the library</td>
<td>57</td>
<td>72.1</td>
</tr>
<tr>
<td>Lack of information on how to use E-resources</td>
<td>37</td>
<td>46.8</td>
</tr>
<tr>
<td>Insufficient search skills</td>
<td>46</td>
<td>58.2</td>
</tr>
<tr>
<td>Poor internet connectivity</td>
<td>68</td>
<td>86.0</td>
</tr>
<tr>
<td>Inadequate access location</td>
<td>58</td>
<td>73.4</td>
</tr>
<tr>
<td>Power outages</td>
<td>65</td>
<td>82.2</td>
</tr>
<tr>
<td>Limited subscribed titles</td>
<td>5</td>
<td>6.3</td>
</tr>
</tbody>
</table>

Source: Field work, 2014  N=79

4.9 DISCUSSION OF FINDINGS

The discussion of findings is based on the main objectives of the study under the following sub-headings: awareness of electronic resources, use of electronic resources, training in the use of electronic resources, access to electronic resources, usefulness and importance of electronic resources, and problems associated with the use of electronic resources.

4.9.1 AWARENESS OF ELECTRONIC RESOURCES

Awareness according to Okiki (2012) is a requirement to enhanced accessibility, increased usability, effectiveness and establish new ways for information users in using information for more productivity in our endeavours. The findings of this study revealed that awareness was high. (84.8%) were aware of CD-ROM, few respondents (30.4%) were aware of OPAC, (94.4%) were aware of Academic Databases whilst (87.3%) were aware of Dspace. This means respondents have a good idea of E-resources especially for Academic Databases; awareness of OPAC was the least. However, Togia & Tsigilis (2009) in a similar study at Aristotle University of Thessaloniki, revealed that lack of awareness of the availability and
the potential of certain resources seems to be a serious problem associated with underutilization. They indicated that 43.4% of the respondents were not aware of ERIC, the largest digital source of literature in Education. However, more than one third of the respondents used electronic journals rather frequently. Bayugo and Agbeko (2007) refuted the findings in this study. In their study of information seeking behaviour of health science faculty at the college of health sciences, University of Ghana, they reported that academics were unaware of the two full-text journal databases (HINARI and PERI) retrieved from the library. Hence they used PUBMED as their source of access to full-text articles. They also concluded that most academics now prefer to use electronic access to information (CD-ROM/online) to traditional print indexes and abstracts.

4.9.2 USE OF ELECTRONIC RESOURCES

The study revealed a low percentage of frequent use of the various electronic resources as indicated by respondents respectively; CD–ROM (1.2%) daily, (0%) twice a week, (3.7%) once a week, (50.6%) once a month, (44.3%) not at all.

On the use of OPAC, none had used it daily nor twice a week, 10 representing 12.6% indicated once a week, 11 representing 13.9% indicated once a month, with 52 representing 65.8% indicating not all. None has use Dspace daily, 30.3% use it twice a week, 25.3% once a week, 16.4% once a month and 18.9% not at all. On the use of Academic databases, respondents indicated as regards the use of Ebscohost, none has used it daily nor twice a week, 7 representing 8.8% indicated once a week, 35 representing 44.3% indicated once a month, and 43 representing 54.4% indicated not at all. The use of EMERALD also indicated negative for daily use, 2 representing 2.5% indicated twice a week, 42 representing 53.1% once a week, 17 representing 21.5% indicated once a month while 24 representing 30.3% indicated not at all.

Again, respondents indicated their use of SAGE as follows; Out of the 79 respondents, 0 (zero)
representing 0% had used it daily, 1 representing 1.2% indicated twice a week, 9 representing 11.3% indicated twice a week, 26 representing 32.9% indicated once a month, and 46 representing 58.2% indicated not at all.

The findings show that majority of the respondents did not use PROJECT MUSE at all. Only 2 representing 2.5% used it once a month at 74 representing 93.6% indicated not at all.

On OUP, no respondents indicated daily nor twice a week, 1 representing 1.2% indicated once a week, 2 representing 2.5% indicated once a month, with 72 representing 90.1% indicating not at all. Out of the 79 none indicated using JSTOR daily, 3 representing 3.7% indicated twice a week, 32 representing 40.5% indicated once a week, 24 representing 30.3% indicated once a month, 16 representing 20.2% indicated not at all. Further response with respect to ALUKA, indicated that no respondent has use it with 76 representing 96.2% indicated not at all. These results corroborate studies conducted by Bayugo & Agbeko, (2007) which reported on a low percentage of use by academics in a survey of convenient access to, and use of, electronic databases (CD-ROM and online) with full-text journals and their effect on information seeking behavior of health sciences academics at the College of Health Sciences of the University of Ghana. The survey documented academics preferences of print and electronic resource, and the specific databases and full-text journals. Another study conducted by Togia & Tsigilis (2009) also supports the above findings of this study. Their results showed that the vast majority of participants (86%) had used search engines (e.g. Google) more than 6 times during the last three months instead of full-text electronic journals (33.9%) and the Library OPAC (29.3%).

Ojo and Akande (2005) in a survey of 350 respondents examined student’s access, usage and awareness of electronic information resources at the University College Hospital (UCH) Ibadan, Nigeria. The study supports the findings of this study through a revelation that the level of usage of the electronic information resources is not high. Egberongbe’s, (2011) findings on the Use and impact of electronic resources at the University of Lagos, refuting the findings of
this study revealed that 73 (65.2%) lecturers and 46(65.7%) scholars usually used e-resources, 30(26.8%) lecturers and 20(28.65%) scholars used e-resources sometimes, whereas 9(8.04%) lecturers and 4(5.75%) scholars used e-resources rarely. The study indicated that scholars used the library more frequently than lecturers.

4.9.3 TRAINING IN THE USE OF ELECTRONIC RESOURCES

Training is important in ensuring the efficient and increased use of electronic resources. Therefore it is important for librarians to equip users with the necessary skills. The researcher sought to know from respondents if the library has organized training in the use of electronic resources and if they have participated in any of these trainings. The findings showed that few respondents 26(32.9%) indicated having been trained on the use of CD-ROM, with majority of them 52(73.6%) receiving no training on the use of CD-ROM. However, few respondents 10(12.6%) confessed having been provided with training on the use of OPAC as against a large percentage of respondents 64(81%) receiving no training on use of OPAC. 58 respondents representing (73.4%) responded they had been provided with training on the use of Academic databases whilst 19 (24.0%) respondents said they have not had any training in using Academic databases. The findings further show that 56(70.8%) of respondents stating that they have been trained on the use of Dspace, with 21 respondents representing (26.5%) saying they had no training on the use of Dspace. Table 4.5.1 shows the responses. The findings in this study support results from a study conducted by Egberongbe, (2011) on the use and impact of electronic resources at University Lagos in respect of CD-ROM and OPAC; which reports that only 10 (14.3%) scholars had taken training regarding access to electronic resources, while 60(86%) scholars did not participate in training on the use of electronic resources. The study showed that majority of scholars did not receive training in the use of e-resources. In supporting the findings in this study further, in respect of Academic
databases and Dspace, Adeleke and Olorunsola (2010), research on training in the use of e-resources in Redeemer University library Nigeria, reported a high percentage of students; 66% who had training regarding access to electronic resources as against 34% who received no training.

4.9.5 ACCESS TO ELECTRONIC RESOURCES

Access to electronic resources is a function of usability of the information resource. In investigating the access to electronic resources the researcher sought to know where students access electronic resources, either campus only, off campus only or both. Most of the respondents used both on and off campus access. 79.7% representing ON and OFF Campus compared to 7.6% only Campus and 1.2% Off Campus. The findings show that 1.2% of respondents said campus access is excellent as compared to 2.5% respondents who said off campus is excellent. None of the respondent said access was Very Good on campus as compared to 12.6% who said off campus was Very Good. 48 representing 60.7% said campus is good as compared to 23 representing 29.1% who said off campus was Good. 19 respondents representing 24.0% said campus access is fair as compare to 32 respondents representing 40.5% for off campus. None said access is poor for either campus or off campus.

Most of the respondents representing 77.2% use Laptops to access electronic resources whiles 58.2% uses Desktop. 41.7% but few others 5.0% use mobile phones. These findings corroborate Chaputula (2012) study of adoption and use of ICTs by students and academic staff at Mzuzu University, Malawi. The study involved 555 respondents. 77 (13.9%) said they access e-resources off campus, 95(17.1%) use mobile phones to access e-resources, 181(32.6%) said they use laptop to access e-resources whiles 191(34%) access e-resources on campus.
4.9.6 USEFULNESS AND IMPORTANCE OF ELECTRONIC RESOURCES

The construct usefulness according to Venkatesh, Morris, Davis, and Davis, (2003) refers to users' perceptions concerning the degree to which using university library resources, such as electronic resources, would improve performance. A Study by Sharma, (2009) shows the use of e-resources is very common among the teachers and research scholars of Guru Gobind Singh Indraprastha University and majority of the teachers and research scholar are dependent on e-resources to get the desired and relevant information. Zha, X., Li, J. and Yan, Y. (2012) also pointed out in a study that usefulness is considered to be an important dimension for the choice of different kinds of library resources. Their findings show that 67.99% of respondents agree that electronic resources are useful to them as against 15.38% thought otherwise. The findings of this study corroborate the studies by Sharma (2009), Zha Li, and Yan (2012), Venkatesh et al. (2003) in the sense that majority of the respondents indicated that e-resources are very useful and very important whilst few of the respondents think otherwise. The findings indicate the following: CD-ROM, 6(7.6%) of respondents said the CD-ROM was very important, 21(26.5%) of respondents said the CD-ROM was important, 11(13.9%) of respondents said the CD-ROM was not important and 35(44.3%) of respondents said they did not know; On the importance of OPAC, 3(3.7%) of respondents said the OPAC was very important, 13(16.4%) of respondents said the OPAC was important, 7(8.8%) of respondents said the OPAC was not important; On the importance of Academic Databases, 25(31.6%) of the respondents said Academic Databases were very important, 36(45.5%) of respondents said Academic Databases were important, 3(3.8%) said Academic Databases were not important and 9(11.4%) said they did not know. On the importance of Dspace, 25(31.6%) of respondents said Dspace were very important, 36(45.5%) of respondents said Dspace were important, none said Dspace were not important 12(15.1) said they did not know. Madhusudhan (2010) research paper on use of e-resources by scholars of
Kurukshetra University, Delhi, India, also supports the findings of this study with his reports that 50(66%) of the respondents admit that electronic resources are very important and 50(54%) state that electronic resources are more useful compared with print resources.

4.9.7 PROBLEMS ASSOCIATED WITH THE USE OF ELECTRONIC RESOURCES

A number of alternatives were considered under the problems associated with the use of electronic resources. The findings indicate that 72.1% of respondents are certain that inadequate computers in the library are a major setback related to the use of e-resources. Lack of information on how to use electronic resources was also indicated by 46.8% of respondents as another major drawback. 58.2% respondents specified that insufficient skills also bring about problems in accessing electronic resources. Majority of respondents 86.0%, point out that poor internet connectivity hindered efficient use of e-resources, 73.4% believe inadequate access location also pose a problem to them whilst power outages constituted 82.2% of respondents. However, a few of the respondents 5 representing 6.3% said limited titles are a problem for using electronic resource. The result shows that many of the respondents identified themselves with all the problems listed in the table. This is supported by studies conducted by Ivwighreghweta and Onoriode (2012), Ogbomo and Ivwighreghweta (2011), Okoye and Ejikeme (2011), Emorjoho, Ivwighreghweta and Onoriode (2012) which reported power outages, inadequate skills to navigate the Internet, unavailability of Internet facilities. This study is also corroborated by findings in a study by Mirza and Mahmood, (2012) regarding problems in using electronic resources and services, 96 out of 800 (12%) respondents identified the need to market electronic resources and services; 93 (11.62%) stated that IT infrastructure was inadequate; 75 (9.40%) indicated a lack of IT skills among library staff in reader services, and lack of skills among library users in using e-resource as inherent problems in using e-resources and services.
REFERENCE


CHAPTER FIVE
SUMMARY CONCLUSION AND RECOMMENDATION

5.1 INTRODUCTION

This chapter summarizes the findings of the study, concludes and finally makes recommendations based on the findings. The study sought to find out the use of electronic resources by undergraduate students of Ghana Institute of Management and Public Administration with the following objectives: to find out awareness of electronic resources, examined the extent of use of electronic resources, to examine the level of training, find out access to electronic resources, to examine the usefulness and importance of electronic resources and finally, find out problems students face in using electronic resources.

5.2 SUMMARY OF FINDINGS

The summary of findings of the study is presented below.

5.2.1 AWARENESS OF ELECTRONIC RESOURCES

The results of the study showed that majority of respondents were aware of electronic resources especially for CD-ROM, Academic Databases, Dspace, and OPAC being the least. The study also shows that most respondents became aware of some electronic resources through notices, flyers, display, newsletters, posters, and library guide.

5.2.2 USE OF ELECTRONIC RESOURCES

- The findings generally revealed low usage of electronic resources by the respondents.
- There were low levels of use ‘Daily’, and ‘Twice a week’ but comparatively better usage recorded ‘Once a month’ for some selected electronic resources.
- There were proportionately higher respondents who do not use some of the electronic resources at all, especially ALUKA, OUP and PROJECT MUSE.
The results also showed that majority of respondents are assisted by colleagues and friends in searching e-resources. Comparatively fewer respondents however do the searches by themselves. A least number of respondents are assisted by a library officer. The results further showed that, majority of respondents do searches to complete assignment, write projects, and update lesson notes. However, few of the respondents use electronic resources for research and update on new information. The findings also showed that, comparatively greater proportion of respondents scored ‘Fair’, for level of proficiency, followed by ‘Good’, ‘Poor’, ‘Very good’, with none scoring ‘Excellent’. 

5.2.3 TRAINING IN THE USE OF ELECTRONIC RESOURCES

The study revealed high awareness of the provision of training in the use of electronic resources by the library. Participation in training was quite low for CD-ROM and OPAC, but higher for Academic Databases and Dspace. The study also revealed below average score for effectiveness and adequacy of training, and helpfulness of training to academic work. Participation in the training of use of e-resources was relatively low. Reasons for non-participation included lack of awareness and time, unsuitable time and lack of interest.

5.2.4 ACCESS TO ELECTRONIC RESOURCES

Respondents accessed electronic resources on campus, off campus or both. Respondents judged on-campus access as best. Majority of respondents used laptops and desktops to access electronic resources.
Others are I pads and mobile phones.

5.2.5 USEFULNESS AND IMPORTANCE OF ELECTRONIC RESOURCES

- Majority of respondents rated e-resources as useful and important, especially Academic Databases and Dspace..

5.2.6 PROBLEMS IN THE USE OF ELECTRONIC RESOURCES

Problems encountered in using e-resources include:

- Poor internet connectivity
- Power outages
- Inadequate computers in the library
- Lack of information on how to use electronic resources and
- Limited subscribed databases.

5.3 CONCLUSION

Electronic resources are very expensive and thus it is important for university administration to be informed about their extent of use and problems associated with use, so that the necessary actions are taken to ensure efficient and effective use. Such information will also justify the large sums of monies invested in its procurement.

The findings of the study have shown that electronic resources are very important to undergraduate student’s academic at Ghana Institute of Management and Public Administration. Although there are high levels of awareness of electronic resources among the students, their proficiency in searching for these resources are low. Consequently training in information literacy skills (ILS) and reliable information communication technology (ICT) infrastructure by GIMPA remain critical to the effective and efficient use of the electronic resources.
5.4 RECOMMENDATIONS

Based on the findings, the following recommendations are made:

5.4.1 ELECTRONIC RESOURCES TRAINING AS PART OF CURRICULUM

Participation in the training of e-resources was found to be low. A structured curriculum should therefore be established as part of student’s normal lessons periods where time is allocated on their time table for electronic resource training and if possible credited to their academic performance.

5.4.2 PROVISION OF CAMPUS WIRELESS SYSTEMS

Inadequate access was identified as a problem. Accessibility of electronic resources should be improved by providing more computer work stations and data accessibility points through campus wireless network.

5.4.3 SUBSCRIPTION OF APPROPRIATE DATABASES

Appropriate databases related to faculty and students fields of study should be subscribed to address the limited subscription titles.

5.4.4 INTERNET CONNECTIVITY AND POWER STABILITY

Internet connectivity and power generation should be improved for better services.

5.4.5 SUGGESTIONS FOR FURTHER STUDY ON USE OF ELECTRONIC RESOURCES

Further research should be conducted about use of electronic resources in the coming years to help assess whether undergraduate students use of electronic resources have improved or
declined. The study should be replicated using graduate students to get a holistic picture of the use of resources at GIMPA.

Library of Congress

Supplementary guidelines Retrieved from:
http://www.loc.gov/acq/devpol/electronicresources.pdf


Chaputula, A. H. (2012). State, adoption and use of ICTs by students and academic staff at Mzuzu University, Malawi. Program: electronic library and information system. 46(4), pp. 364-382


http://arizona.openrepository.com/arizona/handle/10150/105584.


Hartmann, E. (2001). Understanding of information literacy: the perception of first year graduate students at the University of Ballarat. *Australian Academic and research Libraries, 33*(2), pp. 33-43.


I am Prince Baffour Amankwah, a graduate student of the University of Ghana pursuing Master of Arts degree in Information Studies. I am conducting research entitled, *Use of electronic resources by undergraduate students of the Ghana Institute of Management and Public Administration (GIMPA)*

I will be grateful if you could spare a moment to respond to the following questions on the subject. The Information you provide is strictly confidential and will be used for academic work only. Thanks for your co-operation.

**Part 1: Personal Data**

1. Gender (please tick)
   - Male ( ) Female ( )

2. Age
   - 18-23 ( ) 24-29 ( ) 30-35 ( ) 36-41 ( ) 42-47 ( ) 48 and above ( )

3. Course offered
   - Accounting ( )
   - Finance ( )
   - Hospitality and tourism management ( )
   - Human Resource ( )
   - Marketing ( )
   - Project Management ( )
   - Business Administration ( )
   - Operations and supply Chain management ( )
   - Economics ( )
   - Procurement management ( )

**Part 2: Awareness of Electronic Resources**

4. Which of the following electronic resources are you aware of?
   (Please tick all that apply)
5. How did you get to know of these electronic resources? 
(Please tick all that apply)
Notices ( ) flyers ( ) Display ( ) Newsletters ( ) Posters ( )
E- Library guide ( ) others (please specify) ..............................

6. How would you rate the adequacy of the library’s publicity of Electronic resources?
A. Very adequate ( ) B. Adequate ( ) C. Fairly adequate ( ) D. Not adequate ( )
E. No opinion ( )

Part 3: Use of Electronic Resources

7. How often do you search these electronic resources?

<table>
<thead>
<tr>
<th>Electronic resources</th>
<th>Daily</th>
<th>Twice a week</th>
<th>Once a week</th>
<th>Once a months</th>
<th>Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD-ROM</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OPAC (automated library catalogue)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DSPACE</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

**Academic databases**

<table>
<thead>
<tr>
<th></th>
<th>Daily</th>
<th>Twice a week</th>
<th>Once a week</th>
<th>Once a months</th>
<th>Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>EBSCOHOST</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>EMERALD</td>
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<tr>
<td>SAGE</td>
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<td></td>
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<tr>
<td>PROJECT MUSE</td>
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</tr>
<tr>
<td>OUP</td>
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<tr>
<td>JSTORE</td>
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</tr>
<tr>
<td>ALUKA</td>
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</tr>
</tbody>
</table>
8. How do you normally conduct your searches? (Please tick)

<table>
<thead>
<tr>
<th>I do them myself</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>I am assisted by a Library officer</td>
<td></td>
</tr>
<tr>
<td>I am assisted by a colleague/friend</td>
<td></td>
</tr>
</tbody>
</table>

9. What are the purposes for searching e-resources? (Please tick all that apply)

- To complete assignment ( )
- For research ( )
- To write my project ( )
- To update my lesson notes ( )
- To update myself on new information in my field ( )
- Others (please specify) .........................................................................................................................................................

10. How would you rate your level of proficiency in the use of electronic resources?

   Excellent ( ) very good ( ) Good ( ) Fair ( ) Poor ( )

Part 4: Training in the Use of Electronic Resources:

11. Has the Library provided any training on how to use the following E-resources?

   (Please tick all that apply)

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD ROM</td>
<td>( )</td>
</tr>
<tr>
<td>Online Public Access Catalogue (OPAC)</td>
<td>( )</td>
</tr>
<tr>
<td>Academic Database</td>
<td>( )</td>
</tr>
<tr>
<td>Dspace</td>
<td>( )</td>
</tr>
</tbody>
</table>

12. Have you participated in any training in the use of the following E-resources? (Please tick all that apply).

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD ROM</td>
<td>( )</td>
</tr>
<tr>
<td>Online Public Access Catalogue (OPAC)</td>
<td>( )</td>
</tr>
<tr>
<td>Academic Databases</td>
<td>( )</td>
</tr>
<tr>
<td>Dspace</td>
<td>( )</td>
</tr>
</tbody>
</table>
If you answered ‘Yes’ to any of the E-resources to question “12” please proceed to question 13; 14; and 15, if ‘No’ proceed to question “16”

13. How would you rate the general effectiveness of the training in the use of these E-resources? (Please tick as apply)

<table>
<thead>
<tr>
<th>E-Resource</th>
<th>Excellent</th>
<th>Very good</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD-ROM</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>OPAC</td>
<td></td>
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<td></td>
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<tr>
<td>Academic Database</td>
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<td></td>
</tr>
<tr>
<td>Dspace</td>
<td></td>
<td></td>
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</tbody>
</table>

14. How would you rate the adequacy of training in equipping you with the necessary search skills? (Please tick as apply)

<table>
<thead>
<tr>
<th>E-Resource</th>
<th>Very Adequate</th>
<th>Adequate</th>
<th>Fairly Adequate</th>
<th>Poor Adequate</th>
<th>Not Adequate</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD-ROM</td>
<td></td>
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<tr>
<td>OPAC</td>
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<tr>
<td>Academic Database</td>
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<tr>
<td>Dspace</td>
<td></td>
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</tr>
</tbody>
</table>

15. How has the training been helpful in your academic work? (Please tick as apply)

<table>
<thead>
<tr>
<th>E-Resource</th>
<th>Very Helpful</th>
<th>Helpful</th>
<th>Fairly Helpful</th>
<th>Not Helpful</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD-ROM</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OPAC</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Academic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
16. In case you have not participated in any training, which of these explains your non-participation? (Please tick as apply)
   A. Was not aware (   ) B. Did not have time to participate (   ) C. was not interested(   )
   D. The time was not suitable (   )

**Part 5: Access to Electronic Resources**

17. Where do you access the electronic resources? (Please tick as apply)
   A. Campus (   ) B. Off campus (   )

18. How would you compare on campus and off campus access?

<table>
<thead>
<tr>
<th>Location</th>
<th>Excellent</th>
<th>Very good</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campus</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Off campus</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

19. What electronic device do you use to access the E-resources?
   A. Desk top computer (   ) B. lap top (   ) C. ipad (   ) D. Mobile phone (   )
   E. Others: please specify.................................................................

**Part 6: Usefulness and importance of electronic resources**

20. How will you rate the usefulness of electronic resource in your academic pursuit?
   (Please indicate); A: Very useful; B: Useful; C: Not useful; D: Don’t know
   Online public access catalogue (OPAC) (   )
   CD ROM (   )
   Academic Database (   )
   Dspace (   )
21. How will you rate the importance of electronic resources to your academic work?  
(Please Indicate);   A: Very important; B: important; C: Not important; D: Don’t know

Online public access catalogue (OPAC)  (   )
CD ROM  (   )
Academic Database (   )
Dspace  (   )

22. Is there any other E-resources that are more useful and important to you other than those stated? (Please state) ..........................................................................................................

Part 7: Problems associated with the use of electronic resources

23. Which of these problems do you encounter when accessing electronic resources?  
(Please tick all that apply)

Inadequate computers in the library  (   )
Lack of information on how to use E-resources  (   )
Insufficient search skills  (   )
Poor internet connectivity  (   )
Inadequate access location  (   )
Power outages  (   )
Limited subscribed titles  (   )

Thank you.