AN ASSESSMENT OF USES OF THE INTERNET BY FEMALE UNDERGRADUATES OF AHMADU BELLO UNIVERSITY ZARIA

BY

MOHAMMED ABDULLAHI, AMINU

DEPARTMENT OF MASS COMMUNICATION
FACULTY OF SOCIAL SCIENCES
AHMADU BELLO UNIVERSITY, ZARIA
NIGERIA.

AUGUST, 2014

AN ASSESSMENT OF USES OF THE INTERNET BY FEMALE UNDERGRADUATES OF AHMADU BELLO UNIVERSITY ZARIA

BY

Mohammed Abdullahi AMINU, B.Sc (A.B.U. Zaria) 2008
M.sc./Soc-Scien/5241/2009-2010

A THESIS SUBMITTED TO THE SCHOOL OF POSTGRADUATE STUDIES, AHMADU BELLO UNIVERSITY, ZARIA

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF A MASTER DEGREE (M.SC) IN MASS COMMUNICATION

DEPARTMENT OF MASS COMMUNICATION
FACULTY OF SOCIAL SCIENCES
AHMADU BELLO UNIVERSITY, ZARIA
NIGERIA.

AUGUST, 2014

DECLARATION

I hereby declare that this research work entitled "An Assessment of Uses of the Internet by Female Undergraduates of Ahmadu Bello University, Zaria" was conducted by me in the Department of Mass Communication under the supervision of Prof. Benjamin Uchegbu and Dr. Ladi Sandra Adamu. The sources from which the literature information were extracted have been duly acknowledged in the text and list of references. No part of this Thesis has been presented for the award of another degree in any university.

---------- **----------**

Aminu, Mohammed Abdullahi **Date**
M.sc/Soc.-Sci/5241/2009-2010

CERTIFICATION

This Thesis entitled AN ASSESSMENT OF USES OF THE INTERNET BY FEMALE UNDERGRADUATES OF AHMADU BELLO UNIVERSITY, ZARIA written by Mohammed Abdullahi, AMINU meets the regulations governing the award of the degree of Master of Science in Mass Communication of Ahmadu Bello University, Zaria and it is approved for its contribution to knowledge and literary presentation.

_____ _____

Professor Benjamin Uchegbu **Date**
Major Supervisor

_____ _____

Dr Ladi Sandra Adamu **Date**
Minor Supervisor

_____ _____

Dr Suleiman Salau **Date**
Head of Department
Mass Communication

_____ _____

Professor Adebayo A. Joshua **Date**
Dean, School of Postgraduate Studies

DEDICATION

This research work is dedicated to my parents Alhaji Abdullahi Mohammed and Hajiya Fatima Abdullahi for bringing me into this world and for sponsoring my education.

ACKNOWLEDGEMENTS

First of all, I want to acknowledge the Almighty God for the gift of life and provisions to complete this study. I am indebted to my school, Ahmadu Bello University, Zaria for the admission and enabling environment to carry out this work. The same gesture goes to my distinguished Supervisors and examiners, Prof. Benjamin Uchegbu, Dr. Ladi Sandra Adamu, Dr Umar Mahmud and Dr Suleiman Garba, respectively, who employed their scholastic prowess to guide me throughout the period of this research work. Much gratitude is owed to them for their advice, encouragement and patience which have facilitated the successful completion of this work. I strongly believe that their reward is surely in heaven.

My special thanks go to Dr Salau Suleiman, my humble Head of Department, Dr Umar Mahmud, the Postgraduate Coordinator of the department, all my lecturers in the department: Dr Shola Adeyanju, Dr John Okpoko, Mal. Shittu, Mr Cosmos Eze, Prof. Tunji Arokoyo, Mr Ibrahim Jimoh, Dr Yakubu Suleiman and many others for their advice and guidance in different ways.

To my beloved wife, friends, course mates, colleagues, brothers and sisters, i say a big thank you for your patience, encouragement, moral and financial support all of which led to the successful completion of this work.

I equally want to acknowledge all authors whose scholarly works have been cited in this study.

TABLE OF CONTENTS

Cover Page ---------- i

Title Page ---------- ii

Declaration ---------- iii

Certification ---------- iv

Dedication ---------- v

Acknowledgments ---------- vi

Table of Contents ---------- vii -x

List of Tables ---------- x

List of Figures ---------- xi

List of Acronyms/Abbreviations ---------- xii

Abstract ---------- xiii

CHAPTER ONE: INTRODUCTION

1.1 Background to the Study ---------- 1 - 3

1.2 Statement of the Research Problem ---------- 3 - 5

1.3 Research Questions ---------- 5 - 6

1.4 Aim/Objectives of the Study ---------- 6

1.5 Significance of the Study ---------- 6 - 7

1.6 Scope of the Study ---------- 7 - 8

1.7 Limitations of the Study ---------- 8

1.8 Operational Definition ---------- 8 - 9

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction ---------- 10

2.2 Background On Demography and Patterns of the Internet uses ---------- 10 - 15

2.3 Conceptual Review ---------- 16

2.3.1 Undergraduates' Behaviour Towards the Internet and Purpose of Using it ----- 16 - 21

2.3.2 Frequency of Surfing the Internet and Common Search Engines Used By UG - 21 - 24

2.3.3 Constraints Faced By Undergraduates Using the Internet ---------- 24 - 25
2.4 Empirical Review ---------- 25 - 28
2.5 Gap in Knowledge ---------- 29
2.6 Theoretical Framework ---------- 30
2.6.1 Uses and Gratification Theory ---------- 30 – 32
2.6.2 Critique of the Theory ---------- 32
2.6.3 Theory Justification ---------- 33 - 34
CHAPTER THREE: RESEARCH METHODOLOGY
3.1 Introduction ---------- 35
3.2.1 Research Design ---------- 35
3.2.2 Study Area ---------- 36 - 37
3.2.3 Study Variables ---------- 37
3.3 Population of the study ---------- 37 - 38
3.4.1Sampling Technique ---------- 39
3.4.2 Sample Size ---------- 39 - 40
3.5.1 Method of Data Collection ---------- 41
3.5.2 Instrument for Data Collection ---------- 41 - 42
3.5.3 Validity and Reliability ---------- 42
3.5.4 Pilot Study ---------- 42 – 43
3.6 Method of Data Analysis ---------- 43
CHAPTER FOUR: DATA PRESENTATION, ANALYSIS AND INTERPRETATION
4.1 Introduction ---------- 44
4.2 Data Presentation ---------- 44 - 54
4.3 Discussion of Findings ---------- 54 - 62
CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS
5.1 Introduction ---------- 63
5.2 Summary ---------- 63 - 74
5.3 Conclusion ---------- 74 - 75

5.4 Contribution to Knowledge ---------- 75 - 76

5.5 Recommendations ---------- 76 - 77

5.6 Suggestion for further studies ---------- 78

REFERENCES ---------- 79 - 86

Appendix I: Letter of Introduction from the Department ---------- i

Appendix II: Questionnaire ---------- ii - iv

LIST OF TABLES

Table 4.1 Distribution of Questionnaire according to faculties ---------- 46

Table 4.2 The behaviour of the respondents towards the uses of the Internet----- 47

Table 4.3 The respondents purpose of using the Internet ---------- 49

Table 4.4 The methods used by the respondents for searching the Internet -------- 51

Table 4.5 The Internet Access points used by the respondents ---------- 52

Table 4.6 The Constraints faced by the respondents using the Internet ---------- 53

LIST OF FIGURES

Figure 4.1: The level of the respondents ---------- 44

Figure 4.2: The age of the respondents ---------- 45

Figure 4.3: The websites frequently visited by the respondents ---------- 50

Figure 4.4: The rate at which the respondents use the Internet ---------- 52

LIST OF ACRONYMS/ABBREVIATIONS

1. ABU - Ahmadu Bello University
2. ARPANet - Advanced Research Project Agency Network
3. ICTs - Information and Communication Technologies
4. IWS - Internet World Statistics
5. FCT - Federal Capital Territory
6. UNCTAD - United Nations Conference on Trade and Development
7. IES - Internet Effect Scale
8. ICTD - Information and Communication Technology Directorate
9. WDS - Wireless Distribution System

ABSTRACT

An assessment of uses of the Internet by female undergraduates of Ahmadu Bello University Zaria is a survey that is meant to determine the behaviour of female undergraduates of A.B.U Zaria towards the Internet and the purpose for which they use it. The study has five specific objectives among which include: to find out the behaviour of the female undergraduates of A.B.U. towards the Internet; to identify the purpose for which the Internet is used by the female undergraduates of A.B.U. and to determine the frequency of surfing the Internet by the respondents. Data was gathered using 1,200 questionnaires in the twelve faculties of the University. A systematic random sampling method was used to select the respondents from the faculties. The questionnaire was administered on the female undergraduates at each of the faculties and the results were collated and analysed using the statistical package for social sciences (SPSS). The major findings of the study revealed that 74.1% of the female undergraduates of the university have interest, good perception and positive attitudes towards the uses of the Internet; 84.2% identified internet as an integral part of education; 81.7% said it is easier to use than the library and 56.7% said it is more informative than their lecturers. Also, 62.5% used it for educational purposes, 71.6% for communication, news and information; 69.1% used it for entertainment; 29% revealed daily use of the internet; 88.5% complained of slow and irregular internet connectivity and 65.1% lack adequate knowledge of websites related to their course of study. However, 91.9% of the respondents revealed that they had never uploaded any materials to the Internet. The study therefore recommended that the university should improve the quality of its Internet services; give proper orientation on the importance of good uses of the Internet; make current and relevant websites available to the students and upload course materials online especially in friendly websites and social networks that are frequently patronized by the students as this will facilitate on-line academic exchange.

CHAPTER ONE
INTRODUCTION

1.1 Background to the Study

The Internet is a network of hundreds of thousands of computers all over the world, connected in a way that lets other computers access information from them. So if a computer is connected to the Internet, in principle, it can be connected to any other computer on the network. Today, the Internet comprises more than 45,000 regional, national and international networks, which connect more than 30 million people in over 200 countries. The networks include organizations, schools, universities, companies, governments, groups and individuals (Gray, 1999).The Internet began in 1969 as ARPANet (Advanced Research Project Agency Network) by the United States Department of Defense to share military intelligence and research with university sources. The Internet has since the 1990s become a widely-used civilian tool for communication, research, entertainment, education and advertisement (Hinson and Amidu, 2006).

The history of the Internet has long been linked to university education. This is because the adoption of the Internet in university system has intensified access to information and communication by providing un-reserved access to e-mail messages, web boards, online services and e-publications.In practice, much of the recent focus of technological development in Nigerian Universities has been concerned with promoting the use of the Internet as a teaching and learning tool. Internet is appealing to Universities for a number of reasons: it reduces the time lag between the production and utilization of knowledge; it promotes international cooperation and exchange of

opinions; it furthers the sharing of information; and promotes multidisciplinary research.

Since the Internet's infancy, higher education institutions have pioneered many innovations (Cookson, 2000). According to Bates (1996:47), "information technologies integral to the Internet have allowed higher education to (1) expand access to education and training, (2) raise quality, (3) lower costs, and (4) increase cost-effectiveness". Internet-related technologies have also enabled higher education institutions to: (5) expand the number of courses and programs, (6) generate higher levels of tuition-based revenues, (7) develop specialized programs of study that would not otherwise be possible, and (8) use the process of technological innovation as a vehicle for revitalization of other aspects of their operations (Daniel, 1996).It can therefore be said that the Internet is one of the new technologies that support and promote the technological revolution that has taken place in education.

However, in Nigerian universities and tertiary institutions, there have been concerns on the possible effects of daytime and sometimes all-night Internet browsing on reading time among students. Some studies, for example, Oji (2007) cited in Margaret and Eric (2010:16) has highlighted the growing incidences of students using the Internet not necessarily for academic purposes, but for anti-social activities such as racketeering, blackmail, fraud and pornography. This probably explains why cybercafés patronised by students in many Nigerian cities and towns are often raided by law enforcement officials. Ojedokun (2006:46) pointed out that,"many students use the Internet mostly or only to search and retrieve information on entertainment, sports and news, and attributes this trend to lack of necessary searching skills for effective usage".

Jones (2002:16), in a research carried out on the Internet and African life, found that "university undergraduates use the Internet more to communicate socially than they do for academic work".Thus, whereas, the Internet offers information and systems of instruction that complement the traditional ways that students study and learn, some students seem to be preoccupied with it essentially for activities that entertain rather than educate.

Another contending issue related to the use of the Internet and the behaviour of the users towards it, is the issue of gender disparity in the Internet and the purpose of using it.For instance, Brunner and Bennett (1998:24) observed that, "male and female students differ significantly in terms of their attitude towards the Internet".On a similar study, a review of the literature concerning the Internet usage among the Americans revealed that the once stark gap between the male and the female is closing rapidly, but disparities remain in the purposes for which males and females use the Internet (Odell, Korgen, Schumacher, andDelucchi,2001 cited in Ozoemelem, 2010:18).

This therefore means, with the rapid increase in the Internet access in Nigerian universities and tertiary institutions where the male and female students surf the internet through cyber cafes, wireless hotspot, modems and mobile phones, there is the need to study the behaviour of the students towards the Internet as well as the purpose for which they use the Internet.

1.2 Statement of the Research Problem

The use of the internet for research and studies in the university is now a thing of necessity world-wide, and having access and a positive attitude toward the use of the Internet is a necessary condition for its effective use (Sylvester, 2011). Similarly, it is

important to establish the students' attitudetowards any new technology because it will assist universities to know if they are meeting the needs of students effectively (OECD, 2005).

Findings of previous studies carried out in some universities and tertiary institutions revealed a widespread assumption that female students use the internet for communication purposes, for fashion and shopping reasons and that they are less frequent or intense users of the internet. Also, there is a controversy in the findings of studies related to the female students' attitudes and behaviour towards the internet. Some asserts that female students exhibit less favourable or negative attitudes towards the internet while others posit that female students possessed positive attitudes towards the internet. Meanwhile, the female students, as mothers or would-be mothers, depending on their attitude andpurpose of using the Internet, have the potential of changing the future of the technological level of the society as they are directly involved in the training of next generation of people and thereby have the opportunity to implement the utilization of the Internet into the Nigerian society, particularly amongst children who are the future of the society. If they have a good behaviour towards the uses of the Internet then the level and skills of Internet adaptation in our society will be brighter and if otherwise, then there is the urgent need to reorient and redirect their thinking.

It is in consideration of the enormous importance and necessity of computer and the Internet in education for all that many Nigerian universities, Ahmadu Bello University, Zaria inclusive, are out to develop and boost their Information and Communication Technology sector. Hence, Ahmadu Bello University Zaria has established its own university e-library (MTN University Connect) and the Internet wireless services on its campuses mainly for educational purposes. Meanwhile, the

students have other several ways of accessing the Internet such as through the prepaid cyber cafes, modems and mobile phones among others. For instance, the researcher observed that in A.B.U., more female students have access to mobile Internet gadgets such as mobile phones, iphone, ipad and other devices which provide easier access to the Internet.

This therefore means that, although providing internet facilities and or having access to it is important, studying and analyzing the users' behaviours towards it as well as the purpose of using it is equally important. Hence, while universities like A.B.U. are trying to build the Internet, a valuable teaching and learning tool, it is necessary for them to understand their students' behaviour towards its applications. Also, they need to find out the purposes for which their female students in particular are using the Internet; whether they use it for communication, for entertainment and fashion, for academic purposes, for correspondences or for business and social purposes.

1.3 The Research Questions

The following research questions were set out to generate data for the study:

1. What is the behaviour of female undergraduates of Ahmadu Bello University Zaria towards the uses of the Internet?

2. For what purpose do the female undergraduates of Ahmadu Bello University Zaria use the Internet?

3. What are the Internet search engines and access points used by the female undergraduates of Ahmadu Bello University Zaria?

4. How often do the female undergraduates of Ahmadu Bello University Zaria surf the Internet?

5. What are the constraints faced by the female undergraduates of Ahmadu Bello University Zaria using the Internet?

1.4 Aim/Objectives of the Study

This study aims at determining the behaviour of female undergraduates of Ahmadu Bello University Zaria towards the Internet and the purpose which they use it for. The specific objectives are as follows:

1. To find out the behaviour of female undergraduates of Ahmadu Bello University Zaria towards the Internet usage.

2. To identify the purpose for which the Internet is used by female undergraduates of Ahmadu Bello University Zaria.

3. To identify the search engines/access points mostly used by female undergraduates of Ahmadu Bello University Zaria.

4. To determine the frequency of surfing the Internet by the respondents.

5. To find out the constraints faced by female undergraduates of Ahmadu Bello University Zaria using the Internet.

1.5 Significance of the Study

In the existing body of literature on the uses of the Internet reviewed by the researcher, not many and specific studies have been conducted in relation to the behaviour and purpose of the uses of the Internet by female undergraduates in Nigerian universities. The few ones available such as that of Salam (2003) and Achounye & Olele (2009) among others studied the gender differences among the male and female students in the universities. In Ahmadu Bello University Zaria for example, the Internet

usage among female undergraduates have never been examined in any previous studies. This therefore indicates the gap in knowledge of the study.

This study is further justified in the sense that Ahmadu Bello University Zaria is among the Nigerian Universities that encourages the use of the Internet for academic purposes among its staff and students alike. Hence, the University has established its own e-library, Internet wireless services among others in its campuses. It is in line with this that the researcher carried out this study to find out the behaviour of the female undergraduates of Ahmadu Bello University, Zaria towards the uses of the Internet.

The management of Ahmadu Bello University Zaria will be the primary beneficiaries of the findings of this study considering the huge amount of money and efforts they use in building the Internet facilities on the campus, the efforts they put in encouraging the use of the Internet for academic purposes and their eminent contributions towards bridging the gender gap in education and ICT usage.

Other beneficiaries of the study will include female empowerment campaigners, who over the years have been in the forefront of campaigns for equity in the education of women in the country. So also, the Internet advertisers can use the findings of the study for their decision making for online advert placement.

1.6 Scope of the Study

The study will cover the female undergraduates of Ahmadu Bello University, Zaria. However, only a sample of their total population will be used to make generalizations. Thus, the sample will be drawn from the twelve faculties of the university.

The rationale behind selecting female undergraduates is because it is at their level that foundation of university education is laid and it is also at this level that women who will work in different works of life and women activists that help to liberate other women generations yet to come from domination are produced. The researcher observed that in the university more female students have access to mobile Internet gadgets such as mobile phones, iphone, ipad and other devices which provide easier access to the Internet. The female undergraduates, as mothers or mothers to be, depending on their attitude and purpose of using the Internet, have the potential to change the future of the technological level of the society as they are directly involved in the training of next generation of people. They have the opportunity to implement the utilization of the Internet into the Nigerian society, particularly amongst children who are the future of the society. If they have a good behaviour towards the uses of the Internet then the level and skills of Internet adaptation in our society will be brighter and if otherwise, then there is the urgent need to reorient and redirect their thinking.

1.7Limitations of the Study

The questionnaire was administered during examination period therefore having the attention of the respondents was difficult for the researcher.

1.8 Operational Definitions

i. **Behaviour** – in the context of this study means feeling, perception or attitudinal dispositions of a certain group towards a particular thing.

ii. **Perception/Attitude -** in this study means opinion or way of thinking and understanding of the female undergraduates towards the internet.

iii. **Access point** – in this study means the device or way through which one surfs the Internet. For instance, it could be through subscription modem, cyber cafes, wireless hotspots, e-library and mobile Internet like devices like i-phone, ipad and other devices which provide easier access to the Internet.

iv. **A.B.U** –is used several times in this study and it means Ahmadu Bello University, Zaria

v. **Search engine** – in this study it refers to the method of information searching in the internet.

vi. **Female Undergraduates** –as it is used in this study means all female students in the university from 100 level to 400 or 500 level.

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

This chapter reviewed literature related to the Internet usage especially in the universities at the national and international levels. A highlight on the uses of the Internet, the demographic characteristics of the Internet users, gender disparities related to attitude and purpose of using the Internet especially among the female undergraduates were made. The gap in literature was identified and a theory that further explains the study was presented and weaved to the work.

2.2 BACKGROUND ON DEMOGRAPHIC AND PATTERN OF INTERNET USES

The information superhighway pinnacled as Internet has become the everyday word for different ages, sex, career, academic and status resulting in the world becoming a global village. Its usage is also narrowing down from public places to the comfort of peoples' homes especially as regards developing countries where internet usage is still relatively new. However, a study shows that 80% of internet users in Ibadan, Nigeria, use cybercafé for their internet activities (Olasina, 2006). Furthermore according to Anunabi and Mbagwu (2009:2), the use of cybercafé is still prevalent in many states in Nigeria

despite the use of some wireless internet services like the mobile phones and rainbow net by a significant population of the country.

In as much as different members of this information fascinating society use the internet, literature has shown that the characteristics of the users vary. According to Internet World Statistics (2012), there were 45,039,711internet users in Nigeria. The IWS reports further explained that most of Nigerian internet users are concentrated in big cities. All the 36 state capitals and the FCT have one degree of internet connectivity or the other. Though only a handful of them (the main commercial cities of Lagos, Ibadan, Abuja, Kano, Kaduna, Jos, Benin, Port Harcourt, and Enugu) have real broadband internet facilities.

The second concentration of internet users in Nigeria can be found in university/polytechnic towns all over the country (IWS, 2012). According to the report, like other countries the world over, the vast majority of Nigeria's internet users fall below the age of 40. Generally, they can be divided into four groups: 10-17yrs, 18-24yrs, 25-40yrs and, above forty.

Dependents: these are mostly students who are still dependent on their parents or guardian for their living. They are the 10-17 and 18-24 year olds.

10-17yrs: these are mainly secondary school students who use the internet primarily for trivial purposes. They play games and movies, some of them use facebook to connect with their friends. They mostly use the internet facilities in their schools. They constitute an insignificant percentage of Nigerian internet users.

18-24yrs: predominantly undergraduates. They use the internet for three main activities. (1) To source for information for their school works (2) social networking, especially on

facebook and (3) *yahoo yahoo* – This is a less scrupulous use of the internet. The majority of Nigeria's notorious internet fraudsters fall within this group. A lot of them, especially those in private universities and top federal universities have personal laptops;they are also among the most Internet savvy Nigerians. Also, they probably constitute more than 20% of Nigeria internet users. They access the internet mainly through their phones, cybercafés and school libraries.

Job seekers: these are made up of the teeming unemployed Nigerian graduates. They mostly fall between the ages of twenty five to thirty. These are the most voracious internet users in Nigeria. To verify this, just type the name of any top Nigerian company on Google and you will see the first page dominated by pages from Nigeria's online job portals like *nairaland* and *careersnigeria*. This is simply because these job portals have the highest traffics among Nigerian sites. They use the internet principally to seek and apply for job vacancies. Since majority of them possess neither computers nor smart phones, they mostly access the internet through cyber café. They probably make up around 15% of Nigeria's internet users (IWS, 2012).

Young and upwardly mobile professionals: made up of beginning and mid level company executives, professionals and entrepreneurs. They are our 25-40 year olds. These are the crème' de la crème' of Nigeria's internet users. They are young (25-40), trendy and, acquisitive. They use the internet everyday in the course of their work; routinely send and receive emails, source for information, chat, read newspapers, network socially on the net. Their use of social networks is not restricted to facebook only. They are active on facebook, linked-in, twitter, flick and YouTube. Their use of the internet is more sophisticated and varied. They shop online, study online, bank online and even flirt online.

They are the drivers of e-commerce in Nigeria. In fact, most of the internet related businesses are started and operated by people in this group. They make up not less than twenty percent of Nigeria internet users. They access the internet mainly on their internet enabled smart phones and laptops.

Old schoolers: above forty years, they are top level managers, administrators and business owners who are compelled to use the internet because it has become an integral part of their world, whether they like it or not. Forced by the dictates of the modern world to embrace the internet, their usage is less enthusiastic. They use the net for only the most basic functions. Emailing is their most common internet activities. Very few of them are on social networking sites. They predominantly access the internet on personal or office computers—they almost never use cyber café.

It is noted that age influences the use of internet (Pollock & Hockley, 1997). Thus, online resources were indicated to be more accessible to older adults than younger ones (Mead, Sit Rogers, Rousseau & Jamieson, 2000). Contrary to this, survey has shown that internet users constitute mostly of young people with 93% in the 15 - 17 years age group and 85% being between 18 and 24 years old as against 19% of 2005/06 who were aged 65 and over (The Australian Bureau of Statistics, 2001-2005/2006). In another study of internet usage in Owerri, Nigeria the highest percentage of internet users were (56.25%) aged 20 – 29 years, 15% of them fall between 30 - 39 years of age while 12.5% fall within the age group of 10 - 19 years (Amaeshi, Ayanwu&Oparaku, 2006).

Again, research shows variations in the percentage of male and female internet users. It was revealed that internet users are predominately male who are fairly young, university students, technical; professional or researchers (Larson, 1996). Miller (1996:18)

noted that most the present day internet users possess high educational qualification which motivates them to explore the new technology before wider use.

Despite the general uses, different occupational groups use the internet for different reasons. Palesh Saltzman &Koopman, (2004:437) discovered that 60% of college students in America use internet for school related activities. Other uses of the internet by the students are e-mail (55%) entertainment (50%) and chatting (24%). Along the same line, in Nigeria, students use of Internet was revealed to include for knowledge improvement, search for materials needed for assignments and for research works (Anunobi, 2006). Academic institutions use the internet for research, teaching, class work and knowledge improvement (Nwogu&Anunobi, 2007). This therefore indicates how different occupational groups put the internet to use, a father communicates with the daughter in far away country, a teacher acquires course materials, a house wife entertain herself with scientific research, a farmer acquires agricultural information while a library information scientist have access to a large quality of graphic information and a journalist sources and disseminates information.

Further to that, motive for using internet varies also with age. The young and older people use the internet for communication purposes while the middle age group use it to seek for information. 60% of adult respondents in a study carried out in America used the Internet for business and personal activities (Miller, 1996). Although Miller‘s findings indicated that young ones use the internet more frequently, it is applied for experimental and entertainment purposes. Middle age users (30 to 49 years) employ the internet for online shopping which young adults are not likely to engage in since they have less money. Confirming young people’s use of internet for entertainment, Slone (2003:37) observed that

50% of 13 - 17 years age group in America use internet for recreational goals while the remaining 50% use it for educational purposes.

In general, the proportion of female Internet users tends to be higher in countries with higher per capita incomes. For instance, countries in Western Europe and Oceania had higher proportions of female Internet users than lower income countries in Asia and Latin America. In the developing countries, women usually account for much smaller proportion of the total Internet population. Adoption of any technology, including the Internet, requires investments in fixed capital as well as recurring variable costs. A lower income level implies that users have to invest a higher proportion of their income in acquiring and using a technology (UNCTAD 2002).

According to the Pew Internet and American Life project (2005) as cited in Le Claire (2005:56), the proportion of female users of the Internet is higher among countries with longer history of Internet usage. For instance, in the early 2002, female Internet users were 46 percent in Sweden, 42 percent in Britain, and 39 percent in Germany and France. This proportion drops to 31 percent in Italy and 29 percent in Spain (Cyber Atlas 2002). Similarly, Brazil and Mexico – early adopting Latin American nations – had higher proportion of female Internet users than other Latin American nations.

However, the gender gap in Internet adoption has been diminishing over time. Recent studies suggest that the gender gap may even be reversed owing to technological development, for example, the introduction of mobile Internet and other devices that provide internet access. A review of the recent literature concerning the Internet usage among Americans reveals that the once stark gender gap is closing rapidly, but disparities remain in the purposes for which males and females use the Internet. In a study

conducted by Odell et al 2001 cited in Ozoemelem, 2010:19) who studied Internet use among female and male college students at institutions of higher learning in Georgia, Hawaii, New Jersey, Massachusetts and Rhode Island state found that while the gap in the use of the Internet has nearly closed, there remain differences in how male and female undergraduates use the Internet.

2.3 CONCEPTUAL REVIEW

This sub-section of the study further reviewed literature related to the concepts specifically mentioned in the objectives of the research. The aim of doing this is to assist the researcher determines the extent to which researches have been conducted in the area and to be able to identify the gap in literature for which this study can cover.

2.3.1 UNDERGRADUATES' BEHAVIOUR TOWARDS THE INTERNET AND PURPOSE OF USING IT

By and large, vast majority of undergraduates in universities world over, recognized the importance of computer literacy and the Internet as the key for success in their personal and professional lives (Sanders and Morrisson-Shetlar 2001).

In general, Katz, Gurevitch and Haas (1973) summarized the basic needs which Internet users intends to gratified while using the Internet - cognitive needs (acquiring information, knowledge, and understanding), affective needs (emotional, pleasurable, or aesthetic experience), personal integrative needs (strengthening credibility, confidence, stability, and status), social integrative needs (strengthening contacts with family and

friends) and tension release needs (escape and diversion). Furthermore, Slone (2003:24) identified three reasons for using the internet as business, personal and academic purposes. The reasons were also presented to be for entertainment, socials, ecommerce (e-marketing, e-shopping) and games (Olasina, 2006). Confirming young people's use of internet for entertainment

Investigations of student Internet use have proven especially insightful, as research on this group allows for an examination of gender differences within an institution in which the male and the female generally have equal access to the Internet (Odell, Korgen, Schumacher, and Delucchi,2001 cited in Ozoemelem, 2010:18).The most pronounced gender difference in Web use is found in the online applications used by males and female. Male undergraduatesare more likely than their female counterparts to use the Internet for recreational purposes (e.g., playing games online, visiting adult-only sites, gambling, accessing news groups and discussion forums, staying abreast of news developments, and seeking information for personal use), while females are more likely to use the Internet to talk to family and friends (Goodson, McCormick, & Evans, 2001; Jackson et al., 2001; Odell et al., 2000; Scealy, Phillips, & Stevenson, 2002 cited in Ozoemelem2010). These findings appear to reinforce the widespread assumption that men prefer to use the Web for information gathering and entertainment and women prefer to use the Internet for communication (Shaw & Gant, 2002).

On one hand, Jackson et al. 2001 in Ozoemelem (2010:32) found that females in general tend to exhibit less favorable computer attitudes. Similarly, Schumacher and Morahan (2001) ascertain that participation by females on the Internet is hampered by their attitudes towards computers, which in turn is reflective of their attitudes towards

new technology. On the other hand, Zhang (2002) asserts that female students possess more positive attitudes than male peers. Other several investigations subsequently carried out have reported that gender has no significant effect on user attitude (Jennings et al., 2001; Shaw et al, 2002). The inconsistencies in these findings revealed how the increasing number of female Internet users is altering women's attitudes regarding computers and the Internet as well.

Slone (2003:37) observed that 50% of 13 - 17 years age group in America use internet for recreational goals while the remaining 50% use it for educational purposes. Meanwhile, a review of the literature concerning the Internet usage among the Americans revealed that once stark gap between the male and the female is closing rapidly, but disparities remain in the purposes for which males and females use the Internet (Odell, et al, 2001cited in Ozoemelem, 2010:18). This therefore means, even with the rapid increase in availability and accessibility of the Internet facilities and services, there may still be differences in the purposes for which male and female students use the Internet.

Several other studies on gender gap in the Internet usage and attitudes have been conducted in different parts of the developed and the developing countries of the world. In the United States of America, a study was conducted by the Pew Internet & American Life Project in 2005 entitled "How Women and Men Use the Internet," as cited by Le Claire (2005:2). It revealed that American women are catching up with men in the overall Internet usage and framing their online experience with a greater emphasis on deepening connections with people. While Pew (2005) determined that men continue to pursue many Internet activities more intensively than women, and that men are still first out of the blocks in trying the latest technologies and women are also making headway.

Pew's research further revealed that, online men are more likely to check the weather, get news, get do-it-yourself information, check for sports information, get political information, get financial information, do job-related research, download software, listen to music, rate a product/person/service through an online reputation system, download music files, use a Webcam, gather material for their hobbies, read online for pleasure, take informal classes, participate in sports fantasy leagues, download music and videos, remix files, and listen to radio. Women on the other hand, are more likely to use the internet for e-mail, get maps and directions, look for health and medical information, use web sites to get support for health or personal problems, and get religious information. Men and women are equally likely to use the Internet to buy products and take part in online banking, but men are more likely to use the Internet to pay bills, participate in auctions, trade stocks and bonds, and pay for digital content (Pew, 2005 in Le Claire (2005).

Hupfer and Detlor (2006:4) observed that gender differences in internet usage and web information seeking behaviors have attracted considerable interests. They further found that male and female differences in web searching appear to persist in such away that women are more into e-mail, chat, and search reference materials about medical and government information whereas men tend to focus on information about investment, purchase and personal interests. Hupfer and Detlor's (2006) finding is similar to Garbarino and Strahilevitz's (2004) work which concludes that females perceived Internet as a tool of maintaining social values. Liu and Huang (2008:18) study on male/female differences in web searching materials by focusing on the online reading environment shows that there is a significant difference between genders in which female readers have a strong preference for paper as a reading medium than male readers. On the other hand male readers have

greater sense of satisfaction with online reading. Thus the study reported that there are some significant differences between male and female behavior in the online reading environment.

Lorence and Park (2007) showed that there is somehow a difference between female and male Internet users in terms of online health information users. The study found that males were more likely to be Internet users but in terms of online health information users, females were the dominant users. However, a study conducted by Wolin and Kargaonkar (2003) on gender differences in beliefs, attitudes, and behaviour towards web advertising reported a slight difference. The writers found that males are likely to browse the Internet for functional and entertainment purpose while females are more into shopping reasons.It was also reported that in Malaysia the females' attitudes towards the Internet and their willingness to learn and use information technologies is not different from that of males' (Awang&Jaffar, 2004). Contrary to that, the Internet is almost totally inaccessible for females in most of the poorest countries of the world (Hafkin& Taggart, 2001).

Precise data on Internet usage and purposes of using it are extremely difficult to obtain, especially from developing countries, and the available data lack reliability and comparability (UNCTAD, 2002). Nonetheless, statistics on Internet access and patterns of its usage across countries reveal gender as one of the most important factors influencing Internet adoption and usage. The degree of gender bias in the adoption of the Internet varies widely across the world. Among Internet users, the male-female ratio ranges from 94:6 in Middle East to 78:22 in Asia, 75:25 in Western Europe, 62:38 in Latin America, and finally 50:50 in USA. There is great variability even within a region.

In Western Europe, for instance, the male-female ratio in Internet use varies from 70:30 in Italy to 55:45 in Germany (IWS, 2012).

In Nigeria, Anunobi (2006) revealed that 81% of students at Federal University of Technology Oworri, Nigeria, used Internet for academic purposes as compared to 15% who used it for entertainment purposes. Adekunmisi, Ajala and Iyoro (2013:7) in a survey on Internet access and usage by undergraduate students of Olabisi Onabanjo University, Nigeria posit that "majority of the respondents used the Internet for personal communication purposes, for academic and research activities, for leisure/entertainment, for general knowledge and for current news."Fasae and Aladeniyi (2012) in a survey in two Nigerian Universities on Internet use by students found that "out of the total number of students, 78% of them used the Internet for communication purposes, 89% for educational purposes and 58% for entertainment purposes."Buhari, (2013:23) found that undergraduates used the Internet purposely for e-mail (17.2%), for information (16.2%), for conduct of research (27.0%) and for entertainment (4.6%).

2.3.2 FREQUENCY OF SURFING THE INTERNET AND COMMON SEARCH ENGINES USED BY UNDERGRADUATES

There have been studies on the number of visit to the internet and the length of time spent surfing the internet by users. In some cases, people's priority determines their duration on-line. In effect, younger Internet users have more time at their disposal than those in their 30s and 40s, who could not use much of the time for social activities online. Those aged 50 and older have more free time than the middle age and therefore can also use it for online social activities (Larson, 1996).

Studying the rate of internet usage by students in some Nigerian Universities, it was revealed that more people (6%) use it on weekly and daily basis respectively than 11.76% who used it on monthly and bi-monthly basis (Jagboro, 2003). This means that People's reasons for using the internet vary. Three goals for searching the internet were identified by Miller (1996) as *situational, specific* and *formal* goals. Situational goals are the most common and include educational, recreational, job-related and personalized purposes (Miller, 1996). Elaborating more on situational goals, Slone (2003:24) identified three reasons for using the internet as business, personal and academic purposes. The reasons were also presented to be for entertainment, socials, ecommerce (e-marketing, e-shopping) and games (Olasina, 2006).

Internationally, studies on the use of the Internet by undergraduates have been carried out. Bao (1998) surveyed Internet use at Seton Hall University. The findings of his study reported that 40.2% of the respondents used the Web on a daily basis, 38.3% weekly, and 10.7% on a monthly basis. About 10% respondents said they seldom or never used the Internet. The findings also revealed that the undergraduates searched the Internet for information related to both their academic (83.2%) and nonacademic studies (73.8%).

A differential usage pattern in terms of frequency of internet usage was also noted in different studies on gender and Internet. Winnker (2005) as cited in Fasae & Aladeniyi (2012:64) posit that "along with other factors, time is an important variable in the usageof the Internet in which men use the Internet more frequently and for long hours while women are in the categories of moderate users" Al-Kandry and Al-Kashaan (2001:45) argued that "there are significant differences between males and females in the average number of hours of using the internet in favor of males". Ono and Zovodny (2003:31)

found women to be less frequent and less intense users of the Internet. Bao (1998:21) surveyed Internet use at Seton Hall University. The findings reported that "40.2% of respondents used the Web on a daily basis, 38.3% weekly, and 10.7% on a monthly basis. About 10% of the respondents said they seldom or never used the Internet". Scherer (1997:30) examined patterns of Internet use among 531 students using mailing questionnaires at the University of Texas at Austin and found that "73% of the students accessed the Internet at least once a week, 13% of which reported that they believed their Internet usage to be excessive and significantly interfered with their personal functioning".

Davis, Smith, Rodrigue & Pulvers (1999:232) used a questionnaire to compare Internet use at a small, private liberal arts university and a medium-size, public state university in Texas. They found that "91% of the students on both campuses accessed the Internet for about 25 hours perweek". Students who abused the Internet admitted that it interfered with their work, school and interpersonal relationships. Anderson (2001:19) studied 1,302 college students (649 men, 647 women) from seven colleges in the northeastern U.S. and one in Ireland using a 69-question survey. The results indicated that "on average, students spent about 100 minutes per day using the Internet and the two most frequently and time-consuming activities were browsing the Internet and checking email". Ozoemelem (2010:9) found that "63.33% of undergraduates at Delta State University, Nigeria, spent thirty minutes to one hour per day surfing the Internet".

Chandran (2000:8) conducted a research at S.V. University and found out that 25% of the students used the Internet for 2-3 times a week. Adekunmisi, Ajala and Iyoro (2013:7) in a survey on Internet access and usage by undergraduate students of Olabisi Onabanjo University, Nigeria found out that the respondents spent 1-2 hours daily on the

Internet. Buhari, (2013) in a survey on Internet access and use by Academic staff and students in a Nigerian Polytechnic found that "more than 20.6% of the respondents used the Internet 2-3 times per week.

In a study conducted at Hezekiah Oluwasami Library, Olufemi (2006) found out that students commonly accessed the internet through commercial cyber cafes where they paid for access time through their pocket money. Fasae and Aladeniyi (2012) in a study conducted in two Nigerian Universities on Internet use and access found out that the most commonly internet access points used by students are resource centres on campus and cyber cafes within and outside the university. Buhari (2013) in a survey on internet access and use discovered that undergraduates accessed the internet mostly through private internet café within and outside their school (28.6%) and modems/mobile phones (71.4%).

2.3.3 CONSTRAINTS FACED BY UNDERGRADUATES USING THE INTERNET

Kaur (2005) surveyed the use of the Internet facilities by students at the Guru Nnak Development University, Amritsar. The findings revealed that the respondents faced the problem of slow internet connectivity. Jagboro (2003) carried out a study on internet usage in Nigerian Universities where opinion of 73 respondents was sought for. Two-third of the respondents identified low level of internet connectivity and high cost of cyber café services as the major constraints they faced using the internet. Kumar and Kaur (2005) carried out a research on internet and its use in the Engineering College of Punjab, India. The findings of the study revealed that the major problem faced by the respondents was slow access speed of the Internet. Fasae and Aladeniyi (2012) in a survey on internet usage in two Nigerian Universities found out that irregular power supply, slow internet access speed,

delay in internet connectivity, too long to view/download page and high cost of internet access as the major constraints faced by the students. Aqil and Ahmed (2011:11) identified slow internet speed, missing link, irrelevant, high cost of airtime as the major constraints faced by students in Aligarh Muslim University. Adekunmisi, Ajala and Iyoro (2013:8) identified high cost of browsing, frequent loss of signal, poor internet skills and difficulty of judging relevant information as the major constraints faced by students using the internet at Olabisi Onabanjo University, Nigeria.

Conclusively, in all the literature reviewed by the researcher so far, all the studies carried out by different researchers in different parts of the world did not pay particular attention to female undergraduates in university. Most of the studies were either comparative analysis of the uses of the Internet from gender perspective or surveys on the attitude and perception of students on the Internet. This revealed that there is no any particular study especially in Nigeria that paid attention specifically to the attitudes or patterns of uses of the Internet by female undergraduates especially in Nigerian universities. The findings of this study will therefore fill the existing gap in literature.

2.4 EMPIRICAL REVIEW

The Internet has emerged as an important component in academic institutions as it plays a pivotal role in meeting information and communication needs of institutions (Luambano and Nawe, 2004). As rightly pointed out in the previous paragraph, there are many general surveys on the use of the Internet, and nearly all found out that Internet usage is most prevalent amongst younger, more educate people (Haoffman, Novak and Schlosser, 2000). Rehman and Ramzy (2004:4) opined that:

> The Internet has established a place in the personal and professional lives of researchers and scholars through their daily use of the Net for serious work and personal communication.

Adomi (2005:81) posited that "the Internet is very important to university students in Nigeria because it enables them to have access to timely, accurate and relevant information". Similarly, Pascoe, Applebee, and Clayton, (1996) observed that "ease convenience and accessibility were major factors influencing academic Internet use". Underscoring the various importance and uses of the Internet, Dutton (2004:215) found in his research that ''the Internet is either important or very important to a majority of people. More than seven in ten people believe that the Internet is making life better".

The increase in availability of access to the Internet underscores the increase in affinity for digital information. Goodson (2001) reported that "almost all students use the Internet to communicate with friends and family via social networks". This also led to increasing dependence on the Internet, which is geometrically growing as many students enjoy free access 24 hours a day on Internet centers or their mobile gadget such as ipad, i-phone among other. Dependence, coupled with easy access to technology, points towards university students spending a substantial quantity of time on the Internet (Hall and Parsons, 2001).

Studies on the use of the Internet in Africa particularly in Nigeria included that of Jagboro (2003), who found that "among the majority of postgraduate students of ObafemiAwolowo University, the Internet is ranked fourth among the sources they use to search for materials". Ajuwon (2003) studied Internet use by first year clinical and nursing students of the University College Hospital in Ibadan, Nigeria. Her study revealed

that 60% of the respondents used the Internet for different purposes. Odusanya and Bamgbala (2002) found that "58% of the medical and dental students in their final year at the University of Lagos, Nigeria, whom they studied, used Internet for educational and non-educational purposes". Salaam (2003), in a survey of the use of Internet services in Nigerian university libraries, identifies a poor telecommunication system, unreliable electrical supply, lack of Internet service providers in some parts of the country, and poor funding of the university system as major problems militating against access and use of Internet facilities in Nigerian universities. Awang and Jaffar (2004:193) studied the attitudes of Malaysian women towards the internet and found out that they have positive attitudes towards the internet and are willing to use the technology.

In an appraisal of the advantages of the Internet, Adomi, Okiy and Ruteyan, (2004:91) observed that "with Internet resources available and accessible, university students can obtain information which the library cannot provide from their shelves". Yumba(1997:34) had earlier observed that "the Internet provides lecturers with access to colleagues through e-mail, powerful search facilities (engines), access to large and growing number of online journal and electronic databases on various subjects. He further noted that Internet surfing helps university students to boost their intellectual development and job preparation.

However, like any other technology, the use of the Internet has both beneficial and negative consequences. Suhail and Bargees (2006:121) distinguished between healthy and unhealthy Internet use, positing that "excessive time spent on the Internet in purposeless activities can often take people away from their actual goals". Although there seems to be a growing concern about the potential effect of Internet use on students generally, studies

related to Internet use and reading variables among undergraduates are not commonplace. Ray and Day (1998) as cited by Margaret and Eric (2010:18) surmise that:

> The Internet has greater potential for desirable information, is a faster means of accessing information, provides access to a wider range of information; provides access to electronic journals, enables access to multiple files at once; provides access to information from home, and gives more satisfactory answers to queries than library staff.

In spite of these benefits, Gilbertson (1992) as cited by Margaret and Eric (2010:18) challenges the reliability of some Internet information. Oji (2007) as cited by Margaret and Eric (2010:21) considers Internet usage to be one of the causes of the decline in the reading culture of Nigerian undergraduates. She posits that, some undergraduates are often seen in cybercafés browsing the Internet and engaging in activities that entertain rather than educate, adding that perhaps some of the ills of today's society could be attributed to wrong use of information gotten from websites. Suhail and Bargees (2006:16) posit that "the misuse of the Internet often leads to unhealthy consequences, while heavy Internet use leaves little time for anything else". They investigated the positive and negative effects of excessive Internet usage among undergraduates in Pakistan and found positive associations between time spent on the Internet and the various dimensions of the Internet Effect Scale (IES), indicating that excessive Internet usage can lead to a host of problems of educational, psychological, physical and interpersonal nature. Although a high proportion of the students reported positive than negative effects of Internet usage, the authors suggested that Internet usage should be within reasonable limits, so that adequate time can be focused on activities that enhance productivity.

In another related study on the internet usage patterns in Nigerian universities, Achounye and Olele (2009), found that:

> More female students (39%) are personally connected than their male counterparts (16%); but that more male folks (83%) surf the internet themselves than the females (53%) and that this is an indicator of male dominance in skills which is more important than mere possession of connection.

By this finding, Achounye and Olele (2009) expressed worry over the persistence of gender barriers, which have since been identified to hinder females in science and technology.

In relation to the above review, the researcher was only able to come across few studies that investigated the pattern of internet usage by university undergraduates in Nigeria. However, the researcher could not find any specific studies that assessed the pattern of internet uses or attitudes of female undergraduates in any Nigerian university.

2.5 GAP IN KNOWLEDGE

The forgone discussions revealed that in the existing body of literature on the uses of the Internet reviewed by the researcher, not many and specific studies have been conducted in relation to the behaviour of Nigerian university female undergraduates towards the Internet and their purpose of using it. This clearly indicates the gap in the literature which this study intends to fill. This study therefore, will cover the female undergraduates of Ahmadu Bello University, Zaria. However, only a sample of their total population will be used to make generalizations. Thus, the sample will be drawn from the twelve faculties of the university.

The rationale behind selecting female undergraduates is because it is at their level that foundation of university education is laid and it is also at this level that women who will work in different works of life and women activists that will help to liberate other women generations yet to come from domination are produced. The researcher observed that in the university more female students have access to mobile Internet gadgets such as mobile phones, i-phone, ipadamong others, which provide easier access to the Internet. The female undergraduates, as mothers or would-be mothers, depending on their attitude and purpose of using the Internet, have the potential to change the future of the technological level of the society as they are directly involved in the training of next generation of people. They have the opportunity to implement the utilization of the Internet in the Nigerian society, particularly amongst children who are the future of the society. If they have good behavioural intentions towards the uses of the Internet then the level and skills of Internet adaptation in our society will be brighter and if otherwise, then there is the urgent need to reorient and redirect their thinking.

2.6 THEORETICAL FRAMEWORK

As the media continue to evolve through transformation in the communication system, several trends according to Wimmer and Dominick (2006) are already apparent owing to improved technology. These trends include audience segmentation, convergence, user-generated content and mobile media. The continuous evolvement of the new media (Internet) requires the need for proper monitoring and regulation of the manner and ways in which the Internet is used. It is based on this that the Uses and Gratification Theory is

chosen to explain the situation. The use of this theory will help to establish causal relationship between dependent and independent variables.

2.6.1 USES AND GRATIFICATION THEORY

Herta Herzog is credited as the originator of uses and gratification, which was first used in the 1940s. She researched radio soap opera fans and what their motivations were listening to their shows. They included, "merely a means of emotional release," "the opportunities for wishful thinking," and the "advice obtained from listening to daytime serials." Herzog was interested in why women enjoyed soap operas.

According to Lin (1996: 574),

> There are few true communication theories. Most have been borrowed from other fields of study. Uses and gratifications is a true communication theory with social and psychological roots. The strength of this theory is that it allows researchers to study communication from several sets of psychological needs, psychological motives, communication channels, communication content, and psychological gratifications within a particular context.

According to the uses and gratifications theory, audiences differ in the gratifications they seek from the mass media. These differences are related to certain social conditions and or personality dispositions. These differences result in many media use patterns and a variety of media effects. (Palmgreen, Wenner and Rosengrenl, 1985). Hence, the basic assumption of the theory is that peoples' choice of a particular medium is predicted on the type of gratification they obtain. This is interesting to media scholars and professionals because it tells us the more people use media the more they enjoy it and the more they want to use it; particularly with media that are active like the Internet.

Katz, Gurevitch and Haas, (1973) saw the media as a way for individuals to connect or disconnect with others. Obviously they were not thinking of the Internet, but uses and gratifications theory had evolved at this point to include radio, newspapers, and television. They listed 35 needs and put them into five categories:

1. Cognitive needs (acquiring information, knowledge, and understanding)
2. Affective needs (emotional, pleasurable, or aesthetic experience)
3. Personal integrative needs (strengthening credibility, confidence, stability, and status)
4. Social integrative needs (strengthening contacts with family and friends)
5. Tension release needs (escape and diversion)

Kaye and Thomas (2004:197) said that:

> The growth of the Internet has produced a renaissance in the uses and gratification tradition as scholars are increasingly interested in going beyond discovering who uses the Internet to examine what and why they use this new medium.

Larose and Eastin (2004:373) suggested that ‘’uses and gratification theory can explain the Internet use but it can also be enhanced by the addition of some new variables such as expected activity outcomes and social outcomes just as explained in expectancy value theory”. Expectancy activity outcomes concern what people think they will obtain from the medium.

In spite of the above positive postulates, there were scathing criticisms against uses and gratifications research.

2.6.2 CRITIQUE OF THE THEORY

One criticism of the uses and gratifications approach is that it focuses too narrowly on the individual. Also, some studies showed that exposure to media are not always purposeful or deliberate. People are often going through media on "automatic pilot" (Donohew, Nair and Finn, 1984). This view suggests that people consume a great deal of mass communication at a low level of attention that might be labeled habitual.

Another criticism of uses and gratifications theory is that the audience is not always as active as was once originally thought, "a valid view of audience behaviour lies between the extremes of being passive and expected to be influenced by the communicated messages and being active and expected to make decisions about what media content to accept and reject." (Rubin,1993).McQuail (2007) believes that the theory suffers from lack of theoretical coherence. He thinks that some of the theory's terminologies need to be further defined. He notes that the theory relies too heavily on the functional use of the media, because there are times when the media can be reckless.

2.6.3 THEORY JUSTIFICATION

However, regardless of its methodological constraints and ensuing criticisms, uses and gratification theory cannot be immediately consigned to the waste bin as the theory has some practical relevance in the way and manner people use the mass media especially Information and Communication Technologies such as the Internet where McQuail (2007) identified information and education, guidance and advice, diversion and relaxation,

social contact, value reinforcement, cultural satisfaction, emotional release, identity formation and confirmation, lifestyle expression, security, sexual arousal and filling time as some of the gratifications sought by users.

The uses and gratification theory allows us to study why and what the students use the Internet for, and what reasons or needs they are attempting to gratify. An assessment of uses of the Internet by female undergraduates of A.B.U. Zaria would allow us to understand what the female students use the Internet for and whether their needs are being gratified. In making a survey on their behaviour towards the Internet and their purpose for using it, we will have a deeper understanding of the relationship between the aim of making the Internet facilities and services available to the students vis-à-vis encouraging them to use them, and the set desire of developing the educational sector.

Most uses and gratification scholars agree that concepts such as an active audience have to be revised when applied to Internet communication. This is because reasons for using the Internet differ from person to person (Ruggiero, 2000). An active audience is central to uses and gratification theory and communication motives are keys to audience activity. Students used the Internet to fulfill needs. The Internet's social and psychological effect depends on the function it serves for the user.

Kaye and Thomas, (2004:22) opined that:

> The uses and gratification theory is particularly well suited to studying the Internet. Through television, individuals can try to have their needs gratified by using the remote. But, online functions such as email, bulletin boards, and chat rooms require active users. In addition web surfers actively look for information by using links and search engines''.

Additionally, the vast amount of information available on the Internet should be able to fulfill many needs. Furthermore, the theory can be used to explain the attitudes of the undergraduate students towards the educational uses of the Internet. In other words, to determine whether they use the Internet for academic purposes, we can as well find out how often they use the Internet for academic purposes, what is their attitudes and constraints towards the use of the Internet for educational purposes.

The fore-gone discussion in this chapter revealed the background information on the various patterns of the internet usage in Nigeria in particular and in the world at large. A highlight on the demographic feature of the Internet users in Nigeria was made and the contending issue of gender gap in the Internet usage and attitude was also explained. Furthermore, a conceptual review of the basic concepts in the objectives of the study was made. Similarly, an empirical review on the previous researches carried out on a similar topic was made. The chapter drew a conclusion with the explanation of uses and gratification theory and how it fits into the context of the study.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter explains the methodology chosen for the study. This include the research design, the population of the study, the sampling size and sampling technique, the research instrument for data collection as well as the pilot study.

3.2 Research Design

The research design adopted for this study is survey research method. This strategy was chosen because of the nature of the research topic which demands the collection of significant amount of data from a meaningful population size in an efficient manner. According to Tull and Dell (1993:329), survey research method enables a researcher to systematically gather information from respondents for the purpose of understanding and predicting some aspects of the behaviour of the population of interest. Sambo (2005:108) explained that a survey research method is a type of research in which information is obtained from a sample of respondents for the purpose of testing hypothesis or answering research questions concerning the states of a given problem.

Survey research method allows Mass Communication researchers to measure characteristics, opinions or behaviours of a population by studying a small sample from that group, then generalizing back to the population. The logic of survey assumes that it is impossible or impracticable to observe all members of a given population. This therefore means that the method is efficient in getting information on the opinions, feelings and attitudes of the respondents, in this case, towards the use of the Internet.

3.3 Study Area

The study area is Ahmadu Bello University, Zaria, Nigeria, one of the largest and most extensive of all universities in Sub-Saharan Africa with representation from almost all parts African continent and other parts of the world. The university at present has twelve faculties, a School of Postgraduate, 84 academic departments, five research institutes, six specialized research centres and a Division of Agricultural College. The total students' enrolment in the University's degree and sub-degree programs is about 40,000 which are drawn from every state of the Federation and the world. It has 1,400 academic and research staff and over 6000 non-teaching staff in its employment.

The University established its ICT infrastructure in August 2002, with a fast set-up radio solution based on wireless local-loop technology. To meet the current challenges in the provision of Internet facility to the University Community, the university established the Information and Communication Technology Directorate (ICTD) which is a centrally organized, service oriented unit responsible for the day-to-day implementation and attainment of the university ICT objectives and policies. The primary tasks of the directorate are management and maintenance of common ICT systems and end-user support.

The University Management through the financial support of First Bank Nigeria Plc. provided the University community with a 2.4GHz Internet Wireless Distribution System (WDS) or Hotspots project. Recently, ABU Zaria due to its huge staff and student population as well as its increasing demand for converged network services and bandwidth, employed the services of MEED Networks to build a campus Fiber Optic network. The new infrastructure will enable ABU to deliver high-speed Internet and intranet access to its 40,000+ students and staff respectively in its campuses in Zaria,

and will enable the university to facilitate e-learning, online applications and multimedia communication services for staff and students. The University also has a virtual library (e-library) which provides the staff and the students with free Internet access. All these were established in the University with the sole aim of promoting academic information access, usage, exchange and applications within and outside the university.

3.4 Study Variables

The study has two variables, namely: Dependent and Independent variables. Ujo (2004:47) explained that the dependent is the expected outcome of the independent variable while independent variable is the cause of the changes in the values of the dependent variable.

The dependent variable for this study is the "Uses of the Internet". The Internet can be used for various purposes such as academic, enlightenment, entertainment, recreation, communication, Internet related crimes among others. On the other hand, the independent variable for the study is the "female undergraduates of A.B.U. Zaria".

3.5 Population of the Study

According to Ekeh (2003:79) Population, statistically refers to the entire members of the universe being studied. This m ay be human being, animals, places, things or circumstance. Sambo (2005:88) says population is the set of all elements, objects or events that are of interest for a particular study.

The female undergraduate of Ahmadu Bello University, Zaria is the population of the study. According to the A.B.U. MIS unit database (2012), the university has an estimated total population of 12,000 female undergraduates. Thus, the population of the

study consists of the 12,000 population of female undergraduates in the 12 faculties of the university namely; Administration, Agriculture, Arts, Education, Engineering, Environmental Design, Law, Medicine, Pharmaceutical Sciences, Science, Social Sciences and Veterinary Medicine. The following table shows the population distribution of the female undergraduate of the university according to faculty:

3.1 Distribution of Female Undergraduate Population in A.B.U.

S/N	FACULTY	ESTIMATED POPULATION
1.	ADMINISTRATION	1487
2.	AGRICULTURE	277
3.	ARTS	1532
4.	EDUCATION	1609
5.	ENGINEERING	506
6.	ENVIRONMENTAL DESIGN	556
7.	LAW	657
8.	MEDICINE	736
9.	PHARMACY	462
10.	SCIENCE	2136
11.	SOCIAL SCIENCES	1857
12.	VETENARY MEDICINE	185
	TOTAL	**12,000**

Source: MIS Unit, A.B.U. Zaria (2012).

3.6 Sampling Technique

Since all the female undergraduates of the university cannot be studied due to inadequacy of time and resources, the researcher used probability sampling technique in order to have adequate representation of the entire population. Furthermore, the study adopted a probability random sampling to select the respondents for the study. Ten percent of the total population of female undergraduate at each of the 12 faculties of the university were randomly selected and given a questionnaire to fill. This sampling method was used for this study in order to give equal chance of selection and participation for all female undergraduates in the twelve faculties of the university.

3.7 Sample Size

Sample in research according to Ekeh (2003:79) means a subset or representation of a population selected for the purpose of investigation. It includes those to whom research conditions and tests were administered or for whom responds were obtained. Agreeing with Ekeh, Sambo (2005:88) asserts that a sample is a subset of a population from which data for a study is collected.

This study used a sample size of 1,200 respondents selected from the twelve faculties of the university. The sample size was drawn based on the recommendation of Krejeie and Morgan (1970) as presented in Sambo (2005:124) that a sample size of 10% of the population is a fair representation of such population. Similarly, Gay (1980) cited in Olayiwola (2007:83), suggested that for descriptive research, a minimum sample of 10% of the population would be considered enough. Hence, 1,200 was used as 10% of 12,000 population of the female undergraduates of the university. The 1,200 was drawn from 10% of each of the population of every faculty of the university. The respondents

were then randomly selected from the 12 faculties of the university. Thus, the questionnaire was administered at each of the 10% of the total population of every faculty. The 10^{th} female undergraduate met at each of the faculties was given a questionnaire to fill. Hence, a total of 1,200 questionnaires were administered and returned in each of the faculties as shown in the table below:

Table 3.2 Sample Size for the Study

S/N	FACULTY	ESTIMATED POPULATION	SAMPLE
1.	ADMINISTRATION	1487	149
2.	AGRICULTURE	277	28
3.	ARTS	1532	153
4.	EDUCATION	1609	160
5.	ENGINEERING	506	50
6.	ENVIRONMENTAL DESIGN	556	56
7.	LAW	657	66
8.	MEDICINE	736	73
9.	PHARMACY	462	46
10.	SCIENCE	2136	214
11.	SOCIAL SCIENCES	1857	186
12.	VETENARY MEDICINE	185	19
	TOTAL	**12,000**	**1,200**

Source: MIS, ABU ZARIA 2012.

3.8 Method of Data Collection

This study is a survey research which necessitates the researcher to go out and obtain data on the female undergraduate students' attitudes, opinions and purpose for which they use the Internet. The data were collected from both primary and secondary sources. The researcher used four female research assistants to assist him in collecting the data from the respondents in the twelve faculties of the university. One Thousand Two Hundred Questionnaires were distributed using on-the-spot questionnaire administration technique and this may be the reason why there was 100% return of the questionnaire and all were valid. The Primary data were collected using structured questionnaire while the secondary data were gathered through published and unpublished materials.

3.9 The Instrument for Data Collection

To be able to answer the research questions set out for the study, an instrument has to be used. Hence, the research instrument for this study is a structured questionnaire.

Best (1981:267) viewed questionnaire as an instrument for data collection which has some advantages over other research instruments. The advantages include, giving the researcher the opportunity to establish rapport with the respondent to explain the purpose of the study and to explain the meaning of some items. Similarly, Sarantakos (1993:177) noted that questionnaire enables the researcher to collect information in a systematic way avoiding bias and distortion, and on a specific research question or purpose. Thus, it gives opportunity for assessing situations as well as obtaining data on

the feelings, perceptions or attitudinal dispositions of a certain group towards a particular problem.

The questionnaire for this study was made up of close-ended items. It was designed in such a way that section one contained the bio-data of the respondent and section two contained questions on the variables. It contained items which asked the female undergraduates about their behaviour towards the Internet. The items are in Likert-scale with responses ranging from Strongly Agree, Agree, Strongly Disagree, Neutral to Disagree. Other options are Very often, Often, Rarely, and Never among others.

According to Malhotra and Birks (2007:67), the Likert-scale typically consists of statements to which respondents evaluate their agreement or disagreement or to estimate the extent of the favourable and unfavourable attitude to a question. Each response was expressed in a numerical number that reflects the degree of attitudinal favourableness.

3.9.1 Validation and Reliability

In order to ensure that the instrument measures exactly what it is intended to measure, the questions in the instrument were made relevant, clear and unambiguous. Furthermore, it was ensured that the questions cover all the dimensions of the variables included in the study. To attain the validity of the instrument, the questionnaire was pre-tested before embarking on full scale field work in order to finalize the design structure and ensure that the instrument can generate the desired data. For the purpose of testing its validity, the instrument was tested using a pilot study.

3.9.2 The Pilot Study

To test the reliability of the instrument, a pilot study was conducted. For the purpose of the pilot study, a total of 120 (10% of the sample size) female undergraduates were purposively sampled from the twelve faculties of the university. A test-retest method of measuring reliability was used. After the first test, an interval of five weeks was given before the second test was carried out. After the re-administration of the instrument, the responses were then collated, scored and computed using the Pearson Product Moment. The calculated coefficient for the instrument was positive with a value of 0.5 using the inferential statistics of t-test. The use of the pilot study assisted significantly in modifying the instrument before the field administration.

3.10Method of Data Analysis

The data resulting from the study were processed and analysed using descriptive and inferential statistics. To be able to present and analyse the data, SPSS computer statistical package, tables, bar charts, pie charts and histogram were used. Frequencies and Percentages of the quantitative data were subsequently analysed and interpreted. Having done this, inferences were made based on the analysis of the data. The essence is to put the data in contextual form to enable the researcher answer the research questions as well as addresses the research objectives.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.1 Introduction

This chapter presents, interprets, analyzes the data generated and discusses the findings of the study. One thousand two hundred questionnaires were personally administered in the twelve faculties of Ahmadu Bello University by the researcher with the help of three other research assistants. One Thousand Two Hundred Questionnaires were distributed using on-the-spot questionnaire administration technique and this may be the reason why there was 100% return of the questionnaire and all were valid.

4.2 Data Presentation

This part of the work presents the data resulting from the study were processed and analysed using descriptive and inferential statistics. Hence, SPSS computer statistical package, tables, bar charts, pie charts and histogram were used to present the data.

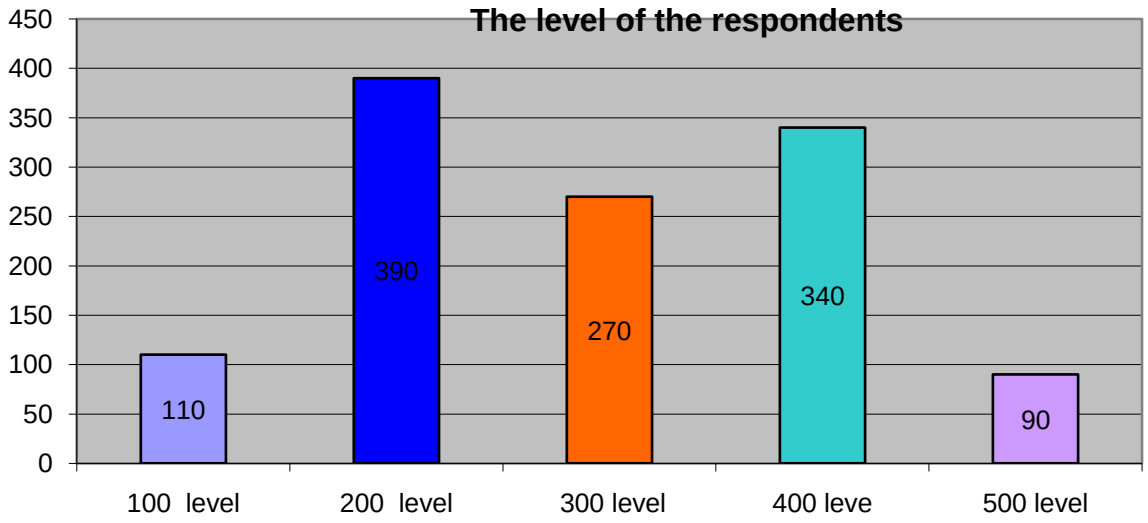


Figure 4.1: The level of the respondents

The above figure indicates that there was representation of respondents from each of the various levels of the twelve faculties of the university. This therefore means that the findings are fair enough for generalization.

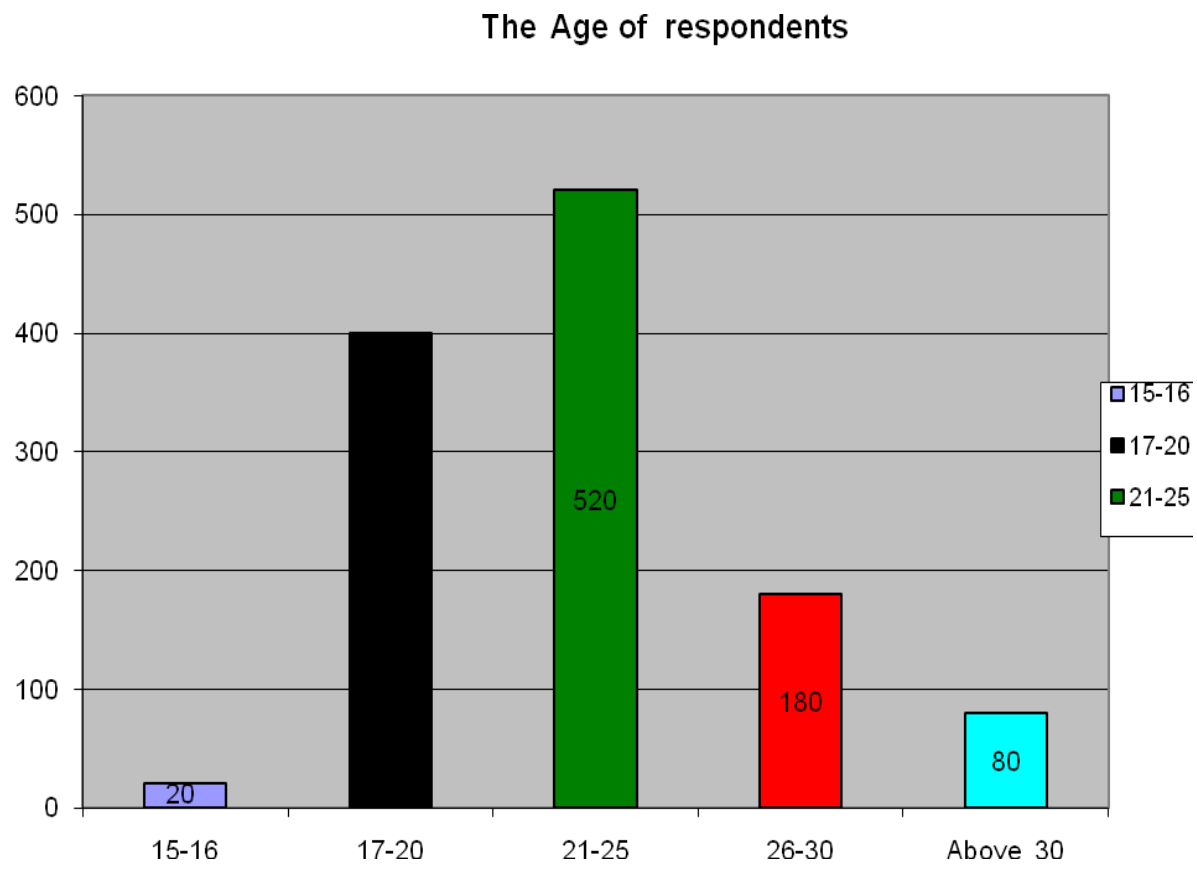


Figure 4.2: Age of the respondents

Figure 4.2 above shows that majority of the respondents were youths within the age bracket of 17 - 25. This is not surprising because majority of university undergraduates nowadays are between this age brackets of 17 - 30. Similarly, this coincided with the findings of the study of the International World Statistics (2011) which observed that youths constitute the majority of the internet users as early adopters, while the older generation is laggards. It further explained that the vast majority of Nigeria's Internet users fall below the age of fourty and they are mostly found in the universities and tertiary institutions.

Table 4.1: Distribution of questionnaire according to faculties

Faculty	Agriculture	Administration	Arts	Education	Engineering	Environmental Design	Law	Medicine	Pharmacy	Science	Social Science	Vetenary Medicine
Frequency	**149**	**28**	**153**	**160**	**50**	**56**	**66**	**73**	**46**	**214**	**186**	**19**
Percentage	**12.4**	**2.3**	**12.8**	**13.3**	**4.2**	**4.7**	**5.5**	**6.1**	**3.8**	**17.8**	**15.5**	**1.6**

Source: survey, 2012.

As shown in table 4.1 above, the questionnaires were administered in the twelve faculties of the university so as to have fair representation and justifiable generalization.

Table 4.2: The behaviour of female undergraduates towards the Internet

Item	S/Agree	Agree	Neutral	Disagree	S/Disagree
	Freq %	**Freq %**	**Freq %**	**Freq %**	**Freq %**

1. I browse the Internet myself	**990**	**82.5**	**120**	**10.0**	**40**	**3.3**	**50**	**4.2**	**00**	**0.0**
2. My friend assist me in browsing the Internet	**180**	**15.0**	**50**	**4.2**	**140**	**11.7**	**630**	**52.5**	**200**	**16.6**
3.Knowledge of Internet is essential to students	**860**	**71.7**	**290**	**24.2**	**30**	**2.5**	**10**	**0.8**	**10**	**0.8**
4.Internet is important like other research tools	**760**	**63.3**	**370**	**30.8**	**50**	**4.1**	**10**	**0.8**	**10**	**0.8**
5. Internet is easier to use than Library	**360**	**30.0**	**620**	**51.7**	**80**	**6.7**	**70**	**5.8**	**70**	**5.8**
6.Internet is more informative than my lecturers	**90**	**7.5**	**590**	**49.2**	**210**	**17.5**	**140**	**11.7**	**170**	**14.2**
7. I do not use Internet for academic works	**70**	**5.8**	**60**	**5.0**	**90**	**7.5**	**710**	**59.2**	**270**	**22.5**
8. I enjoy getting information from books than from Internet	**110**	**9.2**	**90**	**7.5**	**70**	**5.8**	**690**	**57.5**	**240**	**20.0**
9. I feel overwhelmed using the Internet for my studies	**280**	**23.3**	**610**	**50.8**	**150**	**12.5**	**30**	**2.5**	**130**	**10.8**
10. Internet does not particularly interest me	**60**	**5.0**	**50**	**4.2**	**90**	**7.5**	**730**	**60.8**	**270**	**22.5**
11. Using the Internet makes learning fun	**340**	**28.3**	**700**	**58.3**	**60**	**5.0**	**40**	**3.3**	**60**	**5.0**
12. Internet is an integral part of educational process	**320**	**26.7**	**690**	**57.5**	**80**	**6.7**	**40**	**3.3**	**70**	**5.8**
13. I access the Internet more at school than at home	**251**	**20.9**	**669**	**55.8**	**70**	**5.8**	**90**	**7.5**	**120**	**10.0**
14. Internet does not contain useful & relevant educational information	**90**	**7.5**	**68**	**5.7**	**92**	**7.6**	**620**	**51.7**	**330**	**27.5**
15. Internet is difficult to use for academic activities	**90**	**7.5**	**40**	**3.3**	**140**	**11.7**	**710**	**59.2**	**220**	**18.3**
16. I have security concern about using Internet for academic purposes	**100**	**8.3**	**110**	**9.2**	**270**	**22.5**	**510**	**42.5**	**210**	**17.5**
17.Surfing/Browsing Internet confuses me	**140**	**11.7**	**70**	**5.8**	**70**	**5.8**	**730**	**60.8**	**190**	**15.8**
18.Information from the Internet is unreliable	**122**	**10.2**	**378**	**31.5**	**200**	**16.6**	**360**	**30.0**	**140**	**11.7**
19. I find any course that requires the use of the Internet interesting	**250**	**20.8**	**800**	**66.7**	**90**	**7.5**	**30**	**2.5**	**30**	**2.5**

Source: Survey, 2012.

Table 4.2 above shows that 92.5% of the respondents can browse the Internet themselves whether through desktop, laptop or mobile Internet among others. However, 19.2% of the respondents confessed that their friends assist them in browsing the

Internet. Meanwhile, 95.9% and 94.1% of the respondents affirmed that knowledge of the Internet is essential for students and that the Internet is important like other research tools, respectively. Furthermore, 81.7% said that the Internet is easier to use than the library and 56.7% revealed that the Internet is more informative than their lecturers. 22.5% of the respondents said that they do not like using the Internet for important academic works while 16.7% said that they enjoy getting information from books than from the Internet and only 9.2% said that the Internet does not particularly interest them. This therefore, can be used to justify the positive attitude of the respondents towards the Internet. To further justify this, 74.1% revealed that they feel overwhelmed using the Internet for their studies while 86.6% said using the Internet makes learning fun, 84.2% identified the Internet as the integral part of the educational process and 76.7% of the respondents said they access the Internet more at school than at home. This therefore means there is the likelihood for the respondents to use the Internet for their studies or to communicate with their family, friends and relations.

To further buttress their positive attitude towards the Internet, 79.2% and 77.5% of the respondents disaffirmed the statements that the Internet does not contain useful educational information and that it is difficult to use for academic activities, respectively. However, 60% of the respondents expressed their security concern about using the Internet for academic purposes and 76.6% confessed that surfing the Internet confused them. Meanwhile, there was a striking balance of 41.7% and 41.7% agreement and disagreement of the respondents' opinion on the issue of reliability of information sourced from the Internet. However, majority (87.5%) of the respondents signified their interest in any course that requires the use of the Internet.

Table 4.3: The respondents' purpose of using the Internet

PURPOSE OF USING THE INTERNET	NEVER		SOMETIMES		OFTEN		V. OFTEN	
	FREQ	%	FREQ	%	FREQ	%	FREQ	%
For my on-line registration	10	0.8	11	0.9	506	42.2	673	56.1
For Seminar/Assignment	60	5.0	120	10.0	720	60.0	300	25.0
For my course related information	200	16.7	250	20.8	190	15.8	560	46.7
For communication e.g (e-mail)	160	13.3	210	17.5	660	55.0	170	14.2
For social networking	140	11.7	200	16.7	430	35.8	430	35.8
For news and information	190	15.8	220	18.3	200	16.7	590	49.2
For game, music and movies	200	16.7	170	14.2	630	52.5	200	16.6
For downloading softwares	110	9.2	190	15.8	210	17.5	690	57.5
For downloading e-books, journals	180	15.0	120	10.0	340	28.3	560	46.7
For uploading documents	1103	91.9	26	2.2	51	4.2	20	1.7

Source: Survey, 2012.

Table 4.3 above indicates that the majority of the respondents represented by 98.3% use the Internet often and very often for their on-line registration. This is connected with the fact that students' registration in the university is now on-line. So also, 60% and 25% of the respondents often and very often use the Internet to source for materials for their class seminar and assignments. Similarly, 62.5% further explained that they use the Internet to source for materials and information related to their course of study. A significant number of the respondents (69.7% and 71.6%) use the Internet often and very often for the purpose of communication through social networks such as facebook, twitter, skype and e-mail respectively. Sixty-five point nine percent of the respondents said that they use the Internet to source for news and information about happening nationally and internationally. A higher number of the respondents represented by 69.1% revealed that they use the Internet to play online games, listen to music and watch movies. A number of the respondents represented by 75% said that

they use the Internet, often and very often to download softwares while 28.3% and 46.7% use it to download e-books and Journals among others. However, 91.9% revealed that they have never uploaded any files or materials to the Internet.

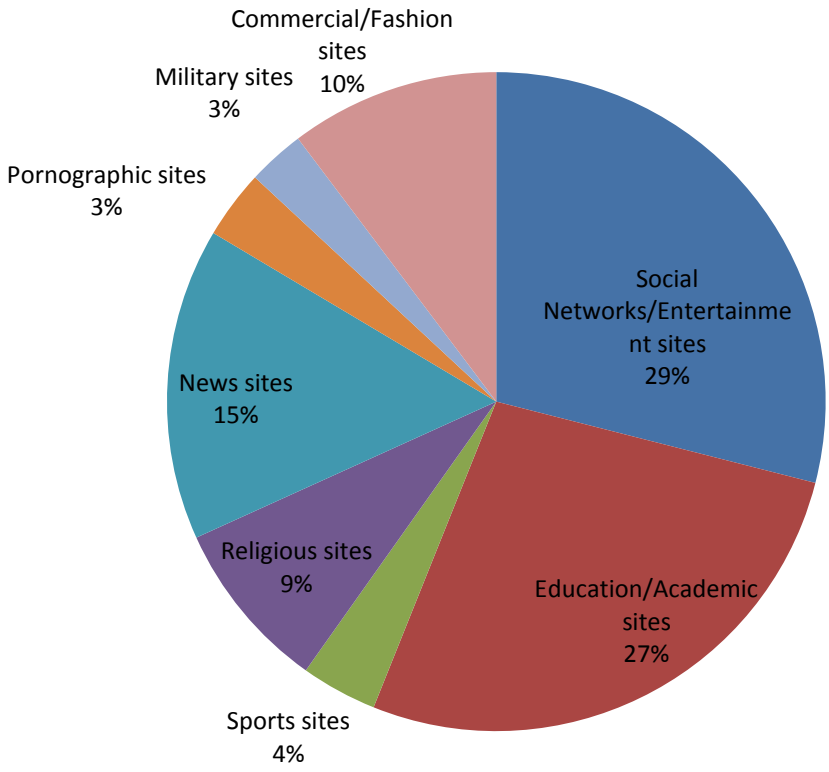


Figure 4.3: The Internet websites mostly visited by the respondents

The figure above shows the Internet web sites frequently visited by the respondents. Twenty-seven percent of the respondents visit educational/academic sites, 29% visit social networks/entertainment sites, 15% visit news and information sites, 10% visit commercial/fashion sites, 9% visit religious sites, sport has 4%, while pornographic and military sites have 3% respectively.

Table 4.4: Method of searching information by the respondents

METHOD OF INFORMATION SEARCH	VERY OFTEN		OFTEN		RARELY		NEVER	
	FREQ	%	FREQ	%	FREQ	%	FREQ	%
Yahoo	**360**	**30.0**	**640**	**53.3**	**160**	**13.3**	**40**	**3.3**
Google	**493**	**41.0**	**630**	**52.5**	**50**	**4.2**	**27**	**2.3**
Alvista	**10**	**0.8**	**240**	**20.0**	**160**	**13.3**	**790**	**65.8**
Dogpile	**20**	**1.7**	**30**	**2.5**	**110**	**9.2**	**1040**	**86.7**
Directories	**50**	**4.2**	**130**	**10.8**	**180**	**15.0**	**840**	**70.0**
Ask.com	**130**	**10.8**	**160**	**13.3**	**640**	**53.3**	**270**	**22.5**
Social Networks	**510**	**42.5**	**400**	**33.3**	**130**	**10.8**	**160**	**13.4**

Source: Survey, 2012

On the method of information search, the respondents revealed that they frequently use the most popular search engines such as Yahoo, Google and Social networks to send or retrieve information from the Internet. The use of other pathways such as Alvista, Dogpile, Directories and Ask.com is low.

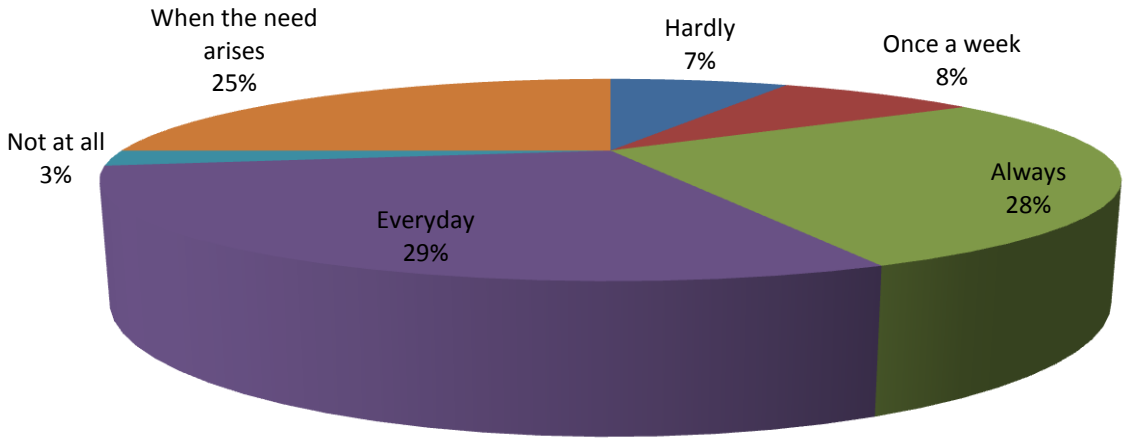


Figure 4.4: The frequency of using the Internet by the respondents

In figure 4.4 above, respondents who access the Internet everyday, always and when the need arises constituted the majority while those who hardly and/or do not use it at all are in the minority.

Table 4.5: The Internet access points used by the respondents

THE INTERNET ACCESS POINTS	VERY OFTEN		OFTEN		RARELY		NEVER	
	FREQ	%	FREQ	%	FREQ	%	FREQ	%
Internet Cyber Café	170	14.2	720	60.0	210	17.5	100	8.3
Wireless hot spots on Campus	70	5.8	380	31.7	430	35.8	320	26.7
Wire ports in Staff offices	20	1.7	140	11.7	390	32.5	650	54.1
Lecture rooms/ halls	47	3.9	203	16.9	559	46.6	391	32.6
University e-library	74	6.2	186	15.5	593	49.4	347	28.9
Subscription Modems	260	21.7	630	52.5	150	12.5	160	13.3
GSM Phone, iphone, ipad	933	77.8	172	14.3	65	5.4	30	2.5

Source: Survey, 2012.

The table above shows that most of the respondents have multiple access to the Internet. For instance, 74.2% frequently accessed Internet facilities through Internet cafés, 37.5% use wireless hotspots on the campus. Also, 74.2% prefer to use their subscription modem while 92.1% said they used their mobile Internet such as include phone, i-phone, ipad among others. However, only 13.4% and 20.8% used wire ports in staff/lecturers' offices and the university e-library, respectively.

Table 4.6: Constraints faced by the respondents using the Internet

Constraints of using the Internet	S/Agree		Agree		Neutral		Disagree		S/Disagree	
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%

Slow Internet access	**560**	**46.7**	**501**	**41.8**	**100**	**08.3**	**20.0**	**1.70**	**019**	**01.5**
Too long to download materials	**290**	**24.2**	**720**	**60.0**	**150**	**12.5**	**18.0**	**01.5**	**22.0**	**01.8**
Problem of Electricity	**140**	**11.7**	**190**	**15.8**	**240**	**20.0**	**380**	**31.7**	**250**	**20.8**
Difficulty in finding relevant information	**083**	**06.9**	**587**	**48.9**	**310**	**25.8**	**140**	**11.7**	**80**	**06.7**
I do not know websites in my subject area	**160**	**13.3**	**621**	**51.8**	**179**	**14.9**	**110**	**09.2**	**130**	**10.8**
Air time too expensive	**70.0**	**05.8**	**490**	**40.8**	**240**	**20.0**	**280**	**23.3**	**120**	**10.0**
Irregularity of Internet connectivity	**120**	**10.0**	**536**	**44.7**	**294**	**24.5**	**130**	**10.8**	**120**	**10.0**
I have poor Internet skills	**20**	**01.7**	**290**	**24.2**	**340**	**28.3**	**210**	**17.5**	**340**	**28.3**

Source: Survey, 2012

In table 4.6, the respondents identified some major constraints they faced while using the Internet. For instance, 88.5% complained of slow Internet access which makes them spend too much time in downloading materials from the Internet (84.2%). However, majority of the respondents (52.5%) discarded the complain of poor electricity as acclaimed by 26.5%. So also, 65.1% confessed that they do not know important websites related to their subject area and this serves as a proof why 55.8% alluded difficulty in finding relevant information. A significant number of the respondents (46.6%) lamented the high cost of air time. This mostly affects those who use cyber cafes (74.2%), subscription modems (74.2%) and mobile Internet (92.1%) such as i-phone, i-pad and mobile phones. Additionally, 54.7% complained of irregularity of Internet connectivity. Among the respondents, only 25.9% accepted that they have poor Internet skills while 28.3% sat on the fence and 45.8% made no claims.

In general, the findings of this study correlated with the postulate of the theory used. For instance, table 4.3 and figure 4.4 revealed that the respondents use the Internet to satisfy different needs. These needs as categories and explained by the theory (uses and gratification) are affective needs, personal integration needs, social needs and tension needs.

4.3 Discussion of Findings

The major findings of the study revealed that the majority of the female undergraduates of A.B.U. Zaria have good perception and positive attitude towards the uses of the Internet. They respondents expressed their delight for using the Internet not only for communication and entertainment purposes but also for their academic activities. A significant number of the respondents even said that the Internet is easier to use than the library and that it is more informative than their lecturers. The study discovered that the female undergraduates of the university frequently patronize websites and search engines such as yahoo, google, and social networks to gratify their needs to communicate, get entertained and search for educational and social materials online. They use multiple access points such as the mobile Internet like mobile phones, i-phone as well as cyber café and subscription modem to access the Internet. Also, majority of them use the Internet either everyday or always. However, a higher number of them never uploaded any materials onto the Internet, meaning that they are only good at downloading and not uploading information.

It can therefore be inferred that the respondents used the internet to gratify their cognitive needs (information, knowledge and understanding), social integration needs (connect with friends and family) and affective needs (emotion, pleasure and aesthetic),

respectively. Furthermore, the findings revealed the significance and great impact the internet has on the academic and social life of the students as they prefer to use it than the library and tap from its resources to supplement their lecture notes.

This segment of the work further discussed the major findings of the study with the aim of answering the research questions. Thus:

4.3.1 RQ1. What is the behaviour of the female undergraduates of A.B.U. towards uses of the Internet?

The data generated in response to this question revealed that the female undergraduates of A.B.U. Zaria have good interest, good perception and positive attitude towards the uses of the Internet. As shown in Table 3, 92.5% of the respondents can browse the Internet themselves, 95.9% and 94.1% of the respondents affirmed that knowledge of the Internet is essential for students and the Internet is important like other research tools, respectively. Furthermore, 81.7% said that the Internet easier to use than the library and 56.7% revealed that the Internet is more informative than their lecturers. 74.1% revealed that they feel overwhelmed using the Internet for their studies while 86.6% said using the Internet makes learning fun, 84.2% identified the Internet as the integral part of the educational process and 76.7% of the respondents said they access the Internet more at school than at home. Meanwhile, there was a striking balance of 41.7% and 41.7% agreement and disagreement of the respondents' opinion on the issue of reliability of information sourced from the Internet. The reasons associated with the positive attitudes and or good perception of the female undergraduates towards the Internet can be linked to the numerous importance of the

Internet as summarized by the findings of Adomi (2005:81) who posited that "the Internet is very important to university students in Nigeria because it enables them to have access to timely, accurate and relevant information". In a similar study, Adomi, Okiy and Ruteyan, (2004:91) observed that "with Internet resources available and accessible, university students can obtain information which the library cannot provide from their shelves". Furthermore, Pascoe, Applebee, and Clayton, (1996) observed that the ease convenience and accessibility were major factors influencing ones attitude towards the Internet.

The findings of this study disagreed with the findings of Jackson et al (2000) as cited by Ozoemolem (2010:32) which opined that females tend to exhibit less favourable attitude towards computer and the Internet. However, it reinforced the findings of Zhang (2002) and Hupfer & Detlor (2006) which asserted that female in general have positive attitude towards the Internet, they are willing to use the technology and perceived it as a tool for maintaining social value, respectively.

4.3.2 RQ2. For what purpose do the female undergraduates of A.B.U. Zaria use the Internet?

This research question can be answered using data presented in Table 4.2 and 4.3. The findings from the tables revealed the major purposes of using the Internet by female undergraduates of the university. Hence, it can be deduced that the female undergraduates of A.B.U Zaria use the Internet for educational/academic purposes such as online registration (98.3%), assignment/class work/seminar (75%), downloading

course related information (62.5%), and downloading e-books, Journals and others (75%). A significant number of the respondents use the Internet for the purposes of communication such as e-mail (69.7%) and social networking (71.6%). So also, 65.9% use the Internet to source for news and information about happening nationally and internationally. A high number of the respondents represented by 69.1% revealed that they use the Internet to play online games, listen to music and watch movies. A number of the respondents (75%) use the Internet to download soft-wares. It is worthy of mention that, although female undergraduates are good users of the Internet, one interesting feature is that 91.9% of them have never uploaded any files or materials to the Internet, meaning they are good users of information, but very little information is uploaded. They are good at downloading but not uploading information.

The findings show that the Internet web sites frequently visited by the respondents include social network and entertainment sites (29%), educational/academic sites (27%), news and information sites (15%), commercial/fashion sites (10%), religious site (9%), sports sites (4%), pornographic sites (4%) and military sites (4%). These sites are patronized by the respondents with the aim of satisfying their purpose of using the Internet as stated above. The respondents' purpose of using the Internet can therefore be concurred with the five categories of needs to be gratified for using the Internet as put forward by Katz, Gurevitch and Haas, (1973).They are, cognitive needs (acquiring information, knowledge, and understanding),affective needs (emotional, pleasurable, or aesthetic experience), personal integrative needs (strengthening credibility, confidence, stability, and status), social integrative needs (strengthening contacts with family and friends) and tension release needs (escape and diversion). Furthermore, Slone (2003:24)

identified three reasons for using the internet as business, personal and academic purposes. The reasons were also presented to be for entertainment, socials, ecommerce (e-marketing, e-shopping) and games (Olasina, 2006).

Similarly, underscoring the various importance and uses of the Internet, Dutton (2004:215) found in his research that ‘‘the Internet is either important or very important to a majority of people. More than seven in ten people believe that the Internet is making life better. They said that it saves them time, and 60% of the users multi-task (e.g. listen to music, watch TV or phone someone while online). The respondents also revealed that they use the Internet to get information (70%), to e-mail friends (71%), to get school information (51%) and to shop (45%). Also, 60% of the respondents regarded the Internet as their favourite information source. This generally means that the female undergraduates use the Internet for their studies and to communicate with their family, friends and relations.

The findings of this study further agree with Hall’s (2000) findings which discovered that the Internet has the ability to provide up-to-the minute information which can be obtained around the world, made it a reliable source for information as well as easier and faster means of communication. This is the reason why the above websites were frequently patronized by the female undergraduates. This means that the findings of this study did not only reinforced the widespread assumption that female prefer to use the Internet for communication purposes but also discovered that they used it for academic and information gathering purposes.

4.3.3 RQ3. What Internet search engines and access points are used by the female undergraduates of A.B.U Zaria?

To answer this question, we can refer to Table 4.4. The data in the table shows that the search engines frequently used by the respondents are Google (93.5%), Yahoo (83.3%) and Social networks (75.8%) for sending or retrieving information from the Internet. However, the use of other search engines such as Alvista, Dogpile, Directories and Ask.com had low patronage. The frequently used search engines such as Google, Yahoo and Social networks only indicates the limitations of the respondents' knowledge and skills in exploring their potentials of the Internet. This is because the other search engines equally serve as pathways to rich and readily available information on the Internet. It is in line with this, Nwokedi (2007) cited in Margaret et al (2010:21) posits that "lack of searching skills is still hindering good use of Internet". He asserts that acquisition of Internet skills can lead to discovery of valuable research and teaching resources, which would in turn cause the users to use the Internet to enhance their research and learning capabilities.

Table 4.4 shows that most of the respondents have multiple Internet access points such as cybercafés (74.2%), wireless hotspots on the campus (37.5%), subscription modem (74.2%) and mobile Internet (92.1%), i-phone, ipad among others. However, only 13.4% and 20.8% use wire ports in staff/lecturers' offices and the university e-library, respectively. This means that majority of the students access the Internet via payable access. Only a handful of them use the Internet through the university Internet facility. The implication of this is that those who do not have Internet access through

personal mobile Internet or modems go to the cyber café occasionally and only when the need arises. Thus, the point of access influences the frequency of Internet usage. These findings reinforced the general findings of Olufemi (2006) and Buhari (2013) who found that students commonly access the Internet through commercial cyber cafes and modems/mobile phones.

4.3.4 RQ4. How often do the female undergraduates of A.B.U. Zaria surf the Internet?

The data in Figure 4.4 answers this research question. It shows that the respondents who access the Internet are: everyday (29%), always (28%) and when the need arises (25%) constitute the majority, while those who use it once a week (8%), hardly (7%) and those who do not use it at all (3%) are in the minority. This means that the respondents spend a substantial amount of time on the Internet. According to Hall and Parsons (2001), dependence, coupled with easy access to technology, points towards university students spending a substantial quantity of time on the Internet. Meanwhile, the finding of this study is similar to the findings of other studies like that of Ozoemelem (2010) who found that 63.33% of Undergraduates at Delta State University, Nigeria spent 30 minutes to 1 hour per day surfing the Internet. So also, Adekunmisi (2013) in a survey at Olabisi Onabanjo University, Nigeria found that students spent 1-2 hours daily on the Internet. a related study, Suhail and Bargees (2006:16) posit that "the misuse of the Internet often leads to unhealthy consequences, while heavy Internet usage leaves little time for any other thing". They investigated the positive and negative effects of excessive Internet use among undergraduate students in

Pakistan and found positive associations between time spent on the Internet and the various dimensions of the Internet Effect Scale (IES), indicating that excessive Internet usage can lead to a host of problems of educational, psychological, physical and interpersonal nature.

Similarly, the increase in availability of access to the Internet underscores the increase in affinity for digital information. Goodson (2001) reported that almost all students use the Internet to communicate with friends and family via social networks. This also led to increasing dependence on the Internet, which is geometrically growing as many students enjoy free access 24 hours a day on Internet centers or their mobile Internet gadgets such as ipad, i-phone among others.

4.3.5 RQ5. What are the constraints faced by the female undergraduates of A.B.U. Zaria using the Internet?

The respondents identified some major constraints they face while using the Internet. For instance, 88.5% complained of slow and irregular Internet connectivity which makes them spend too much time in downloading materials from the Internet (84.2%). However, majority of the respondents (52.5%) discarded the complain of poor electricity as claimed by 26.5%. So also, 65.1% confessed that they do not know important websites related to their subject area and this serves as proof why 55.8% alluded difficulty in finding relevant information. A significant number of the respondents (46.6%) lamented high cost of air time. This mostly affects those who use cyber cafes (74.2%), subscription of modems (74.2%) and mobile Internet (92.1%) such as i-phone, i-pad and mobile phones. Additionally, 54.7% complained of irregularity of

Internet connectivity. Among the respondents, only 25.9% accepted that they have poor Internet skills, while 28.3% sat on the fence and 45.8% made no claims.

The findings of this study agreed with the findings of Fasae and Aladeniyi (2012), and Akinkunmisi (2013) that slow Internet access speed high cost of Internet connectivity (airtime) and poor computer skills are among the major constraints faced by students using the Internet.

In general, the findings of this study correlate with the postulate of the theory used. For instance, Table 4.3 and Figure 4.3 revealed that the respondents use the Internet to satisfy different needs. These needs as categorized and explained by the theory (uses and gratification) are cognitive needs (information, knowledge and understanding), affective needs (emotion, pleasure and aesthetic), personal integration needs (confidence, status and stability), social integration needs (to connect with friends and family) and tension needs (to get escape and diversion). Similarly, the findings of the study will go a long way in filling the gap that exist in literature especially with regard to the behaviour of university female undergraduates towards the Internet and their various purposes of using the technology.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter of the work is mainly the summary, conclusion and recommendations for the study. The study is a survey meant to assess the behaviour and purpose of using the Internet by female undergraduates of Ahmadu Bello University, Zaria. This is in consideration of the enormous importance and necessity of computer and the Internet in the life of people, particularly university students. The study is relevant in thattheuse of ICTs such as the Internet continues to be a topical subject at the universities world over.

5.2 Summary

The study is an assessment of uses of the Internet by female undergraduates of Ahmadu Bello University, Zaria. In chapter one, the background to the study, statement of the problem, research questions and objectives, the significance of the study as well as the scope and limitations of the study were clearly stated and explained in order to give focus and direction to the study. Having stated the problem to be addressed in the study, the research objectives were set, among which include: to find out the behaviour of the female undergraduates of A.B.U. towards the Internet; to identify the purpose for which the Internet is used by the female undergraduates of A.B.U.; to identify the search engines/access points mostly used by the female undergraduates of A.B.U.; to determine the frequency of surfing the Internet by the respondents and to find out the constraints faced by the female undergraduates of A.B.U. using the Internet. This was

immediately followed by identifying the significance of the study. Here, the management of A.B.U. Zaria was identified as the primary beneficiary of the findings of the study considering the huge amount of money and efforts they have put in building Internet facilities and the motivation they give to the staff and students to use it. The rationale for selecting female undergraduates was explained. Thus, it is at their level that foundation of university education is laid and it is also at this level that women who will work in different works of life and women activists that help to liberate other women generations yet to come from domination are produced. The researcher observed that in the university more female students have access to mobile Internet gadgets such as mobile phones, iphone, ipad and other devices that provide easier access to the Internet. The female undergraduates, as mothers or mothers to be, depending on their attitude and purpose of using the Internet, have the potential to change the future of the technological level of the society as they are directly involved in the training of next generation of people. They have the opportunity to implement the utilization of the Internet into the Nigerian society, particularly amongst children who are the future of the society. If they have a good behaviour towards the uses of the Internet then the level and skills of Internet adaptation in our society will be brighter and if otherwise, then there is the urgent need to reorient and redirect their thinking.

The second chapter of the study gave a thorough review of literature related to the variables of the study and a discussion of theoretical framework that best explain diverse reasons for uses of the Internet. In the course of the review, a background study on the uses of the Internet in Nigeria was given. Here, IWS (2013) mentioned and explained the various categories of the Internet users in Nigeria ranging from

dependents who are mostly students under the 10-17 and 18-24 age brackets, the job seekers, the young and upwardly mobile professionals with 25-40 age brackets and the old schools with 40 years and above. Furthermore, the people's reasons for using the Internet as identified by Miller (1996) were highlighted. Thus, the situational reason which cover educational, recreational job related and personalized, the specific reason and the formal reason. Furthermore, Slone (2003:24) identified three reasons for using the internet as business, personal and academic purposes. The reasons were also presented to be for entertainment, socials, ecommerce (e-marketing, e-shopping) and games (Olasina, 2006).

The review also made a highlight on the gender gap in the Internet usage and attitude. The work cited the report of the Pew Internet and American Life Project in 2005 entitled "How Women and Men use the Internet" as cited by Le Claire (2005:2). The report revealed that American women are catching up with men in the overall Internet use and framing their online experience with a greater emphasis on deepening connections with people. It further states how men and women use the Internet differently. The report discovered that the proportion of female Internet users tends to be higher in countries with higher per capita income and longer history of Internet usage than lower income countries. Precise data on the Internet usage by gender are extremely difficult to obtain, especially from developing countries (UNCTAD,2002). However, the report concluded that gender gap in Internet adoption and usage has been diminishing over time. Recent studies suggest that the gender gap may even be reversed owing to technological development, for example, the introduction of mobile internet

and other devices that provide internet access. This part also explained the various sources of gender bias in the Internet usage and attitude.

Still in this chapter, an empirical study to review works related to this study was done. Here, studies that analyse the various importance of the Internet were presented. For instance, Rehman and Ramzy (2004:4) opined that ‘‘the Internet has established a place in the personal and professional lives of researchers and scholars through their daily use of the Net for serious work and personal communication’’. Owing to this, Lazinger, Barillan and Peritz, (1997:89) observed that “the Internet has transformed information access, use, exchange and application for university academics and other professionals”. Even Luambano and Nawe (2004:106) reported that “the installation of the Internet at the University of Dar es Salaam changed the learning environment by facilitating access to a wide range of journal databases in various academic disciplines”. Similarly, Pascoe, Applebee, and Clayton, (1996) observed that “ease convenience and accessibility were major factors influencing academic Internet use”. Underscoring the various importance and uses of the Internet, Dutton (2004:215) found in his research that ‘‘the Internet is either important or very important to a majority of people. More than seven in ten people believe that the Internet is making life better”. Goodson (2001) reported that “almost all students use the Internet to communicate with friends and family via social networks”.

Studies on the use of the Internet in Africa particularly in Nigeria included that of Jagboro (2003), who found that “among the majority of postgraduate students of Obafemi Awolowo University, the Internet is ranked fourth among the sources they use to search for materials”. Adomi (2005:81) posited that “the Internet is very important to

university students in Nigeria because it enables them to have access to timely, accurate and relevant information". Ajuwon (2003) studied Internet use by first year clinical and nursing students of the University College Hospital in Ibadan, Nigeria. Her study revealed that 60% of the respondents used the Internet for different purposes. Odusanya and Bamgbala (2002) found that "58% of the medical and dental students in their final year at the University of Lagos, Nigeria, whom they studied, used Internet for educational and non-educational purposes".

However, like any other technology, the use of the Internet has both beneficial and negative consequences. Suhail and Bargees (2006:121) distinguished between healthy and unhealthy Internet use, positing that excessive time spent on the Internet in purposeless activities can often take people away from their actual goals. Oji (2007) as cited by Margaret et al (2010:21) considers Internet use to be one of the causes of the decline in the reading culture of Nigerian youths. She posits that, some youths are often seen in cybercafés browsing the Internet and engaging in activities that entertain rather than educate, adding that perhaps some of the ills of today's society could be attributed to wrong use of information gotten from websites. Suhail and Bargees (2006:16) posit that "the misuse of the Internet often leads to unhealthy consequences, while heavy Internet use leaves little time for anything else". They investigated the positive and negative effects of excessive Internet use among undergraduate students in Pakistan and found that excessive Internet use can lead to a host of problems of educational, psychological, physical and interpersonal nature.

The study adopted uses and gratification theory. According to the theory, audiences differ in the gratifications they seek from the mass media. These differences

are related to certain social conditions and or personality dispositions. These differences result in many media use patterns and a variety of media effects (Palmgreen, Wenner and Rosengrenl, 1985). Hence, the basic assumption of the theory is that peoples' choice of a particular medium is predicted on the type of gratification they obtain. This is interesting to media scholars and professionals because it tells us the more people use media the more they enjoy it and the more they want to use it; particularly with media that are active like the Internet. Katz, Gurevitch and Haas, (1973) listed 35 needs and put them into five categories which people tend to gratify as they use the media: Cognitive Needs (acquiring information, knowledge, and understanding), Affective needs (emotional, pleasurable, or aesthetic experience), Personal integrative needs (strengthening credibility, confidence, stability, and status), Social integrative needs (strengthening contacts with family and friends) and Tension release needs (escape and diversion). Using the theory allows us to study why and what the students use the Internet for, and what reasons or needs they are attempting to gratify.

The third chapter of the work specifically explained the methodology used. This covers the study area which specified that the study was conducted in Ahmadu Bello University, Zaria, the research design which states that the study was a survey and that the population of the study is the female undergraduates of Ahmadu Bello University, Zaria. The sampling technique adopted was systematic random sampling whereby every 10th female undergraduate met at each of the twelve faculties of the university was given a questionnaire to complete. A sample size of 1,200 respondents was used. The questionnaire was administered personally with the assistance of four female research assistants. The instrument for data collection was questionnaire and it was validated

using test-retest method. The data gathered were processed and analyzed using SPSS computer statistical package, tables, bar charts, pie charts and histograms.

Chapter four of the study presents, interprets and analyses the findings of the study with a view of answering the research questions. In order to be able to make generalizations, there was fairness in the distribution of the questionnaire among the respondents at the various levels and in the twelve faculties of the university. Hence, 100 questionnaires were administered at each faculty.

The findings of the study revealed that majority of the female undergraduates of A.B.U. Zaria have a positive attitude towards the uses of the Internet. As shown in table 3, 92.5% of the respondents can browse the Internet themselves, 95.9% and 94.1% of the respondents affirmed that knowledge of the Internet is essential for students and the Internet is important like other research tools, respectively. Furthermore, 81.7% said that the Internet easier to use than the library and 56.7% revealed that the Internet is more informative than their lecturers. 74.1% revealed that they feel overwhelmed using the Internet for their studies while 86.6% said using the Internet makes learning fun, 84.2% identified the Internet as the integral part of the educational process and 76.7% of the respondents said they access the Internet more at school than at home. Meanwhile, there was a striking balance of 41.7% and 41.7% agreement and disagreement of the respondents' opinion on the issue of reliability of information sourced from the Internet. The reasons associated with the positive attitudes and or good perception of the female undergraduates towards the Internet can be linked to the numerous importance of the Internet as summarized by the findings of Adomi (2005:81) who posited that "the Internet is very important to university students in Nigeria

because it enables them to have access to timely, accurate and relevant information". In a similar study, Adomi, Okiy and Ruteyan, (2004:91) observed that "with Internet resources available and accessible, university students can obtain information which the library cannot provide from their shelves". Furthermore, Pascoe, Applebee, and Clayton, (1996) observed that ease convenience and accessibility were major factors influencing ones attitude towards the Internet.

The findings further revealed the major purposes of using the Internet by female undergraduates of the university. Hence, it was deduced that the female undergraduates of A.B.U Zaria use the Internet for educational/academic purposes such as online registration (98.3%), assignment/class work/seminar (75%), downloading course related information (62.5%), and downloading e-books, Journals and others (75%). A significant number of the respondents use the Internet for the purpose of communication such as e-mail (69.7%) and social networking (71.6%). So also, 65.9% use the Internet to source for news and information about happening nationally and internationally. A high number of the respondents represented by 69.1% revealed that they use the Internet to play online games, listen to music and watch movies. A number of the respondents (75%) use the Internet download soft-wares. It is worthy of mention that, although female undergraduates are good users of the Internet, one interesting feature is that 91.9% of them have never uploaded any files or materials to the Internet, meaning they are good users of information, but very little information is uploaded. They are good at downloading but not uploading information.

Concurrently, the findings showed that the Internet web sites frequently visited by the respondents include social network and entertainment sites (29%),

educational/academic sites (27%), news and information sites (15%), commercial/fashion sites (10%), religious site (9%), sports sites (4%), pornographic sites (4%) and military sites (4%). These sites are patronized by the respondents with the aim of satisfying their purpose of using the Internet as stated above.

The respondents' purpose of using the Internet can therefore be concurred with the five categories of needs to be gratified for using the Internet as put forward by Katz, Gurevitch and Haas, (1973).They are, cognitive needs (acquiring information, knowledge, and understanding),affective needs (emotional, pleasurable, or aesthetic experience), personal integrative needs (strengthening credibility, confidence, stability, and status), social integrative needs (strengthening contacts with family and friends) and tension release needs (escape and diversion). Furthermore, Slone (2003:24) identified three reasons for using the internet as business, personal and academic purposes. The reasons were also presented to be for entertainment, socials, ecommerce (e-marketing, e-shopping) and games (Olasina, 2006).

Similarly, underscoring the various importance and uses of the Internet, Dutton (2004:215) found in his research that ''the Internet is either important or very important to a majority of people. More than seven in ten people believe that the Internet is making life better. They said that it saves them time, and 60% of the users multi-task (e.g. listen to music, watch TV or phone someone while online). The respondents also revealed that they use the Internet to get information (70%), to e-mail friends (71%), to get school information (51%) and to shop (45%). Also, 60% of the respondents regarded the Internet as their favourite information source. This generally means that

the female undergraduates use the Internet for their studies and to communicate with their family, friends and relations.

The findings of this study further agree with study, Hall (2000), who discovered that the Internet has the ability to provide up-to-the minute information which can be obtained around the world, made it a reliable source for information as well as easier and faster means of communication. This is the reason why the above websites were frequently patronized by the female undergraduates.

The findings also explained that the respondents frequently use are Google (93.5%), Yahoo (83.3%) and Social networks (75.8%) for sending or retrieving information from the Internet. However, the use of other pathways such as Alvista, Dogpile, Directories and Ask.com is low. The frequent use of Google, Yahoo and Social networks only indicates the limitations of the respondents' knowledge and skills in exploring the potentials of the Internet. This is because the other search engines equally serve as pathways to rich and readily available information on the Internet. It is in line with this, Nwokedi (2007) in Margaret et al (2010:21) posits that lack of searching skills is still hindering good use of Internet. He asserts that acquisition of Internet skills can lead to discovery of valuable research and teaching resources, which would in turn cause the users to use the Internet to enhance their research and learning capabilities.

Table 4.4 shows that most of the respondents have multiple access points to the Internet. For instance, 74.2% frequently access Internet facilities through Internet cafés, 37.5% use wireless hotspots on the campus. Also, 74.2% prefer to use their subscription modem while 92.1% said they use their mobile Internet which include phone, iphone,

ipad among others. However, only 13.4% and 20.8% use wire ports in staff/lecturers' offices and the university e-library, respectively. This means that majority of the students access the Internet via personal mobile Internet, cyber cafés and modems of which they have to subscribe for access. Only a handful of them use the Internet through the university Internet facility. The implication of this is that those who do not have Internet access through personal mobile Internet or modems go to the cyber café occasionally and only when the need is severe. Thus, the point of access influences the frequency of Internet usage.

The study also shows that the respondents who access the Internet everyday (29%), always (28%) and when the need arises (25%) constitute the majority while those who use it once a week (8%), hardly (7%) and those who do not use it at all (3%) are the minority. This means that the respondents spend a substantial amount of time on the Internet. According to Hall and Parsons (2001), dependence, coupled with easy access to technology, points towards university students spending a substantial quantity of time on the Internet.

In a related study, Suhail and Bargees (2006:16) posit that "the misuse of the Internet often leads to unhealthy consequences, while heavy Internet use leaves little time for anything else". They investigated the positive and negative effects of excessive Internet use among undergraduate students in Pakistan and found positive associations between time spent on the Internet and the various dimensions of the Internet Effect Scale (IES), indicating that excessive Internet use can lead to a host of problems of educational, psychological, physical and interpersonal nature.

Similarly, the increase in availability of access to the Internet underscores the increase in affinity for digital information. Goodson (2001) reported that almost all students use the Internet to communicate with friends and family via social networks. This also led to increasing dependence on the Internet, which is geometrically growing as many students enjoy free access 24 hours a day on Internet centers or their mobile Internet such as ipad, i-phone among others.

The respondents identified some major constraints they face while using the Internet. For instance, 88.5% complained of slow Internet access which makes them spend too much time in downloading materials from the Internet (84.2%). However, majority of the respondents (52.5%) discarded the complain of poor electricity as claimed by 26.5%. So also, 65.1% confessed that they do not know important websites related to their subject area and this serves as a proof why 55.8% alluded difficulty in finding relevant information. A significant number of the respondents (46.6%) lamented for high cost of air time. This mostly affects those who use cyber cafes (74.2%), subscription modems (74.2%) and mobile Internet (92.1%) such as i-phone, i-pad and mobile phones. Additionally, 54.7% complained of irregularity of Internet connectivity. Among the respondents, only 25.9% accepted that they have poor Internet skills while 28.3% sat on the fence and 45.8% made claims.

Finally, the findings of this study correlate with the postulate of the theory used. For instance, table 4.3 and figure 4.3 revealed that the respondents use the Internet to satisfy different needs. These needs as categories and explained by the theory (uses and gratification) are affective needs, personal integration needs, social needs and tension needs.

5.3 Conclusion

The rapid increase in the Internet access in Nigerian universities where the male and female students surf the internet through cyber cafes, wireless hotspot, modems and mobile phones can be associated with the significant role it is playing in meeting information and communication needs of the people. Hence, the need to study the Internet users' behaviour as well as the purpose for which they use it can never be over emphasized.

This study therefore assessed the uses of the Internet by female undergraduates of Ahmadu Bello University, Zaria and discovered that the female undergraduates of the university have interest, good perception and positive attitudes towards the uses of the Internet. Majority of them can surf the Internet themselves, they use the Internet for educational/academic purposes, for communication and social networking purposes, for news, information and for entertainment purposes. However, a higher number of the respondents revealed that they have never uploaded any files or materials to the Internet, meaning that they are good at downloading and not uploading information to the Internet.

The findings of the study further revealed that the female undergraduates frequently patronize websites and search engines such as yahoo, google, and social networks to gratify their needs to communicate, get entertained and search for educational and social materials online. And that the respondents have multiple access points to the Internet such as the mobile Internet like mobile phones, i-phone and i-pad, the Internet Cafes, the subscription modems and the wireless hotspots on the university campuses. Similarly, the respondents that use the Internet everyday, always and

whenever the need arises constituted the majority. So also, the female undergraduates highlighted some of the major constraints they face while using the Internet among which include, slow and irregular internet connectivity, which makes them spend too much time in downloading materials from the Internet, high cost of air time and that they do not know important websites related to their course of study or subject area.

Meanwhile, most of the problems highlighted can be addressed if the university authority creates a friendly websites or take the advantage of social networks that are frequently patronized by the students such as yahoo, whatsapp, facebook, twitter among others to upload academic materials in a simple and entertaining way through the use of attractive design, pictures animations and charts to woe the attention of the students and sustain their interest.

5.4 Contribution to Knowledge

As rightly pointed out in chapter one of this study, in all the existing body of literature on the uses of the Internet reviewed by the researcher, not many and specific studies have been conducted in relation to the behaviour and purpose of the uses of the Internet by female undergraduates in Nigerian universities. The few ones available such as that of Salam (2003) and Achounye & Olele (2009) among others studied the gender differences in the Internet and or web affinity among the male and female students in universities. In A.B.U. Zaria for example, the Internet usage among female undergraduates have never been examined in any previous studies. This therefore indicates the gap in knowledge and the findings of this study will therefore go a long way in providing literature on the issue of the Internet uses and the purpose of using it among university female undergraduates. Similarly, the findings of the study will give

credence to the existing body of literature on gender disparities on the purpose for which female undergraduates use the Internet.

5.5 Recommendations

Based on the findings of this study, a number of issues have to be addressed so that the students would avail themselves of the benefits accruing from Internet use especially good social and for academic purposes. It is in line with this that the following recommendations were made:

i. As it was revealed by the findings of the study that the respondents access the Internet more at school than at home, this signifies the importance of improving the quality of the Internet services in the University and the need for a proper and thorough orientation on the necessity of Internet knowledge, skills and application in especially for academic activities.

ii. The University should frequently organize courses and seminars that require use of the Internet for the students and the staff alike.

iii. Course materials should be uploaded on the internet through friendly websites or social networks that are frequently patronized by the students such as yahoo, whatsapp, facebook, twitter among others using attractive design, pictures animations and charts to attract the attention of the students and sustain their interest.

iv. Academic cooperation should be promoted through the sharing of educational resources among the faculties of the universities, online.

v. To enhance academic cooperation between all the faculties of the universities communication between various points of the network should be computer-mediated

vi. More bandwidths should be sought so as to provide faster access and connectivity that will save much of the users' time and be a source of motivation to users. Here, the university must be applauded for their on-going project of 'ABU Fiber optic campus networks infrastructure', a project that is aimed at providing the university with a high-speed Internet and intranet access to its 40,000+ students and staff respectively in its campuses in Zaria. However, the university management must be stimulated to successfully complete the project. This will go a long way in making the students save the money they would have used in buying air time for their mobile Internet.

vii. Students' over dependency and too much use of some websites like entertainment and social networks such as facebook, e-mail, twitter, should be discouraged as initiated by the University MTN-Virtual Library of the university.

viii. Information regarding the relevant and contemporary academic websites with their addresses should be displayed on departmental notice boards, their libraries and lecture rooms.

ix. That the university should be clear as to "why" they are encouraging students to use the Internet especially for academic purposes. Furthermore, to achieve success in educational applications of the Internet, they should take students' attitudes and views into consideration.

5.6 Suggestions for Further Studies

Research on uses of the Internet and its users cannot be exhaustive. Thus, further and or related studies can be conducted in the area of university curriculum content and the teaching/learning of the internet for academic activities, correlation of uses of the internet in the faculties and at different levels of the university, viability of using social

networking sites to upload course related materials for academic exchange, university internet service coverage and its effectiveness among staff and students of the university.

REFERENCES

Achuonye, K.A.,&Olele, C.N. (2009). Internet using patterns of Nigerian teacher-trainees: implications for teacher education in Nigeria. *Journal of the Science Teachers Association of Nigeria*, 44(1 & 2), 103.

Adekunmisi, S.R., Ajala, E.B. and Iyoro, A.O. (2013:7) Internet Access and Usage by Undergraduates Students: A case study of Olabisi Onabanjo University, Nigeria. *Library Philosophy and Practice.* University of Nebraska-Lincoln.

Adika,G.(2003).Internet use among faculty members of universities in Ghana. *Library Review*.52(1), 22-37.

Adomi, E.E. (2005). Internet development and connectivity in Nigeria.*Program: Electronic Library and Information Systems*. 39 (3), 257-268.

Adomi, E.E., Okiy, R.B. &Ruteyan, J.O. (2004).Survey of cybercafés in Delta State, Nigeria.*The Electronic Library*.21 (5), 487-495.

Ajuwon, G. A. (2003). Computer and Internet use by first year clinical and nursing students in a Nigeria teaching hospital.*BMC Medical Information Decision Making*, 3(1), 10– 15.

Amaeshi B.O, Ayanwu E.U, &Oparaku D.C (2006). Characteristics of Internet users in Nigeria: The case of Owerri Metropolis, Imo State.

Anderson, K. J. (2001). Internet use among college students: An exploratory study. *Journal of American College Health*, *50*, 21-26.

Anunobi, C. V. (2006). Dynamics of Internet usage: A case of students of the Federal University of Technology Owerri (FUTO) Nigeria. *Educational Research and Reviews*, 1 (6), 192-195. Retrieved June 10, 2012, from http://www.academicjournals.org/ERR/PDF/Pdf2006/Sep/Anuno bi.pdf

Anunabi C.V. &Mbagwu F.C. (2009).Determinants of Internet Use in Imo State, Nigeria.*Educational Research and Review*. Vol. 4(9) 436-442

Anyira I. E. (2011) Internet Services in Nigerian Private Universities: A case study. *Journal ofLibrary Philosophy and Practice 15(22), 0222*

Aqil, M. and Ahmed, P. (2011). Use of the Internet by Research scholars and PG students of Science Faculty of Aligarh Muslim University. *Library Philosophy and Practice.* Retrieved 22/8/2012 from http://unllib.unl.edu/LPP

Australian Bureau of Statistics (ABS) (2001– 2005/06). House hold use of Internet: Selected characteristics of Internet uses any site. Retrieved on 18/03/2012 from http://www.afc.g-ov.au/ gtp/wnmnetuser).

Awang, H., Jaffar, M. (2004). An Outreach Venture: Bringing Computer Literacy to Rural Women in Malaysia. In K. Morgan, C.A. Brebbia, J. Sanchez, A. Voiskounsky (eds.), *Human Perspectives in the Internet Society: Culture, Psychology and Gender* (191-197). WIT Press: Southampton, Boston.

Bao, Xue-Ming. (1998). Challenges and opportunities: A report of the 1998 library survey of Internet usersat Seton Hall University. *College & Research Libraries*, 59(6), 535–543.

Baran, S. J., & Davis, D. K. (2003).Mass Communication Theory(3rd ed.). Belmont, CA: Wadsworth/Thomson Learning.

Bates, T. (1996).The impact of technological change on open and distance learning. Keynote address at *Queensland Open Learning Network. Open Learning: Your Future Depends On It,*4-6December.Brisbane,Queensland,Australia.Retrieved on 18/02/2011 from http://bates.cstudies.ubc.ca/Brisbane.html.

Best, J.W. (1981).Research in Education.Prentice Hall Inc.New York jersey.

Brunner, C. & Bennett, D. (1998).Technology perceptions by gender.*The Education Digest,* February, 56-58.

Buhari, S.R. (2013). Iternet Access and usage by Academic staff and students in a Nigerian Polytechnics. *International Conference on Communication, Media, Technical and Design.*

Chandran, D. (2000). Use of Internet resources and services in S.V. University, Tirupathi environment, Conference on Information Services in a Networked Environment in India. Organised by INFLIBNET. 18-20 December 2000: Ahemdabad

Cookson, Peter. S. (2000). Open learning, Implications on Internet technologies for higher education: North American perspectives. *Open Learning, 15*(1), 71-80.

Cyber Atlas (2002). Men still dominate worldwide internet use. Retrieved October 11 2012 from www.internet.com

Daniel, J.S. (1996). Mega universities and knowledge media: technology strategies for higher education. London: Kogan Page.

Davis, S. F., Smith, B. G., Rodrigue, K., & Pulvers, K. (1999). An examination of Internet usage on two college campuses. *College Student Journal, 33*, 257-260

Donohew, R. L., Nair, M., & Finn, S. (1984). Automacity, arousal, and information exposure.In R.S. Bostrum (Ed.).*Communication Yearbook, 8,* (pp. 267-284). Beverly Hills, CA: Sage.

Dutton, W. (2004). Bridging Broadband Internet Divides: Reconfiguring Access to Enhance CommunicationPower.*Journal of Information Technology,(Palgrave Macmillan),03/2004*

Ekeh, F.I. (2003). Research Methods and Statistics in Education.Abakaliki: Madol Press Ltd.

Fasae, K.J. & Aladeniyi, R.F. (2012). Internet Use by students f Faculty of Science in Two Nigerian Universities. *Library Philosophy and Practice.* Retrieved on September 18, 2012 from http://unilib.unl.edu/LPP

Garbarino, E., & Strahilevitz, M. (2004). Gender differences in the perceived risk of buying online and efforts of receiving a site recommendation. *Journal of Business Research*,57, 768-775

Goodson, P. (2001). Searching for sexually explicit materials on the Internet: An exploratory study of College students.*Archives of Sexual Behaviour* 30(2): 101-118

Gray, D. (1999). The Internet in lifelong learning: liberation or alienation?.*International Journal of Lifelong Education, 18* (2), 119.

Hafkin, N., Taggart, N. (2001). Gender, Information Technology, and Developing Countries: An Analytic Study. *Report for the USAID's Office of Women in Development.* Retrieved 22/11/2011 from http://www.usaid.gov/wid/pubs/it01.htm.

Hall, A.S., & Parson, J. (2001). Internet addiction: College students case study using best practicesin cognitive behaviour therapy. Journal of Management Counselling 23(4): 312-327

Hinson, R. &Amidu, M. (2006).Internet adoption amongst final year students in Ghana's oldest business school.*Library Review*.55 (5), 314-323.

Hoffman, D. L., Novak, T., & Schlosser, A. (2000). The evolution of the digital divide: How gaps inInternet access may impact electronic commerce. *Journal of Computer- MediatedCommunication*, 55 (3).Retrieved August 21, 2011, from http://jcmc.indiana.edu/vol5/issue3/hoffman.html

Hupfer**,** M.E. & Detlor, B. (2006). Gender and Web information seeking: A self-concept orientation model. *Journal of the American Society for Information Science and Technology,* 57(8): 1105-1115.

Internet world Stats (2012).Internet Usage Statistics for Africa. Retrieved on 12/11/2012 from http://www.internetworldstats.com/stats1.htm

Internet.com (2001). Global Digital Divide Still Very Much in Existence. Retrieved August 30 2012 from www.internet.com

Jagboro, K. O. (2003).A study of Internet usage in Nigerian universities: A case study of ObafemiAwolowo University, Ile-Ife, Nigeria. *First Monday: Peer Reviewed Journal on the Internet*.Retrieved August 22, 2012, from http://www.firstmonday.dk/issues/issue8_2/Jagboro

Jennings, S. E., & Onwuegbuzie, A. J. (2001). Computer Attitudes As A Function Of Age, Gender, Math Attitude, And Developmental Status. Journal of Educational Computing Research, 25 (4), 367-384.

Jones, S. (2002) The Internet Goes to College.Washington, DC: Pew Internet and American Lifeproject.

Katz, E., Gurevitch, M., & Haas, H. (1973).On the use of the mass media for important things. *American Sociological Review, 38*, 166-167.

Kaur, A. (2005). Internet facility at GNDU: A survey, National Seminar on Academic Librariesin the Modern Era. Organized by IASLIC December 2000, Bhopa.

Kaye, B. K., & Thomas, J. J (2004). Online and in the know: Uses and gratifications of the Web forpolitical information. *Journal of Broadcasting & Electronic Media, 46*(1), 54-71.

Kumar, R., &Kaur, A. (2005). Internet and its use in the Engineering College of Punjab, India: A case study. *Webology* 2 (4): 1-18. Retrieved 21 November 2012 http://www.webology.org/2005/v2n4/a21.html

Larose, R., Eastin, M. (2004). Internet Gratifications and Internet Addiction: On the Uses and Abuses of New Media. *Cyberpsychology& Behaviour,* (7) 4, Mary Ann Liebert, Inc.

Larson, R. (1996). User Characteristics of the www.Retrieved on 10/01/2012 from http://sherlock.sims.berkeley.edu/assis96/node.3.html).

Lazinger, S.S., Bar-Ilan, J. &peritz, B.C. (1997). Internet use by faculty members in variousdisciplines: acomparative case. *Journal of American Society for Information Science*. (48), 508-518.

Le Claire, J. (2005). Study: Men and Women Use Internet Differently. E.Commerce Times. Retrieved November 22, 2012 from www.e-commerce/internet/men-and-women-use- internet-differently.html.

Luambano, I., &Nawe, J. (2004).Internet use by the students of the University of Daras Salaam.*Library Hi-Tech News*.(10), 13-17.

Lund, H. (1998). Bridging the gap? Internet and e-mail access within universities in developing commonwealth universities. Retrieved August 22, 2011 from www.acu.ac.uk/chems/onlinepublications/952599435.pdf

Lin, C. (1996). Looking back: The contribution of Blumler and Katz's "Uses of Mass Communication Research".*Journal of Broadcasting & Electronic Media, 40*(4), 574.

Lorence, D & Park, H. (2007). Gender and online health information: a partitioned technologyassessment. *Health Information and Libraries Journal*, 24, 204-209

Malhotra, N.K. & Birks, D.F. (2007).Marketing Research: An Applied Approach. Harlow: Financial Times Prentice Hall.

Margaret, B. & Eric T. (2010) Reading and Internet Use : Activities of Undergraduate Students of the University of Calabar. *African Journal of Library8 (2)*

Mc Quail, D. (2007). Mass Communication Theory.5th Edition. Los Angeles: Sage Publications

Mead, S.E., Sit.,R.A., Rogers, W.A., Rousseau, G.K. & Jamieson, B.A. (2000). Influence of GeneralComputer Experience and Age on Library Database Search Performance. *Behavioural Information Technology*. 19: 107 – 123.

MIS Unit (2012). Students' Registration Statistics by Faculty and Gender.Information and Communication Technology (ICT) Directorate.Ahmadu Bello University, Zaria.

Miller, T.E. (1996). Segmenting the Internet-Internet users by age, survey by Find/SVP AmericanDemographics.Retrieved on 20/04/2011 from http:////findarticles.com/p/articles/m1_m4021/1s_n7_v18/ai18440641.

NPC (2006).National Population Commission Census Reports.

Nwogu, J.E. &Anunobi, C.V. (2007). Use and Evaluation of Internet Resources: A case of the Academic Community in Imo State. *Information Technology*. (4), 47-59.

Odusanya, O. O., &Bamgbala, O. A. (2002).Computing and information technology skills of final year medical and dental students at the College of Medicine, University of Lagos.*Nigerian Postgraduate Medical Journal,* 9(4), 189–193.

OECD (2005), E-learning in tertiary education: where do we stand? *Education & Skills*, (4), 1-293 Retrieved on 26 April 2012 from http://www.caos.nl/ocw/doc/Preliminary_Findings2.pdf

Ojedokun, A. A. (2006). Internet access and usage by students of the University of Botwana.*AfricanJournal of Library Archival & Information Science,* 11(2), 97–107.

Olasina, G. (2006). A user Requirement Analysis of Internet Resources by Clients at cybercafés inIbadan.*Information Technology*. 3*:* 30-39.

Olufemi, Omotayo. B. (2006). A survey of Internet access and usage among undergraduates in an African University. *The International Information and Library Review*, 38 (4), 215. Retrieved on January 13 from

http://www.cat.inist.fr/?aModele=afficheN&cpsidt=18319658.

Ozoemelem, O.A. (2010). Web Affinity: A Study of Undergraduate Students in Nigerian Universities. Library Philosophy and Practice.

Palesh, O., Saltzman K., &Koopman C. (2004). Internet Use and Attitudes Towards Illicit Internet use behaviour in a sample of Russian College Students. *Cyber. Psychological Behaviour. (7): 553-558.*

Palmgreen, P., Wenner, L. A., &Rosengren, K. E. (1985).Uses and Gratifications Research: The Past Ten Years(Rev. ed.). Beverly Hills, CA: Sage.

Pascoe, C., Applebee, A., & Clayton, P. (1996).Tidal wave or ripple?The impact of Internet on theAcademic. Australian Library Review 13 (12): 147-153.

Pollock, A. & Hockley A (1997). What's wrong with Internet searching? *Lib Magazine* Retrieved on 30/08/2011 from http.//www.dlib.org/dlib/March'97/bt/03 pollock.html) 3(3).

Rehman, S. &Ramzy, V. (2004).Internet use by health professionals at the Health Centre of Kuwait University.*Online Information Review.*28 (1), 53-60.

Rubin, A. M. (1993). Audience activity and media use. *Communication Monographs, 60,* 98- 105

Ruby R. D.,Nikhilesh D. and Nir K. (2003). Gender and internet usage. New York: Wiley.

Ruggiero, T. E. (2000). Uses and gratifications theory in the 21st century.*Mass Communication &Society,3*(1), 3-37.

Salaam, M. O. (2003). A survey of the use of Internet services in Nigerian University Libraries.ASSET, 3(3),115–121. Stern, C. M. (2002). How undergraduates search and use theInternet. Retrieved on 09/09/2012 from http://www.stc.org/confproceed/2011/.

Sambo, A.A. (2005). Research Method in Education. Ibadan: StirlingHorden Publishers.

Sanders, D.W. and Morrison-Shetlar, A.I. 2001. Students' Attitudes Towards WebEnhance Instruction In An Introductory Biology Course. *Journal of Research on Computing In Education*,(33), 3: 251-262.

Sarantakos, S. (1993). *Social Research.*Australia: Macmillan education press limited.

Scherer, K. (1997). College life on-line: Healthy and unhealthy Internet use. *Journal of College Student Development, (38),* 655-665.

Schumacher, P. and J. Morahan-Martin (2001). Gender, Internet and computer attitudes and experiences. *Computers in Human Behavior*, *17*(1), 95-110.

Shaw, L. H., & Gant, L. M. (2002). Users divided? Exploring the gender gap in Internet use. *Cyberpsychology & Behavior*, 5 (6),517-527 Mary Ann Liebert, Inc.

Slone, D.J (2003). 'Internet search approach: The Influence of age, search goals, and experience'.*Library and Information Science Research*. (25), 403-418.

Suhail, K., &Bargees, Z. (2006).Effects of Excessive Internet Use on Undergraduate Students in Pakistan.*Cyber Psychology & Behavior*, (9), 297-307.

Sylvester, M.N. (2011). Attitude Of Male And Female Students Towards The Use Of Internet.*Gender&Behaviour.*Retrieved from on 13/3/2012 http://readperiodicals.com/201106/2375818571.html

Tadasad, P. G., Maheswarapp, B. S., &Alur, S. A. (2003).Use of Internet by undergraduate studentsof P.D.A College of Engineering, Gulbarga.*Annals of Library and Information Studies*, 50 (1), 31-42.

Tull D. & Dell H. (1993).Marketing Research, Measurement and Method (6th edition). India:Prentice hall.

Ujo, A. (2004). Understanding Social Research: A Non-quantitative Approach. Kaduna: Anyaotu enterprises and publishers limited.

UNCTAD (2002).E-Commerce and Development Report. Retrieved on September 22 2011 from http://r0.unctad.org/ecommerce/doc/edro2 en/ecdro2ch3.pdf

Usun, S. (2003). Undergraduate Students Attitudes Towards Educational Uses of Internet. *Interactive Educational Multimedia*. 7: 46-62. Retrieved August 28, 2012, from http://www.ub.edu/multimedia/iem/down/c7/IEM_number7.pdf

Wimmer, D. R. & Dominick, J. R. (2006). Mass Media Research An Introduction. Canada: Thomson Wadsworth.

Wolin, D. L, & Korgaonkar, P. (2003). Internet research: Electronic networking. *Web advertising: Gender differences Applications and Policy,* 13(5), 375-385.

Www.portal.abu.edu.ng/history of abu

Yumba, D. (1997). Internet in the library: Potentials. *African Journal of Library, Archives and Information science* 7 (2): 163-168.

Zhang, Y. X. (2002). Comparison Of Internet Attitudes Between Industrial Employees And College Students. Cyberpsychology & Behavior, 5 (2), 143-149.

Appendix I
Letter of Introduction

Department of Mass Communication,

Faculty of Social Science,

Ahmadu Bello University, Zaria.

Dear Sir/Madam,

QUESTIONNAIRE FOR AN ASSESSMENT OF USES OF THE INTERNET BY FEMALE UNDERGRADUATES OF AHMADU BELLO UNIVERSITY, ZARIA

I am a post-graduate student of the above named department conducting a research for my Masters Thesis on an assessment of uses of the Internet by female undergraduates of Ahmadu Bello University, Zaria.

Kindly spare some of your time to fill this questionnaire. I assure you that your candid responses to the questions will be used specifically for this research purposes. All responses given will be kept confidentially.

Thank you for your cooperation.

Yours faithfully,

Aminu Mohammed Abdullahi

Appendix II

Questionnaire

Section I

Tick (√) the appropriate box(es)in the tables below:

1. Level ? 100 ☐ 200 ☐ 300 ☐ 400 ☐ 500 ☐

2. Age ?15-16 ☐ 7 - 20 ☐ -25 ☐ -30 ☐ Above 30 ☐

3. Faculty?

Name of Faculty	Agric.	Admin.	Arts	Educ.	Engnr	Env. Design	Law	Med	Phrm	Sci	Soc.sc	Vet.
Tick												

Section II

1. FEMALE UNDERGRADUATES' BEHAVIOUR TOWARDS THE INTERNET

✓ **Tick : Strongly Agree=1, Agree=2, Neutral=3, Disagree=4, Strongly Disagree=5**

WHAT IS YOUR BEHAVIOUR TOWARDS THE INTERNET?	1	2	3	4	5
1.I browse the Internet myself					
2.My friend assist me in browsing the Internet					
3..Knowledge of Internet is essential for students					
2.Internet is important like other research tools					
3 Internet is easier to use than Library					
4.I find the Internet to be more informative than my lecturers					
5.I do not like using the Internet for important academic works					
6. I enjoy getting information from books than from Internet					
7.I feel overwhelmed using the Internet for my studies					
8.The Internet does not particularly interest me					
9.Using the Internet makes learning fun					
10.I find using Internet as an integral part of the educational process					
11.I am indifferent about using the Internet for my studies					
12.I access the Internet more at school than at home					
13. Internet do not contain useful & relevant educational information					
14.Internet is difficult to use for academic activities					
15. I have security concern about using Internet for academic purposes					
16.Accessing/Surfing/Browsing Internet confuses me					
17.Information from the Internet is unreliable					
18. I find any course that requires the use of the Internet interesting					

2. FEMALE UNDERGRADUATES' PURPOSE FOR USING THE INTERNET:

WHAT DO YOU USE THE INTERNET FOR?	**Never**	**Sometimes**	**Often**	**Very Often**
1.To obtain course-related information				
2.For Seminar/Assignments				
3.For my on-line course registration				
4. Communicating with friends and others (e.g. e-mail)				
5. For Social Networking(facebook, twitter,skype, etc)				
6. For News and information				
7. For Playing Games and Music				
8. For Downloading Softwares				
9. For downloading e-books, Journals and Articles				
10. For Uploading files and documents				

HOW OFTEN DO YOU VISIT THE FOLLOWING SITES ON THE INTERNET?	**Very Often**	**Often**	**Rarely**	**Never**
1.Entertainment (e.g. Games, Films and Music)				
2.Education/Academics				
3.Sports				
4.Religious				
5.News				
6. Pornographic				
7.Military				
8.Commercial and Fashion				

3. SEARCH-ENGINES/PATHWAYS USED BY FEMALE UNDERGRADUATES

HOW OFTEN DO YOU USE THE FOLLOWING SEARCH-ENGINES AND PATHWAYS ON THE INTERNET?	**Very Often**	**Often**	**Rarely**	**Never**
Yahoo				
Google				
Alvista				
Dogpile				
Directories				
Ask				
Social networks (Facebook, Twitter, You-Tube, Skype, LinkedIn)				

4. TIME SPENT ON THE INTERNET BY FEMALE UNDERGRADUATES

HOW OFTEN DO YOU USE THE INTERNET?	Everyday	Always	Once a week	When the need arises	Hardly	Not at all

5. THE INTERNET ACCESS POINTS USED BY FEMALE UNDERGRADUATES

HOW OFTEN DO YOU USE THE FOLLOWING INTERNET PATHWAYS?	**Very Often**	**Often**	**Rarely**	**Never**
Internet Café				
Wireless Hot spots on the Campus				
Wire Ports in Staff and Lecturers' Offices				
Lecture Rooms and Conference Halls				
University e-library				
Subscription Modems				
GSM Phone/Handsets, iphone, ipad,				

6. CONSTRAINTS FACED BY FEMALE UNDERGRADUATES USING THE INTERNET

Strongly Agree=1, Agree=2, Neutral=3, Disagree=4, Strongly Disagree=5

WHAT CONSTRAINTS DO YOU FACE USING THE INTERNET	**1**	**2**	**3**	**4**	**5**
Slow Internet Access					
Too long to download materials					
Electricity failure					
Difficulty in finding relevant information					
Important Websites in subject area not known					
Air time too expensive					
Internet connectivity always off					
I have poor computer skills					