NIGERIAN UNIVERSITY STUDENTS' INTERNET USES AND GRATIFICATIONS: A STUDY OF TWO SELECTED INTERNET ACCESS POINTS

BY

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BY

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

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DECLARATION

I declare that the work in this Thesis entitled NIGERIAN UNIVERSITY STUDENTS' INTERNET USES AND GRATIFICATIONS: A STUDY OF TWO SELECTED INTERNET ACCESS POINTS has been carried out by me in the Department of Mass Communication. The information derived from the literature has been duly acknowledged in the text and a list of references provided. No part of this thesis was previously presented for another degree at this or any other Institution.

EMMANUEL, Nathan Oguche	**Signature**	**Date**

CERTIFICATION

This thesis entitled NIGERIAN UNIVERSITY STUDENTS' INTERNET USES AND GRATIFICATIONS: A STUDY OF TWO SELECTED INTERNET ACCESS POINTS by EMMANUEL NATHAN OGUCHE meets the regulations and standards governing the award of the degree of Masters of Science (M.Sc.) in Mass Communication of the Ahmadu Bello University, and is approved for its contribution to knowledge and literary presentation.

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DEDICATION

To all those who strive to make their inherited world a better place for the inheritance of future generations and to those who, not by their own making, have no access to the internet – the digitally marginalized groups in the society.

ABSTRACT

Nigerian university students have become receptive to Internet technology. However, literature indicates that there are sparse studies on how and why the students make use of this technology. The few studies on Internet uses and gratifications were conducted in the context of America, Europe and India. This research looks at Nigerian university students' Internet uses and gratifications with specific attention to two Internet access points – cybercafé and *MTN Universities Connect* in Ahmadu Bello University, Zaria and University of Benin, Edo State. Using a survey method, 350 copies of questionnaire were purposively administered and the results of the two-paired sample t-test shows discernible statistically significant differences between cybercafé and MTN Universities Connect uses. Also, the study applied an Exploratory Factor Analysis (EFA) to compare the gratifications of the two Internet access points. Applying Kaiser Criterion, all factors that had the eigenvalue of > 1.0 were retained. Through varimax rotation method, the factor analysis generated two and three gratification dimensions for *MTN Universities Connect* and cybercafé respectively. This study is therefore a demonstration of the fact that Internet access point (technology) is a predictor for Internet uses and gratifications.

TABLE OF CONTENTS

Cover page - - - - - - - - i
Fly leaf - - - - - - - - - ii
Title page - - - - - - - - - iii
Declaration - - - - - - - - - iv
Certification - - - - - - - - - v
Acknowledgements - - - - - - - - vi
Dedication - - - - - - - - - viii
Abstract - - - - - - - - - ix
Table of content - - - - - - - - x
List of tables - - - - - - - - xii
List of figures - - - - - - - - xiii
List of appendices - - - - - - - - xiv

CHAPTER ONE: INTRODUCTION

1.1 Background of the study - - - - - - 1
1.2 Statement of the problem - - - - - - 5
1.3 Research questions - - - - - - - 6
1.4 Research objectives - - - - - - - 7
1.5 Significance of the study - - - - - - 8
1.6 Scope of the study - - - - - - - 9

CHAPTER TWO: LITERATURE REVIEW

2.0 Introduction - - - - - - - - 10
2.1 Conceptual review - - - - - - - 10
2.1.1 The Internet phenomenon - - - - - - 11
2.1.2 Internet access and connectivity in Nigerian universities - - 14
2.1.3 State of Internet and ICTS in Nigerian universities - - - 17
2.1.4 The *MTN Universities Connect* Library - - - - - 20
2.1.5 The use and abuse of Cybercafé by the youths - - - 22
2.2 Empirical studies on gratifications of Internet uses - - - 24
2.2.1 Uses and gratifications of Internet medium - - - - 25
2.2.2 Internet uses, gratifications and users' demography - - - 27
2.2.3 Internet uses, gratifications and other media - - - - 29
2.3 Theoretical framework: uses and gratifications theory - - 31
2.4 Evolvement and tenets of uses and gratifications theory - - 34
2.5 Critique of the uses and gratification theory - - - - 37
2.6 The applicability of the theory to current study - - - 38
2.7 Gap in literature - - - - - - - 39

CHAPTER THREE: METHODOLOGY

3.0 Introduction - - - - - - - - 41
3.1 Research design - - - - - - - 41

3.2 Population - - - - - - - - 41
3.3 Sampling techniques - - - - - - - 42
3.4 Data collection instrument - - - - - - 43
3.5 Method of data presentation and analysis - - - - 43
3.6 Measurement of variables - - - - - 44
3.7 Reliability testing - - - - - - 45

CHAPTER FOUR: DATA PRESENTATION, INTERPRETATION AND ANALYSIS

4.0 Introduction - - - - - - - 46
4.1 Data presentation - - - - - - 46
4.2 Demographic characteristics of users - - - - - 47
4.3 Internet uses index across access points - - - - 50
4.4 Patterns of usage of the internet - - - - - 52
4.5 Satisfaction index of internet users - - - - - 56
4.6 Gratification dimensions across access points - - - 58
4.6.1 MTN universities connect users' motives - - - - 58
4.6.2 Cybercafé users' motives - - - - - - 59
4.7 Interpretation of factors and factor labeling - - - - 60
4.8 Internet access points index - - - - - 63
4.9 Discussion of findings - - - - - 64

CHAPTER FIVE: SUMMARY, CONCLUSION, AND RECOMMENDATION

5.0 Introduction - - - - - - - 69
5.1 Summary - - - - - - - 69
5.2 Conclusion - - - - - - - 70
5.3 Recommendations - - - - - - 71
5.4 Suggestions for further studies - - - - - 71

REFERENCES - - - - - - - - 73

APPENDIX - - - - - - - - 84

LIST OF TABLES

Table1:	Sex distribution of respondents - - -	45
Table 2:	Age distribution of respondents - - -	46
Table 3:	Educational distribution of respondents - - -	46
Table 4:	Distribution of internet users/non-users - - -	48
Table 5:	Descriptive analysis for *MTN universities connect* uses-	49
Table 6:	Descriptive analysis for cybercafé uses - - -	54
Table 7:	Descriptive analysis of users' satisfaction- - -	56
Table 8:	Total variance explained for MTN universities connect -	57
Table 9:	Total variance explained for cybercafé - - -	58
Table 10:	Gratifications for cybercafé uses (after extraction) -	59
Table 11:	Gratifications for universities connect (after extraction)-	60

LIST OF FIGURES

Figure 1: Respondents' Internet Skills - - - - - 47
Figure 2: Internet (*MTN Universities Connect*) Uses Index - - 48
Figure 3: Internet (Cybercafé) Uses Index - - - - 50
Figure 4: Frequency of Internet Usage across Access Points - - 51
Figure 5: Satisfaction Index of Respondent - - - 55
Figure 6: Preferred Internet Access Points - - - - 62

LIST OF APPENDIX

APPENDIX I: QUESTIONNAIRE - - - - - 83

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Today's society is regarded as an information-based economy; a place where information is traded like commodity. Information is thus regarded as a major force of civilization, either in terms of technological advancement, human capital development or socio-cultural transformation. The evolvement of Internet has brought about the emergence of an enhanced society, through auto-aided human capacity or what Castells (2004:8) describes as *informationalism*, "a technological paradigm based on the augmentation of the human capacity of information processing and communication made possible by the revolutions in microelectronics, software and genetic engineering. Computers and digital communications, *especially the Internet* are the most direct expression of this revolution" (italics mine). Internet, being one of the twenty-first century world's greatest technological revolutions, is an augmentation of "human capacity"; it provides a wide range of possibilities in the new world order where information has become an essential commodity. Through its numerous and vast electronic resources, the Internet provides a pool of opportunities to individuals, groups, organizations and institutions. The Internet can therefore be described as one of the most versatile technologies in human history because information about virtually all aspects of human endeavors can be retrieved from it. More so, there is virtually no aspect of human life that has not been affected, either negatively or positively, directly or indirectly by the Internet. Educational institutions which are the hub

of knowledge and information are equally taking advantage of this great revolution of the 21st century.

Before the Internet revolution in the 1990s, libraries all over the world depended mostly on print materials as means of storage, dissemination and retrieval. But today, digital library as against the traditional library has become more relevant to the contemporary society because of its numerous resources and flexibility through the Internet technology. The resources of digital library are situated in the cyberspace and are available to multiple users operating and accessing it from different locations both synchronously and asynchronously. Virtual or digital library can therefore be described as the library without borders or library without walls because the Internet, which is a major drive of a digitalized library, has shriveled the limitations of time, space, speed and access.

In Nigeria, serious application of information technologies to library processes did not start until the early 1990s after individual efforts at library automation at University of Lagos, University of Ibadan, and the Ahmadu Bello University (ABU), Zaria in 1970s and 1980s had failed largely due to lack of technical know-how (Alabi, 1987). Since then, tertiary institutions in Nigeria have been striving hard to catch-up with their contemporaries in developed countries. However, there are varied opinion on the extent and pace of adoption of Internet by Nigerians.

While some people believe that Nigerians are progressively embracing the new opportunities provided by Internet revolution, others are of the opinion that the extent of adoption and utilization of Internet is abysmally low compared to what is obtainable in developed countries. For instance, Akintunde (2006) opines that many libraries in Nigeria are still down with the traditional patterns of information management where the librarians

are in charge of every point of service delivery. In other words, libraries in Nigeria are yet to fully explore and capitalize on the potentialities of Internet technologies as many of them still operate in a traditional way. Instead of approaching the old problems of information overload in a new way by exploring and harnessing the many possibilities associated with new technologies, many libraries in Nigeria are still unfortunately limited by space. No wonder, as at the early beginning of the 21st century, only few tertiary institutions in Nigeria were connected to the Internet (Agboola, 2000).

Though, the deregulation in the telecommunications sector has increased the quality of services and access, but Nigeria still lags far behind many developed countries in terms of Internet access. The inevitable implication of the above situation is an observable 'digital divide' (the disparity between those who have access to information technologies and those who do not) in the tertiary institutions in Nigeria. However, this phenomenal digital divide is much more complex than accessibility and connectivity. The developed nations have advanced beyond defining digital divide on the basis of access. According to Cho, Dezunga, Rojas and Sha (2003) though an increasing number of citizens use the Internet for communication, entertainment, shopping, and information, simple "connectedness" focusing on Internet access and time spent online is no longer sufficient to gauge a "divide" that characterize the digital world; it is a sociological phenomenon reflecting broader social, economic, cultural, and learning inequalities. In essence, while the issue of access is necessary, it is not a sufficient measure of divide that permeates the digital world.

In an attempt to computerize their operations, libraries in Nigerian universities are faced with different problems which include inadequate manpower, and lack of spare parts; a development that has limited the operations and activities of these libraries (Ogunshola

and Abayode, 2005). These numerous problems are largely due to their overdependence on government funding (Chesenga, 2000). The reduction of government funding should however propel schools and library administrators to embrace Internet-based learning. Accordingly, Internet-based learning is a swift reaction to consumer demand and reduction of funding by the government because the cost of publishing, purchasing, and storing printed materials is exponentially high (Jagboro, 2003).

Covi and Cragin (2004) observed that students and lecturers in tertiary institutions in Nigeria have increasingly demanded and favored access to electronic sources and networked information from their respective libraries. Similarly, a study found that lecturers perceive the Internet to be more useful than university library (Ojedokun and Owolabi, 2003). Oyewusi and Oyeboade (2009) in agreement with the above finding observe that researchers in Nigeria prefer Internet resources to library resources because the former provides up to date information and allows faster retrieval of information from numerous sources. In addition, the Internet can provide information which most libraries cannot provide from their shelves (Adomi, Omodeko and Otolo, 2004).

Agboola (2000) points out that the greatest impetus to library automation in Nigerian university libraries so far has come from the World Bank. However, recent developments show that corporate organizations in Nigeria are becoming increasingly interested in ICT development in Nigerian tertiary institutions. For instance, MTN Nigeria, one of the leading telecommunication companies in Nigeria, has initiated a programme called the MTN *Universities Connect*, a virtual library project that caters for the virtual needs of the university community. Olatunji (2009) while quoting Ambassador Hamzat Ahmadu, the Chairman of MTN Foundation said that the *Universities Connect* was

fashioned and designed to bridge the digital and knowledge divide by giving students wide access to online and world class research materials. This programme is one of the ways through which MTN Nigeria enriches lives and an evidence of her interest and commitment towards building a conduit that will balance the existing digital and knowledge divide that characterizes the Nigerian tertiary institution environment.

MTN Universities Connect Library is one of the Internet access points in four federal universities in Nigeria, including Ahmadu Bello University, Zaria (Kaduna state), University of Lagos (Lagos state), University of Nigeria, Nsukka (Enugu state) and University of Benin (Edo state). Other Internet access points in most universities in Nigeria include University ICT centres, personal computer, wireless, and cybercafé. However, among these various Internet access points, cybercafé is becoming the most preferred because they are open for long hours, reasonably economical, provide technical assistance to users, usually flexible and provide diverse services to customers (Sairosse and Mutula, 2004).

1.2 Statement of the problem

Internet, just like most technologies, is a two-edged sword – it can be used both positively and negatively. In fact, the very attributes of Internet that heralded its positive use can equally be thwarted in a negative dimension. As medium of communication, Internet technology has changed the pattern of relationship in the society, created a new form of addiction and made geographical distance irrelevant (Castells, 2001) but research about this medium has been sparse compared to its rate of diffusion (Choi, Watt, Dekkers and Park, 2004).

Most studies on how and why students make use of the Internet technology are mainly in the context of developed countries. For instance, Stafford, Stafford and Schkade (2004) conducted it in the American context while Kargaonkar and Wolin (1999) and Roy (2008) conducted it the context of Europe and India respectively. In America, Stafford, Stafford and Schkade (2004) identify process, content and social gratifications, while Roy (2008) identify "relaxation" as one dominant factor through out the Internet uses and gratifications in India. While the above studies focused on the students' uses and gratifications of Internet at the broader level, the current study was conducted at a narrower level, with emphasis on two different Internet access appoints – *MTN Universities Connect* Library and cybercafé. Perse and Courtright (1993) had used similar approach to study the normative images of mass media and interpersonal communication channels.

In Nigeria, the evidence for the growing importance of the Internet in the university system is the increasing rate of acquisition of computers and other information technologies (including VSATs), for use by staff and students (Olakotun, 2007). Considering this ever-increasing importance of the Internet among university students in Nigeria, it becomes imperative to understand the range of activities and associated motivations related to the technology.

1.3 Research questions

In order to investigate the relationship between the Internet access points and its uses and gratifications, the following research questions were put forward:

RQ1. What are the demographic characteristics of Cybercafé and *MTN Universities Connect* users?

RQ2. What are the gratification motives for using *MTN Universities Connect* and cybercafé and does it vary by access point?

RQ3. What use do the students put MTN Universities Connect and cybercafé to and is there difference in their uses?

RQ4. To what extent are students satisfied with the Internet resources of cybercafé and *MTN Universities Connect* and is there difference?

RQ5. What is the most preferable Internet access points among the students and why the preference?

1.4 Research objectives

The broad objective of this study was to uncover Nigerian university students' uses and gratifications of cybercafé and *MTN Universities Connect* library with emphasis on the Internet facility. Through this, the study provided deeper insight into the relationship between the individual Internet user and the Internet access point he or she uses. However, the study's specific objectives were to:

1. Identify the demographic characteristics of cybercafé and *MTN Universities Connect* users.
2. Identify students' uses of cybercafé and *MTN Universities Connect*.
3. Examine the differences between the Internet gratification motives for *MTN Universities Connect* uses and cybercafé.
4. Find the extent of students' satisfaction of cybercafé and *MTN Universities Connect.*
5. Determine preferred Internet access point and why the preference.

1.5 Significance of the study

This study's findings and recommendation would be found useful to information experts, librarians, researchers equally, and those who want to invest in ICTs, to gain a better understanding on how best to approach and explore the potentials of Internet in an information-driven environment like the university. Answers to who is using the Internet, and how frequent do students go online, are imperative for policy makers, government, corporate organizations and other stakeholders who want to embark on a mission that would ameliorate the information challenges in Nigerian universities. It is also a step to assess the value of *MTN Universities Connect,* an ICT initiative by MTN Nigeria in comparison with cybercafés. The findings will therefore help in the design and improvement of policies aimed at fostering the adoption, acceptance, and patterns of usage of the Internet services provided by the *MTN Universities Connect* libraries in Nigerian federal universities and other similar projects that are geared towards enhancing students' access to Internet facilities. Once we understand factors that motivate students to utilize the Internet resources in academic environment, we can design incentive packages that encourage educational use of the infrastructure and discourage use that distracts students from their academic goals and desires.

Furthermore, the research on students' uses of Internet resources in Nigerian universities has important implications for local, state and local policy and funding initiatives. The study will therefore help potential investors on how best to fashion and develop their ICT policies in the context of the needs of the students. The findings will also help to harness the current trends in the Uses and Gratifications Theory in the context of new media (Internet) taking into consideration the various Internet access points. It will

therefore provide a new insight into the Uses and Gratifications theory in Nigerian context thereby shaping future researches in this area. Hence, understanding the Internet gratification motives of *MTN Universities Connect* library and cybercafé is critical in the appreciation of the impact of Internet technology on Nigerian universities students.

Finally, this study provides additional value to the age-long theory of uses and gratification in the context of new media (new media)..

1.6 Scope of the study

This study explored the ways and patterns university students in Nigeria utilize the Internet resources of *MTN Universities Connect* library and cybercafé, taking into cognizance the various gratifications that precipitate their uses and gratifications. The study investigated cyber café and *MTN Universities Connect* users in tertiary institutions in two universities in Nigeria – Ahmadu Bello University, Zaria, Kaduna State and University of Benin, Edo State.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

In order to establish the relationship between the Internet access points and their uses and gratification in the context of Nigerian University, review of literature was made in the following areas: First, this section of the review will shed light on what necessitated the establishment of *MTN Universities Connect* and why cybercafé business is burgeoning in Nigerian universities' environment. Secondly, since the research was done in Nigerian context (university environment), the review of the state of Information and Communication Technologies (ICTs) in Nigerian universities would equally be done in order to establish a technical chord between the study and Nigerian realities. Finally, the review would concentrate on the Internet uses and gratifications and historical development of Uses and Gratifications approach to mass communication was discussed and how the theory has been used to study the new media (Internet) was also established. Hence, the review was done in terms of conceptual, empirical and theoretical dimensions.

2.1 Conceptual Review

The conceptual review of the literature put the various related concepts in perspectives. The review shed light on concept of Internet and the evolvement of Internet technology in Nigerian tertiary institutions w also reviewed. The conceptual review also looked at the status of Internet connectivity in Nigerian tertiary institutions.

2.1.1 The Internet phenomenon

The 21st century society is information driven and comprises of community of people who are hungry and thirsty for information. Within the social and economic configurations, information technologies or Information and Communication Technologies (ICTs) play significant roles. These information technologies have become so pervasive to the extent that any segment, organization or individual that is not in tune with them is often adjudged 'backward'. The Internet has fostered the process of making the world a global village (Ureigho, Oroke and Ekruyota, 2006). Therefore, to operate optimally in the global village, access to the Internet is very important.

What is today known as Internet used to be known as ARPAnet, a project that was funded by the United States of American Government's Advanced Research Project Agency. ARPAnet is a network of computers. The history of Internet began as far back as 20th October 1969 when the first Internet message was sent. Accordingly, researchers at the University of California, Los Angeles and the Stanford Research Institute (San Francisco) had connected two mainframe computers and were able to send the letters "L" and "O", the beginning of "LOGIN" before the computer crashed (Stringer, 2005). It was Charley Kline that sent these two words (Coffman and Odlyzko, 2000). It was the trio, Jon Postel, Steve Crocker and Vinton Cerf, whom while working for the University of California at the time that championed the development and functionality of ARPAnet. By 1971 and 1972, ARPAnet had grown exponentially, with the connection of eleven nodes and twenty-two more respectively and by 1973 the network had expanded outside the United States of America into Europe (Stringer, 2005).

Today, the Internet means network of interconnected millions of smaller, domestic, academic and government networks which allow collaborative interactions between individuals without geographic limitations (Singh, 2002). It is a global network of interconnected computers that allows individual users to access information along multiple points (Adeniran, 2008). A majority of widely accessible information on the Internet consists of inter-liked hypertext documents and other resources of the World Wide Web (WWW) (Adeniran, 2008). In a more comprehensive conceptualization, McQuail (2005:558) defines the Internet as:

> The worldwide system of interconnected networks, using the telecommunications infrastructure that now supports a large number of types of computer-based communication exchanges, including consultation of databases, websites and homepages, conversational interactions, e-mail, many kinds of electronic commerce and financial transactions.

The Internet, no doubt is an American invention. No wonder, in the mid-1990s when the technology was still at its infant stage, nearly 70 per cent of the users resided in the North America (Raacke and Bonds-Raacke, 2008). However, by 2005, this number had dropped to 30 per cent (Lievrouw, 2000). This shows the rate of diffusion of the technology. Today, according to the United Nations Agency, the number of Internet users worldwide grew from 400 million to over two billion between 2000 and 2010 (Adaramola, 2011). The Internet provides a wide range of applications to its over two billion users and such applications include electronic mails, online gaming and chatting, electronic transactions, World Wide Web, downloading, file sharing and transfer among other information resources.

The Internet is at the heart of the new Information Technologies (IT). In the words of Tella (2007) Information Communication Technologies are information handling tools

that are used to produce, store, process, distribute and exchange information and they include conventional information carriers like radio, television, and telephone and the new ones such as computers, satellite, wireless technology and Internet. To Achimugu, Oluwagbemi, Oluwaranti and Afolabi (2009), Information Technology is a form of information exchanges that is made possible through several method of interconnection. All these interconnections work together to form networked world – a massive infrastructure of interconnected world telephone services, standardized hardware, the Internet radio, and television, all reach every corner of the globe (UNDP Evaluation Office, 2001).

Information Communication Technologies (ICTs) is synonymous to IT and both are sometimes called the 'new media', which is defined as "disparate set of communication technologies that share certain features apart from being new, made possible by digitization and being widely available for personal use as communication device" (McQuail, 2005:138). Example of such includes the "Internet, especially on the more public uses, including online news, advertising, broadcasting applications (including downloading of music, etc), forums and discussion activities, the World Wide Web and certain community-forming potential" (McQuail, 2005:138).

When the issue of connection and interconnections are raised in ICTs, it refers to the Internet because Internet technologies provide speedy, inexpensive and convenient means of communications among users who are dispersedly located all over the world. Hence, Internet is a major force of change in higher education and the major vehicle of scholarly communication (Al-Ansari, 2006) and represents one of the most rewarding examples of unremitting investment and commitments to research and development of information infrastructure (Howe, 2007). The Internet has arguably, made Marshall

McLuhan's prediction of a 'global village' more palpable and visible, not just in the domain of communication but in virtually every sphere of human Endeavour – science, medicine, technology, humanity, engineering etc. With Internet technologies, the world has become borderless and boundless; its proliferation is bringing a great transformation in virtually every sphere of life.

However, it is a known fact that Internet, just like any technology is a two-edged sword – it can be used both positively and negatively. In fact, the very attributes of Internet that heralded its positive use can equally be thwarted in a negative dimension.

2.1.2 Internet access and connectivity in Nigerian universities

The Internet has made its presence known in Nigerian university environment. This is seen in the manner university students have incorporated it into their learning experience. This is however a global phenomenon because most universities, polytechnics and colleges of education all over the world have established their presence on the Internet and this development according to Jagboro (2003), is making researchers to have access to the past and current research materials. Through its computer mediated communication tools, the Internet provides the individual with access to a broad spectrum of information and unique communication technologies (Wells, 2000). For the universities in developing countries to play their roles as centers of academic excellence, excellent Internet access is of necessity, and that means Universities school provide more access points to the students and the staff.

Access in communication process or system according to McQuail (2005:547) "refers to the possibility either for a sender to reach a chosen audience or for an audience to receive certain messages or channel…it mainly relates to the degree of openness of media channels to a wide range of voices, especially those with little power or limited resources."

Internet access therefore, is a means by which users are connected to the Internet (Tella, 2007). The following are the common Internet access points in Nigerian University environment; cybercafé, the University's Information Technology (IT) centers, WLAN (Wireless Local Area Network), personal computer (modem), and office place and more recently, mobile phones.

One of the problems associated with Internet use in Nigerian universities is always that of access. There is therefore an observable information gap in terms of Internet access between developed countries and the developing ones. Hence, to really and fully harness the potentialities of Internet in the academic environment the problem of access must be addressed.

Available literature on the history of Internet in Nigeria reveal that Internet really started in Nigeria in the late 1990s (Eshekels Associates, 2001) and has long been linked to the university education (Anyira, 2011). According to Adomi (2005), in July 1995, the Regional Information Network of Africa (RINAF) commenced Internet services at the Computer Science Department of Yaba College of Technology in July 1995. However, it could not be established if this was the first Internet service in Nigerian tertiary institution.

Echezona and Ugwanyi (2010) identify the following types of Internet connectivity in African universities: Dial up, leased line fiber, leased line radio link fiber, leased line wire and VSAT. However, these access and connectivity are generally poor, unreliable, scarce and expensive (Aluoch, 2006). In a study of 2006 African Tertiary Institutions Connectivity Survey (ATICS), it was found that universities in Africa on average paid about U.S $40.5 per kilobits per second (kbps) per month and some universities paid as high as U.S $36 kbps for bandwidth. This figure according to the study is high compared to

North American countries that are on megabit and Gigabits speeds but pay less (Aluoch, 2006). All these have made the Internet access in Africa and indeed Nigeria, low and limited.

In a study of Internet access and utilization by the students at the University of Botswana, it was found that inadequate computers that are connected to the Internet denied the students of access to Internet facilities (Ojedokun, 2001). Jagboro (2003), in a study of Internet access in the Obafemi Awolowo University, Ile Ife (Nigeria) revealed that 22.06 per cent of Internet users access it on a daily basis, 38.24 per cent weekly, and 11.76 monthly. In a similar study conducted in New Zealand, it was found that 73 per cent of the students access the Internet on a daily basis while 25 per cent access it at least once in a week (Waldman, 2003). This shows a great disparity in Internet access between Nigeria and developed countries.

Adeya and Oyeyinka (2002) observe that the level of Internet access in Nigeria is far below that of developed countries. In the later 2003, Nigeria had a total of 750,000 Internet users (ITU, 2004). As at June, 2009, the figure rose significantly as Nigeria had about 11 million Internet users, representing about 5400 per cent increment from 200,000 in December, 2000 (Internetworldstats, 2009). According to the International Telecommunication Union, as cited by Internetworldstats (2013), there are estimated 2.7 million Internet users worldwide and the figure revealed a digital divide by gender and economic development. For instance, according to the figure, more men than women make use of the Internet, 37% of women are online, compared with 41% of all men. Also, according to the data, in the developed countries, the gender divide is smaller compared to

that of developing countries. All these figures are indications that there is a digital divide between the developed and developing countries.

In terms of Internet access, studies have shown that the younger generations in comparison with the older generations, are more positively inclined towards Internet use and utilization. Loges and Jung (2001) demonstrated a significant difference between old and young Americans in terms of Internet access and that there is a tendency for the younger groups to pursue a more narrow range of personal ambitions. To avoid abuse and unhealthy use of the Internet among the young ones, therefore, the narrow ranges of Internet utilization patterns of these young ones should be closely examined (Krauk, Patterson, Lundmark, Kiesler, Mukhopadhyay and Scherlis, 1998). Aside age there are other factors that affect Internet access and connectivity, such as; inadequate communication infrastructure, poverty, relatively high cost of equipment, lack of government interest and problem of technical know-how (Ahiakwo, 1998; Jensen, 2002; Adomi, 2005b; Achimugu, Oluwagbemi, Oluwaranti and Afolabi, 2009).

2.1.3 State of Internet and ICTs in Nigerian universities

With all the possibilities and potentialities of modern ICTs, the critical question now is what is the state of ICT in Nigerian tertiary institutions? Available literature reveals that most universities in Nigeria have embraced the modern Information and Communication Technologies (Covi and Cragin, 2004; Ogunsola and Aboyade, 2005; Womboh and Abba, 2008). However, tertiary institutions in Nigeria display varied degree of development in their deployment of ICT (Akintunde, 2006; Womboh and Abba, 2008). For instance, Fabunmi (2009) laments over the virtually non-existent state of libraries in Nigeria universities not because they do not exist in real sense but due to the fact that the libraries

are narrow in orientation. The libraries are also stocked with outdated books, inadequate collections which are basically undermined by poor funding (Atinmo, 2006).

Different studies reveal that most universities and libraries in Nigeria are at the infant stage of their ICT development. A study by Gbaje (2007) reveals that only 19 universities in Nigeria have functional website and web pages while only 10 schools out of these 19 universities have web pages dedicated to their library. Akintunde (2006) observed that only few universities such as Ahmadu Bello, University of Benin, University of Lagos, Bayero University, University of Ibadan, University of Nigeria, Obafemi Awolowo University and University of Jos were making appreciable efforts in ICT development. For universities in Nigeria to measure up to global standard and expectation, they must discard the traditional means of information management that involves stocking old and dusty books in the shelf; they should embrace the limitless opportunities that Internet technology provides. The truth is that the old and traditional way of information management where books are massively stocked in dusty shelves is becoming obsolete. The libraries of the future are not those that are constrained by space or distance but are those that are in tune with the current trends in ICT; those that are located and situated in the cyber-space. This is the reason why experts have at different times suggested virtual library as a crucial solution to the dearth of information and research in the developing countries. For instance, Okebukola (2002) observes that virtual library would improve the quality of teaching and learning in Nigerian tertiary institutions because both the learner and the teacher would have speedy access to the current e-books, journals and other virtual resources. Hence, for the intellectuals in Nigeria to have their voices heard and their researches read and

accessed, the government, private organizations and individuals must invest in ICT development in Nigerian tertiary institutions.

The libraries in the tertiary institutions of most developing countries are thirsty of people and instructional materials. People point at different reasons why libraries in developing countries like Nigeria are in deplorable state. Some of these factors are inadequate funding (Ogunsola and Okusaga, 2006); inadequate technological infrastructure to support the integration of ICTs in the curricula (Manda, 2006); high cost of acquisition of hard and soft wares (Olanike, 2009); lack of favourable ICT policy, low Internet connectivity, inadequate number of personal computers PC (Minishi-Masanja, 2007); external factors like power supply, transport networks, import duties, also impact on Internet services (Jensen, 2005).

However, recent developments reveal that the federal government of Nigeria and international funding agencies are having a growing interest in ICT development in Nigerian tertiary institutions (Ogunsola and Aboyade, 2005). For example, the federal government of Nigeria in collaboration with the Ministry of Education has embarked on the Virtual Library Project in thirteen universities with the aim of empowering its users to access electronically and up-to-date materials and journals, thereby equipping Nigerian students to compete favourably with their counterparts all over the world (Fabunmi, 2009). The objectives of the national virtual library project includes among others: improving the quality of teaching and learning by making available current books and journals; enhancing access to global information resources; enhancing scholarship through permanent access to shared digital archival materials (Fabunmi, 2009).

In another development, international donor agency like Carnegie Corporation supports the establishment of scientific databases in the University of Ibadan and through grants from it and other agencies; and through grant from the same organization, Obafemi Awolowo University (OAU), Ile-Ife has been able to establish Information Technology and Communication Unit (INTECU) which is the major Internet provider on OAU campus (Ogunsola and Aboyade, 2005). In similar development, in 2002, the Emporia-Nigeria Project, a four year educational partnership between Emporia State University's School of Library and Information Management in Emporia, Kansas, USA a partnership led to setting up of ICT laboratory in the Department of Library and Information Science, Ahmadu Bello University, Zaria (Shiloba, 2005). The objectives of the partnership were the establishment of communication and telecommunication infrastructure for teaching and learning; and to provision of opportunity for the teaching staff to expand their knowledge and skills in ICT (Shiloba, 2005).

Hezekiah Oluwasanni Library of Obafemi Awolowo University, Ile-Ife and the University of Jos library are currently involved in an African-wide project to digitize theses and dissertations originating from their institutions through the Association of African Universities Database of African Theses and Dissertations (DATAD) project (Jagbora, 2007). In essence, while the available literature reveals that most universities in Nigeria have embraced the Internet technology, but Nigeria still lags far behind developed countries in terms of Internet access.

2.1.4 The *MTN Universities Connect* Library

The *MTN Universities Connect* is an innovative project designed to provide digital access to information and infrastructure to Federal Universities in Nigeria. The *Universities*

Connect is a special programme fashioned and implemented by the MTN Foundation, an arm of MTN Corporate Social Responsibility (CSR). Being an ICT company, the thrust of the MTN Foundation education agenda is a fundamental commitment to the effective application of information technology in education.

The MTN Foundation is determined to invest in education such that the primary, secondary and tertiary levels of education are positively impacted. The objectives of the MTN Education Portfolio are as follows: To empower through the provision of information and technology resources; to enable skills acquisition, transfer and development; to raise national literacy levels; to provide educational resources for effective learning and to enhance educational infrastructure development (www.mtnonline.com/univeritiesconnect: 2011). Olatunji (2009) while quoting Ambassador Hamzat Ahmadu, the Chairman of MTN Foundation, said that the *Universities Connect* was fashioned and designed to bridge the digital and knowledge divide by giving students wide access to online and world class research materials.

MTN Universities Connect facilitates access to a collection of digital resources from over 5,500 libraries to assist university students and lecturers with research work. The project is implemented in partnership with Net library Nigeria Limited. The beneficiary schools of the *Universities Connect* for Phase 1- University of Lagos, Akoka, Lagos State; Phase 2- Ahmadu Bello University, Zaria, Kaduna State; Phase 3- University of Nigeria Nsukka, Enugu State and phase 4 – University of Benin, Edo State.

The scope of *MTN Universities Connect* varies from institution to institution. For instance, phase four beneficiary – University of Benin, Edo State – the scope is as follows: 128 networked computers; 3 servers; 2 high capacity printers and 100KVA generator,

VSAT equipment and internet connectivity bandwidth with 2 years subscription; 2 years subscription to electronic resources through the Net Library network (Journals, Books, etc); conducive study environment through space renovation, provision of adequate lighting, furniture, and alternative power supply; technical training for 12 members of existing library staff to work with Net Library over 2 years to build capacity; one-week library awareness to be held annually for students and lecturers; one-week awareness workshops to be held annually for approximately 600 students and 120 lecturers; initiate a 5–year maintenance contract with the University to ensure a conducive environment with a clear sustainability strategy and two years comprehensive insurance cover to take care of theft and fire (www.mtnonline.com/univeritiesconnect: 2011)

2.1.5 The use and abuse of cybercafé

Cybercafé or Internet café or PC café is a place where Internet services are accessed for a fee (Adomi, Okiy and Ruteyan, 2003; Carlson Analytical, 2004). These cybercafés have sprung up in major cities with majority of them situated in cities that have educational institutions and big commercial business centers (Achimugu, Oluwagbemi, Oluwaranti, Afolabi, 2009). Abdulkareem (2010) observes that Internet use is becoming increasingly popular in Nigerian cities and this has necessitated the spread of commercial cybercafés across the federation. These Internet cafés offer Internet access at affordable rates (Omotayo, 2006).

According to Kolawole (2008), Internet connectivity in Nigeria has been greatly enhanced by mobile phone service providers through the use of GPRS (General Packet Radio Service) to the extent that cybercafés have become so popular that there are now at least two privately owned and operated cybercafés in every major street in most Nigerian

cities. However, the fecundity of Internet access points across the nations has brought some challenges to the country. For instance, Nigeria has suffered a great image problem because the youths have turned the Internet into an avenue for perpetuating criminal activities as they have migrated from the street to the cyberspace (Longe and Chiemeke, 2008). This, according to Adeniran (2008), has also brought about the emergence of a new form of culture otherwise known as *yahooboys.*

Cyber-crimes are new form of white-collar crimes (Karofi and Mwanza, 2006) and they are broadly categorized into two: crimes that target computer networks directly and those that are facilitated by computer networks themselves (Ehimen and Bola, 2010). Arguably, the relationship between these two broad categories of cyber-crime can be said to be interdependent and mutually reinforcing. Hence, the very features that aid and facilitate these crimes can equally be victims of crime. Hence, three broad features of the Internet which help in accelerating online fraud are access, affordability and anonymity (Cooper, 1997). Specifically, Long and Chiemeke (2008) identify the following common cyber-crimes; hucksters, fraudsters, piracy and hacking. Cyber-crime depresses trade, investors' confidence and a clear danger to the security and posterity of a nation (Ribadu, 2007). For instance, in 2000, big businesses in the United States of America lost an estimated $10 billion to cyber-crime (Schaefer, 2005).

In his analysis of cyber-crime in Nigeria and its implications on business, Ribadu (2007) made the following assertions: the perpetrators are youths and thousands of unemployed but highly knowledgeable individuals; they are well connected through local insider conspiracy in the financial institutions locally as well as with Nigerian immigrants abroad; knowing full well that Nigerian enforcement process has become so vigorous they

have migrated to mostly West African and other African nations with weak enforcement mechanisms; they also use a mechanism of reshippers mostly in Dubai, the United Kingdom, and the West African way stations, and finally, they enjoy the fact that there are no cyber-crime laws in any of these African jurisdictions that they have chosen as their relay stations.

2.2 Empirical studies on gratifications of Internet uses

With the advent of the Internet, a technology that is arguably the most versatile medium of communication due to its amenability to time, distance, and space, communication scholars have suddenly shifted their attention from the traditional media to this new medium. Some studies have focused on the general uses and abuses of the Internet, while others are devoted to those motivational factors behind the Internet uses and abuses. Still, other studies focus on the motive gratifications of the Internet in comparison with the traditional media of communication. In essence, the research on the use of Internet are in two forms; while some studies entirely place premium on the medium itself, others lay emphasis on the Internet but in relation to the traditional media. Hence, the researcher has broadly categorized the literature on the Internet uses and gratifications into three areas: Uses and Gratifications of the medium; gratifications in relation to traditional media of communication and gratifications in relation to users' demographic characteristics. It should however be noted that these three broad categories are intricately interwoven, as sometimes researchers can make two or more of these categorizations, the focus of their studies.

2.2.1 Uses and gratifications of internet medium

The Internet is arguably the most versatile medium of communication in human history. Its emergence has only bolstered the "theoretical potency" of the uses and gratifications theory "by allowing it to stimulate productive research into proliferating telecommunications medium" (Ruggeiro, 2000:27). Early studies on Internet primarily focused on its general use. Charney (1996) investigated the Internet usage among university students. The finding revealed that Internet is used to get information, for entertainment, diversion, communication to view the sight and sound on the web. December (1996), in his study on the 'unit of analysis of Internet communication' identified communication, interaction and information as the three motivational factors for utilizing the Internet. Eighemey and McChord (1998) studied users of commercial websites and identified personal relevance, information involvement and entertainment values as the major precipitants for browsing through commercial sites. Kaye (1998) in a study of Internet usage among college students identified six motivational factors; including entertainment, social interaction, passing the time, escape, information and website preference. Korgaonkar and Wolin (1999) studied users of e-commerce websites and revealed seven gratification factors of which new among them were 'economic motivation', 'privacy', and 'transactional security'. Raacke and Bonds-Raacke (2007) evaluate how social network sites Facebook and MySpace has affected the manner people interact and identified the following gratification motives among others: 'to keep in touch with old friends', 'to keep in touch with current friends', 'to post/look at pictures', 'to make new friends', and 'to locate old friends'. Salau and Emmanuel (2012) investigated students' uses and perception of Internet (social media) and found that students use it mostly for "social connect" – to connect with existing and new

friends. Joinson (2008) investigate the uses and gratification of Facebook and identified seven gratification factors, including social connections, shared identities, contact, social investigation, social network surfing and status updating but users demography, site visit patterns and the use of privacy setting were found to be associated with different uses and gratifications.

Ferguson and Perse (2000) studied the relationship between Internet usage motivations and certain types of websites visited. The result revealed that search engine sites were strongly related to the information motivation and interaction sites were related to the entertainment motivation. Roy (2009), in a study of Internet Uses and Gratification in an Indian context identified the following gratification motives through factor analysis: "wide exposure" (the Internet broadens users' horizon); "career opportunities" (the ease with which one can seek new career opportunities); "user friendliness" (because it is easy to use); "self-development" (because the Internet enhanced their creativity and allowed them to take control of their lives); "global exchange" (chatting and keeping in touch with others) and "relaxation"

Mondi, Woods and Rafi (2008) applied Uses and Gratification Expectancy to investigate the influences of e-learning resources on students' perceived e-learning experience. The study found that there are significant relationships between uses and gratifications expectancy of the students and their e-learning experiences. In a cross-cultural study, Choi, Watt, Dekkers and Park (2004) compared the differences in gratification motives for Internet use among the high level of broadband Internet penetration and large web population (the Netherlands, South Korea and the United States) and identified 'information-seeking' and 'self-improvement' as the major factors across all

three countries and 'diversion' and 'online companionship' as strong secondary factors. However, the study also found that the composition of the factors differed greatly from country to country. For example, South Korean Internet users are different in terms of surveillance and guidance and information seeking, whereas in the United States of America and Dutch, there was no difference in the composition of the factors.

2.2.2 Internet uses, gratifications and users' demography

When it comes to Internet uses and gratifications, the issue of 'audience' or 'user' is very important. The question therefore is who are the audience and what is the relationship between these users and their gratification precipitants? Cho, Zuniga, Rojas and Shah (2003) explored the relationship between Internet uses and gratifications in the context of digital divide. The study found that Internet uses and gratifications differ across sub-categories defined by the demographic varieties of age and economic status. The results further revealed that users who are young and low in socio-economic status were more likely to utilize Internet to attain connection gratifications and regardless of age, both low and socio-economic category of users were likely to use the Internet to gratify their learning needs. Angleman (2000) explored the relationship between attitudes and opinion of Internet users and their pattern of utilization of the new medium. This study found that there is a significant difference between the way students view and perceive the Internet and their use of the medium. Earlier, Lin (1993) examined the viewing motives, activities, and satisfactions of adolescents in the emerging multichannel environment. The study found that strongly motivated viewers were more actively engaged in various audience activities throughout the viewing period and such audience received greater satisfaction afterwards.

Livati, Vassilopoulos, Lougos and Chorrianopoulos (2002) applied the uses and gratifications approach to categorize viewers' needs in the context of digital environment and the result revealed two categories of needs: instrumental and ritualized needs. The result further revealed that applications that are more suitable for the interactive television environment should aim at gratifying ritualized needs (entertainment and communication) while instrument needs such as information and transaction should only be included as add-ons to the ritualized needs.

One of the most important demographic factors when it comes to the issue of Internet uses and gratifications is gender. This issue has not been prevalent to a large extent (Roy, 2008). Weiser (2000) investigated gender differences in Internet patterns and preferences and found that more women are more likely to engage in communication that is aimed at maintaining personal connections, with family and co-workers. Ono (2003) found that men use online to pursue sexual interest while women were significantly less likely than men to use the internet at home. Teo and Lim (1997) also identified gender differences in terms of perceived ease of use of Internet, perceived usefulness and perceived enjoyment. On all these three dimensions, males were reported significantly mean score than their female counterparts.

Similarly, Taylor, Zhu, Dekkers and Marshall's (2003) study found that demographic and socio-economic factors such as gender, age, education, marital status are all factors that affect Internet access. In terms of generational difference, a study found that young adults spend more time using online communication and are more comfortable doing so as compared to older generations (Tyayer and Ray, 2006). Findings from Choi, Watt, Dekkers and Park 2004; LaRose, Mastro, and Eastin, (2001); Charney and Greenberg,

(2001); and Papacharissi and Rubin (2000) reveal that information seeking, amusement, surveillance, personal relationship, identity, establishing status are common gratifications received by Internet users.

2.2.3 Internet uses, gratifications and other media

Salua and Emmanuel (2012) argue Internet (social media) has greatly boosted the traditional pattern of communication (face-to-face communication) without necessarily abolishing the former. In a study conducted in the context of *mediamorphosis* theory, they found that social media is an extension of face-to-face communication; a situation where the two forms of communication coexist and work in ambivalent relationship. According to Findler as cited by Salau and Emmanuel (2012:28), there are "basically six fundamental principles" that provides a new insight into the emerging computer-mediated communication;

> coevolution and coexistence (that is, as newer media emerges, it becomes part and parcel of the communication system without necessarily abolishing the older media); metamorphosis (that is, new media emerging out of the existing ones); propagation (that is, the new media propagate the dominant traits of the old media); survival (that is, both the new and the old media are forced to adopt to the changes for their own survival); opportunity and need (these media must meet the political, social and economic needs of their adopters in order to survive); delayed adoption (it takes a long time for the new media to become a success commercially) (Salau and Emmanuel, 2012:28).

In other words, the Internet has dissolved the differentiations that exist among the traditional media of mass communication and has created a new order in mass communication process. In the era of Internet, of course, the audiences are not just passive recipients of media messages but they are also merchants of media contents. Audiences, for instance, do not just read newspapers or magazines, they do not just listen to radio or watch

television; they also participate and create their own contents. The question that infuriates every curious mind is: Can the Internet revolution diminish the 'traditional' media to channels of once upon a time? The emerging trends show that the new media have sometimes become an extension of the old media and at other times, alternatives to the old media. This development has brought some apparent trends which include "audience segmentation, convergence, increased audience control, multiple platforms, user-generated content and mobile media" (Dominick, 2009:18).

The Internet has changed the manner of operation of traditional media like radio, television, newspaper and even interpersonal communication. It has been found that the increased use of Internet as a communication tools has brought a new form of interaction (Raacke and Bonds-Raacke, 2007). Although, researchers are interested in the changes Internet has brought to the traditional media but these changes are unclear (Jere and Davis, 2011). Domingo and Heinonen (2008) reveal that Internet has a negative impact on the traditional media due to the inability of print media to monetize their online contents. Although recent study by Barthelemy, Bethel, Christiansen, Jarsvall and Kionis (2011) suggest that there is a clear indication that print media are moving towards monetizing their online contents in order to augment the revenue from the print advertising. Other studies suggest that the Internet is never a threat to the conventional media; it is rather a supplement and not a substitute to the traditional media (See O'Toole, 2000; Kink and Hess, 2008).

Nyland (2007) utilized Uses and Gratifications approach in combination with the Theory of Niche to investigate the use of social networking sites and how those gratifications compare with face-to-face communication and e-mail. The study identified

the following gratifications through factor analysis; gratification opportunities, social utility and entertainment. The study also found that face-face communication is best suitable for fulfilling media gratification. Jere and Davis (2011) on the other hand, compare the motivations for using magazines and the Internet among women's magazine readers in South Africa. While the study identified seven gratifications factors for Internet usage and six gratifications for magazine usage on one hand, it also revealed that magazine provided superior gratifications on more dimension of gratification factors than Internet.

2.3 Theoretical Framework: Uses and Gratifications Theory

Uses and gratifications theory provides a framework for explaining audience motivations for media usage. Historically, the theory had suffered a lot of setbacks based on misunderstanding and misconceptions of some of its basic tenets and assumptions. However, the emergence of Internet and other computer-mediated communication among other factors have restored confidence on the validity of this theory and its ability to provide deep insight into the understanding of media effect. While the Internet has helped in the advancement of the theory of uses and gratifications, the uses and gratification theory on the other hand has helped the society to understand the Internet as the most recent medium of mass communication. Uses and gratifications may be useful due to 'mutability' of the web (Newhagen and Rafaeli, 1996) and the diversity of its contents (Angleman, 2000).

Early mass communication theories were based on the assumption that media audiences are at the mercy of the message source and that the audiences take media messages hook, line and sinker. However, by the 1960s, this research had ceased to provide new sight (Baran and Davis, 2009). Over the years, researchers have shifted their attention

from these early theories which basically focused on the powerful effects of the mass media to a new paradigm that puts the audience above the producer of media contents. Thus, while early theories of media effect emphasized on media source (source-dominated), later theories focused on the audience (audience-dominated).

The Uses and Gratifications theory is audience-centric because it emphasizes on what the receivers are doing with the media rather than what the media are doing to the audience. The Uses and Gratifications theory therefore provided a strong challenge to the long-held assumption that said that media audiences are passive recipients of messages and it emergence provided a new dimension of conceptualizing the relationship between media producers (sender) and the audiences (receivers).

The uses and gratifications theory is recognized as one of the most influential theories in mass communication and media research (Roy, 2009). Though the theory has been in existence before the emergence of Internet technology but the Internet has made the theory more visible and relevant to the contemporary society. This is because the uses and gratifications theory has promoted the audience from its hitherto passive role to active role in the communication process and Internet technology further accentuates this role.

Uses and Gratifications theory "has always provided a cutting-edge theoretical approach in the initial stages of each mass communications medium: newspapers, radio, television, and now the Internet (Ruggiero, 2000:27), has been repeatedly cited as holding promise for the analysis of the new media (Angleman, 2000) and has been used for several studies on Internet (See Charney, 1996; December, 1996; Korgaonkar and Wolin, 1999; Ferguson and Perse, 2000; LaRose, Mastro and Eastin, 2001; Choi, Watt, Dekkers and Park, 2004; Joinson, 2008 and more recently, Jere and Davis, 2011).

Several studies on the uses and gratifications have dealt with virtually every form of mediated communication channels such as VCRs (Cohen, Levy and Golden, 1988); web uses (Charney and Greenberg, 2001; Kaye and Johnson, 2003); Cellular phone (Leung and Wei, 2000), e-consumer behavior (Luo, 2002) and mobile device (Stafford and Gillenson, 2004). A continuous use of medium means that such medium is gratifying specific needs. Researchers argue that although people's initial encounter with a medium might be coincidental, but continuous use of such medium would be highly unlikely if the medium did not provide them with specific benefits (Eighmey and McCord, 1998). Stafford, Stafford and Schkade (2004) identify three broad classifications of gratifications as perceived by the audience and these are: content gratifications, process gratifications and social gratifications. While content gratifications emphasize on the messages that the medium can transmit, process gratifications deal with the actual use of the medium itself and social gratifications have to do with social and interpersonal networking that the medium seek to gratify (Roy, 2008).

Primary predictors in uses and gratifications have been media variable such as channels, programme type or specific programme content (Dervin and Song, 2005) but gratifications received are better predictor of Internet use than gratification sought (Choi, Watt, Dekkers and Park, 2004). Tewksbury and Althaus (2000) investigated the difference between gratifications sought and gratifications received and found that the gratifications sought were significant predictors of gratifications obtained. Furthermore, there is an interaction between features provided by Internet context and its users' personal goals (Spears, Postmes, Lea and Wolbert, 2002). Hence, the gratifications of audience member

cannot go beyond the features the Internet medium provides. More aptly put, the medium may be the gratification.

2.4 The Evolvement and Tenets of Uses and Gratifications Theory

There is a general disagreement among communication scholars as the precise origin of the Uses and Gratifications Theory. Some mass communication scholars cite Payne Fund Studies, researches undertaken by the United States Motion Picture Research Council carried in the late 1920s as the progenitor of Uses and Gratifications theory (Ruggiero, 2000). Rosengren, Johnson-Smaragdi and Sonesson (1994) however argue that the Payne Fund Studies were primarily effect-oriented, propaganda studies as opposed to the traditional Uses and Gratifications Theory which focuses on research of individual use of the media. Baran and Davis (2009) recognised Herta Herzog's work which was published as early as 1944 as the first published research that provided a deep insight into the Uses and Gratifications theory. Herzog's study, titled "Motivation and Gratification of Daily Serial Listener" studied why many housewives were attracted to soap operas. In fact, many scholars recognized Herta Herzog as the scholar who coined the word 'uses and gratifications (See Baran and Davis, 2009; Cho, Zunig, Rojas and Sha, 2003; Luo, 2002).

The Elihu Katz, Jay Blumler and Michael Gurevitch's contributions to uses and gratifications theory may be considered legendary; they provided the basic tenets and assumptions of this theory and their work are frequently cited in successive studies by different scholars. Citing Elihu, Katz. Jay Blumler and Michael Gurevitch's work, Baran and Davis (2006) gave the following tenets and assumptions of the Uses and Gratifications theory; the audience is active and its media use is goal-oriented; the idea of associating need gratification with specific media choice is determined by the audience member; the media compete with other sources by which an audience member satisfies his or her needs; people are aware of their media use, interests and motives to be able to provide the

researcher with the accurate picture of their motives for utilizing media resources and value judgments regarding the audience linking its needs to specific media or content should be discarded and suspended.

The concept of active audience has been central to the uses and gratifications theory. But how active are media audiences? Audience activity "varies across phases of the communication sequence" (Levy and Windahl, 1984:73) and this, according to Ruggeiro (2000:8), means that "different individuals tend to display different types and amount of activity in different communication settings and at different times in the communication process." Social, political, economic, psychological among other multifarious factors may explain why there are variations among media audiences. Scholars therefore categorized media use into ritualized (diversionary) or instrumental (utilitarian) (Rubin, 1984). Ritualized use refers to needs that are mostly focused on companionship, entertainment, personal identity and escape. These needs Rubin (1984) generally refer to the gratification of abstract needs such as curiosity, adventure, advice-seeking and community feelings. Conversely, instrumental use is mostly focused on information needs and generally refers to the gratification of goal-oriented needs, such as achieving an economic advantage or gaining a useful piece of business information. Scholars content that audience uses active mode for instrumental needs and passive mode for ritualized needs (Rubin, 1984).

In the annals of media theory, the advent of Internet has put the theory of Uses and Gratifications in a more vantage position. Uses and Gratifications approach is the most effective theoretical framework to the study of Internet because interactivity which is one of the core characteristics of Internet technology enhances active audience, a concept that is at the centre of the Uses and Gratification theory (Hanjun, 2002). While early studies on computer use revealed that the medium was least gratifying medium (Perse and Courtright, 1993) but the Internet has changed the medium (Cai, 2004). Ruggeiro (2000) argues that

new media like the Internet posses at least three characteristics that provide impetus to the Uses and Gratification theory.

First, "Interactivity significantly strengthens the core of U&G notion of active users" (Ruggeiro, 2000:15). The concept of interactivity in mass communication has been defined by McQuail (2005:558) as the "capacity for reciprocal, two-way communication attributable to a communication medium or relationship…it allows for mutual adjustment, co-orientation, finer control and greater efficiency…" Williams, Rice and Rogers (1988:10) define interactivity as "the degree to which participants in the communication process have control over, and can exchange roles in their mutual discourse."

Secondly, the concept of *demassification* "is the ability of the media user to select from a wide menu…Unlike traditional mass media, new media like the Internet provide selectivity characteristics that allow individuals to tailor messages to their needs" (Ruggeiro, 2000:16). Chaffee and Metzer (2001:369) therefore, describe the Internet as "the backbone of most future mediated communication." Thirdly, *asynchroneity* "refers to the concept that messages may be staggered in time…With…the Internet, an individual has the potential to store, duplicate, or print graphics and text or transfer them to an online web page or e-mail for another individual" (Ruggiero, 2000: 16). It can be added though that when a message is duplicated or modified and then later transferred to an online page the audience here plays a dual role – the role of a sender and that of recipient. On this note therefore, 'asynchroneity' allows the audience to play the role of both consumer and producer of media messages. Other factors that provided impetus for the gratifications theory are: the development of new survey research methods that provided new strategies for studying and interpreting audiences uses and gratifications; the increasing awareness in the 1970s that active use of the mass media might be one of the factors that make effect

more or less likely and too much emphasis on negative effect of the media above its positive influence (Baran and Davis, 2006).

2.5 Critique of uses and gratifications theory

Uses and gratifications theory has been greatly criticized in many ways. The major criticisms focused the following areas: the theory was said to rely on self-reports; the theory was unsophisticated about the social origin of the needs that audiences bring to the media and it was uncritical to the possible dysfunctional implications of satisfying certain forms of needs (Ruggeiro, 2000). Also, at a time in history, especially by the 1960s, the theory of Uses and Gratifications suffered from what Baran and Davis (2006) described as confusion. This confusion, according to these authors, was borne out of Charles Wright's explicit linkage of 'active-audience' and functionalism. "Although Wright cautioned his readers to distinguish between the consequences (functions) of a social activity…functions were assumed by most communication theorists to be equivalent to (synonymous with) the aims or goals of the media industries themselves" (Baran and Davis, 2006:234). Charles Wright who later realized that his conceptualization of media functions and functionality was misconstrued later penned this down for clarification:

> Our working quartet of communications – surveillance, correlation, cultural transmission, and entertainment – was intended to refer to common kind of activities that might or might not be carried out as mass communications or as private, personal communications. These activities were not synonymous for functions, which…refer to the consequences of routinely carrying out such communication activities through the institutionalized processes of mass communications." (Baran and Davis, 2006:235).

Though the uses and gratifications theory has suffered a lot of drawbacks in the past, it has remained strong and relevant in the scheme of media analysis. Three factors were responsible for the "revival of interest" in this theory (Baran and Davis, 2006:237) and these were: new survey methods and data analysis allowed researchers to study and interpret audience needs and gratifications; some media researchers had developed an

increasing awareness that audience needs can be an important factor that make effects more or less likely; and some researchers had begun expressing growing concern that effect research was focusing too much on unintended negative effect. The strength of the theory is "its ability to develop over time into a more sophisticated theoretical model" (Ruggeiro, 2000:25).

2.5 The applicability of the theory to the current study

This study was premised on the assumption that students play active roles in the choice of the Internet access point to use. Hence, the students are aware of their needs, evaluate various communication platforms that are can address the needs they seek to gratify. As such, two different Internet access points – *MTN Universities Connect* and cybercafé were selected, to identify the difference in their uses and motivational factors that precipitate their use. The assumption that the individual student, based on some social, economic and psychological factors, takes the sole decision of what use to put a particular Internet access point to, is a very important tenet of the uses and gratifications. Thus the questions of what the students do online, how frequent they use the two Internet access points and the kind of activities they carry out in these two points were asked. In summary, does 'place' or the 'medium' play any role in Internet uses and gratifications? The 'place' as used in this context is the technology itself because the uses and gratifications of technology may be limited to what the technology can provide. Thus, while technology may not be a sufficient factor for uses and gratifications, it may be a mediating factor in media effect. Thus, the primacy of technology as a mediating factor in media uses in therefore accentuated. Hence, the technology is the uses and the gratifications and conversely, the uses and gratification is the technology.

This new insight is in consonance with the concept of *demassification*, what Ruggerio (2000:16) defines as "the ability of the media users to select from a wide menu...Unlike traditional mass media, new media like the Internet provide selectivity characteristics that allow individuals to tailor messages to their needs." Chaffee and Metzger (2001: 369) were more apt in their submission: "The explosion of available channels afforded by the new technologies contributes to the *demassification* of the media by diffusing the audience for any particular media" that meet their needs.

In conclusion, in theory and practice, for scholars and those who have interest in the Internet uses and gratifications, the basic question remains the same – why are many people so obsessive and attached to the virtual world? A study revealed that 30 million people world wide have virtual world as their "primary place of residence" while the real world is simply a place "where they go for food and sleep" (Gilson, 2007:24). Can people make the virtual world their "primary place of residence" when such world does not gratify certain needs? Uses and gratifications theory provides valid explanations to this question. Though the Internet has blurred the hitherto variations that exist among the various means of communication but uses and gratifications for the future must take care of the mutability of this medium.

2.6 Gap in literature

Though there are several studies on the uses and gratifications of Internet but these researches are mainly in the context of developed countries. Stafford, Stafford and Schkade (2004) applied Uses and Gratifications to study Internet use in America while Kargaonkar and Wolin (1999) applied Uses and Gratification in the European context. Roy (2008) on the other hand used the theory in the context of Internet users in India. This study is

different from the above studies primarily, in two ways. First, the study is conducted in the context of Nigeria. Secondly, while the previous researches focused on Internet Uses and Gratifications on a general note, this study was conducted on a narrower scale, by laying emphasis on two Internet access appoints – MTN *Universities Connect* Library and cybercafé.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter highlights the methodology of the study, the population and sampling procedure and research method that was used. The study instrument was designed in the context of previous similar studies with little modifications to suit the present study. In doing this, the study's instrument was subjected to appropriate procedures to examine validity (content and construct), multidimensionality (factor analysis) and reliability (Cronbach's Alpha).

3.1 Research design

This study sought to understand gratification motives that are obtained by Internet users of two access points: *MTN Universities Connect* and Cybercafé. This research adopted the Explanatory Research Design which is aimed at collecting data in order to answer the various research questions this study aims to answer. To answer the research questions a quantitative survey was used because large sum of data can be collected from large number of people and with ease (Wimmer and Dominick, 2003).

3.2 Population

The population for this study was all university students in the following federal universities: Ahmadu Bello University, Zaria, University of Lagos, University of Nigeria, Nsukka and University of Benin. These four universities were chosen because they are the four beneficiaries of *MTN Universities Connect* project in Nigeria. The pilot project (phase one) of MTN Universities Connect is at the University of Lagos and it was commissioned

on 14th December, 2005; the second phase (Ahmadu Bello University, Zaria) was commissioned on 21st May, 2009; the third phase (University of Nigeria, Nsukka) was commissioned on 5th June, 2009 while the fourth phase (University of Benin) was commissioned on 14th March, 2011.

3.3 Sampling techniques

This study adopted a purposive non-probability sampling method. First, four federal universities where *MTN Universities Connect* can be found were purposively selected. According to Patwardhan (2004:432), though non-probability sampling method limits the estimation of response rate, sampling errors and non-response bias, and generalisability of findings but it "is used in many major Internet users' surveys". These four Federal Universities are Ahmadu Bello University, Zaria (Kaduna State); University of Lagos (Lagos state); University of Nigeria, Nsukka (Enugu state) and University of Benin (Edo state). Then secondly, two universities (Ahmadu Bello University, Zaria and University of Benin) were selected to represent North and South dichotomy. Actually, the University of Lagos (UNILAG) was first selected but when the researcher went to UNILAG for the administration of the research instrument, the MTN Universities Connect virtual library was not functional. The researcher therefore went to UNIBEN, being the latest phase of the project for the administration of the research instrument. The research instrument was conveniently administered at the Universities Connect Library and the cybercafés that are situated within the two selected universities. In the study, 350 self-administered copies of questionnaire were administered in the two selected universities with one hundred and seventy five copies in each of the chosen higher institutions. Since factor analysis will be conducted on the variables what Gaur and Gaur (2009) said about sample size

considerations was instructive here. According to them, "A sample size of less than 100 is not very suitable for conducting factor analysis. A sample size above 500 is considered to be excellent. As a rule of thumb, a sample size of 200-300 should be considered to be adequate for a proper analysis" (Gaur and Gaur, 2009:134). Based on the above principle, the sample size of 300 was considered adequate. In addition to the above principle, Barelett Test of Sphericity was equally conducted to test the adequacy of the sample size. The value of Kaiser-Meyer-Olkin (KMO) from the Barelett Test of Sphericity stood at .932, a confirmation that the sample size was adequate. According to Hutcheson and Sofronious as cited by Field (2005), the KMO values between 0.5 and 0.7 are mediocre, values between 0.7 and 0.8 are good, values between 0.8 and 0.9 are great and values above 0.9 are super.

3.4 Data collection instrument

This study used questionnaire as the primary instrument for the collection of data upon which analysis was based. The instrument used was called the "Internet Uses and Gratifications Scale (IUGS). According to Avwokeni (2009:150) questionnaire as instrument of data collection is used; "where a scale is created to measure a construct"; "where data are needed to confirm a proposition" and "where information is needed about the operation of an entity." This study, from the stated objectives satisfied the above criteria. It should be noted that each questionnaire has an identity tag with the following information: name of institution, the Internet access point (AP), and the questionnaire identity number which was used to track errors.

3.5 Method of data presentation and analysis

Different methods and tools were used to present the data, depending on their suitability. Tables, charts, including descriptive statistical tools like frequency, mean, standard

deviation, and variance were used to give descriptive analysis of the data. In addition, factor analysis was used to analyze the various dimensions of Internet uses while t-test was used to test significant differences.

3.6 Measurement of variables

For this study, the independent variable otherwise known as the criterion variable includes the two Internet access points; MTN Universities Connect and Cybercafé. The dependent variable also known as the predicted variable includes the presumed Internet uses and gratifications. Internet Gratification Index was used to measure the Internet gratification motives. Gratification Index was measured by eighteen gratification statements (gratification motives) that were developed from the review of past studies. Although item statements differ across studies but the current study, taking into consideration theoretical, methodological and practical suitability, has modified those gratification statements. The eighteen gratification statements as reflected on the instrument were; "To chat with people"; "It introduces me to people"; "It provides information about jobs"; "Provides scholarship information"; "Widens my knowledge"; "Makes me to be part of the world"; "Gives me ideas"; "It is cheap"; "It is fast"; "Helps me in assignment"; "It is convenient"; "To watch pornography"; "To check my results"; "For course registration"; "To pass time when bored"; "To get information about events" and "To keep in touch with family." Respondents were asked to rate these statements on a five-point Likert Scale, ranging from Very Often – 5 to Don't Know – 1. Internet Uses Index was used to measure Internet uses. The Internet uses as identified by Roy (2008) were modified to suit the current study. According to Roy (2008) Internet is used for gaming, chatting, e-mail, news, further education-related information, searching for job, shopping, buying tickets, researching,

downloading software and for financial transaction. The modified Internet uses as applied to this study were email, news, online transaction, social networking, gaming, gambling, music download, book download, movie/video download. These various Internet uses were measured on Five-Point Likert Scale ranging from Very Often – 5 to Don't Know – 1. Demographic Index was measured using the following variables: gender, age and educational qualification while the Satisfaction Index was measured on a four-point Likert Scale, ranging from Very-Satisfied-4 to Very Dissatisfied-1.

3.7 Reliability testing

An important part of reliability testing is the pilot study which Monette, Sullivan and DeJong (2002:9) define as "… a small trial run of all procedures planned for use in the main study." Although, there are varied opinion among scholars on the appropriate size for pilot studies but Monette, Sullivan and DeJong (2002) suggest that 20 people should be contacted and interviewed for surveys. In the pilot survey for this study, 40 copies of the research instrument were administered; 20 at the MTN University Connect virtual library and another 20 at different cybercafé in the study area. The use of double coding technique was employed; a situation where two interviewers secure information from the same subject (Monette, Sullivan and DeJong, 2002). Using the Cronbach's Alpha coefficient, the average coefficient reliability stood at 0.8. This figure indicates an acceptable level of reliability. The statistically acceptable internal consistency validity using Cronbach's Alpha is 0.7 (Stafford, Stafford and Schkade, 2004).

CHAPTER FOUR

DATA PRESENTATION, INTERPRETATION AND ANALYSIS

4.0 Introduction

This chapter presents the various data gathered from the field. Statistical Package for Social Sciences (SPSS), version 15.0 was used for the input, management and statistical analysis of the data. The data were interpreted using descriptive statistical tools like frequencies, mean, standard deviation and variance. In addition to this, factor analysis was also used to determine Internet gratification dimensions in the context of the two Internet access points – cybercafé and *MTN Universities Connect.* At the preliminary level, the Null Hypothesis that the correlation matrix was an identity matrix was rejected by Bartlett's Test of Sphericity. The approximate Chi-Square statistic for the Bartlett's Test was 14066.893 with 630 degrees of freedom which was significant at .000 levels.

4.1 Data presentation

The results of this study were presented taking into consideration the various research objectives of the study namely; to find out the demographic composition of the Internet users for the two access points in the selected cosmopolitan universities; find the various gratification dimensions of Internet of the two access points; learn about the extent of usage of the two Internet access points and uncover the possible underlying factors responsible for their usage and determine Internet access points that are most popularly used by the students.

4.2 Demographic characteristics of users

It should be noted that of all the 350 set of questionnaire administered in the two selected Universities, 337 were returned but 323 were valid and this figure represents 92.3 per cent of the sample. Hence, the analysis was based on the number of the valid questionnaire. From the sample, it was revealed that the majority of respondents were male students. The table below shows the sex distribution of respondents.

Table 1: Sex Distribution of Respondents

SEX	*FREQUECY*	*PERCENT*	*CUMULATIVE PERCENT*
MALE	**203**	**62.8**	**62.8**
FEMALE	**120**	**37.2**	**100**
TOTAL	**323**	**100**	

In terms of age distribution, 215 respondents representing 66.6 per cent fell within the age bracket of 18-25 years. In other words, out of every ten student sampled, at least six were within the age-bracket of 18-25 years. Table 2 provides a complete breakdown of the age distribution of respondents.

Table 2: Age Distribution of Respondents

AGE CATEGORY	*FREQUENCY*	*PERCENT*	*CUMULATIVE PERCENT*
18-25	**215**	**66.6**	**66.6**
26-32	**70**	**21.7**	**88.2**
33-39	**23**	**7.1**	**95.4**
40 and Above	**15**	**4.6**	**100.0**
TOTAL	**323**	**100.0**	

In terms of educational distribution, at least seven-in-ten were pursuing one Bachelor's degree or the other, while at least two-in-ten were pursuing Masters Degree. Hence, majority of respondents were pursuing Bachelor's Degree. Table 3 provides the breakdown of educational distribution of respondents.

Table 3: Educational Distribution of Respondents

EDUCATION	*FREQUENCY*	*PERCENT*	*CUMULATIVE PERCENT*
Diploma/Pre-Degree	**5**	**1.5**	**1.5**
Bachelor's Degree	**234**	**72.4**	**74.0**
PGD	**12**	**3.7**	**77.7**
Masters	**71**	**22.0**	**99.7**
PhD	**1**	**.3**	**100.0**
Total	**323**	**100.0**	

An analysis of Figure 1 reveals that there was a normal-curve distribution of respondents in terms of their perceived levels of skill and knowledge in the use of Internet. The bar chart below shows that more than half of the Internet users described their Internet skills as "Intermediate" while roughly three-in-ten described themselves as "Advanced" Internet users.

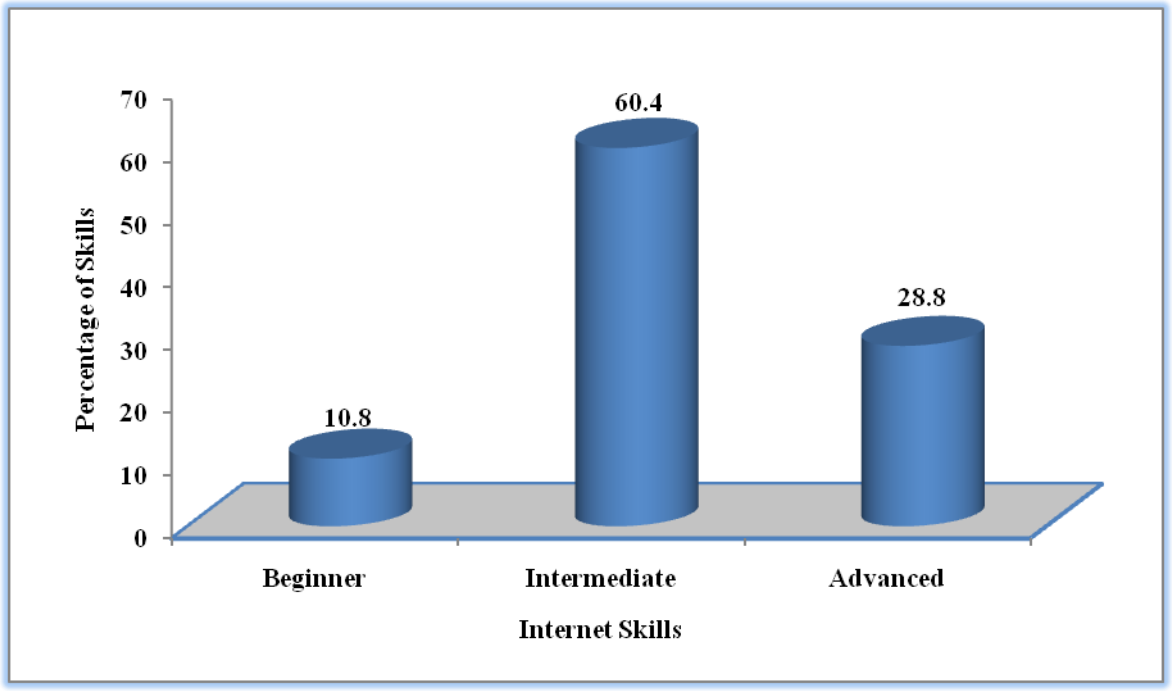


Figure 1: Respondents' Internet Skills

Table 4 reveals the distribution of users and non-users of Internet across the two access points (*MTN Universities Connect* and Cybercafé). The table shows that about seven-in-ten of students access Internet from the MTN Universities Connect while roughly eight-in-ten do so at the Cybercafé. This shows that larger number of students make use of cybercafé than MTN Universities Connect. This may be as a result of flexibility of the former in terms of the number of hours users can access, its ubiquity, and probably, the number of hours it can be opened for business.

Table 4: Distribution of Internet Users/Non-Users

INTERNET ACCESS POINT	*USERS (PERCENT)*	*NON-USERS (PERCENT)*
UNIVERSITIES CONNECT	**73.46**	**26.54**
CYBECAFE	**88.46**	**14.54**

4.3 Internet uses index across access points

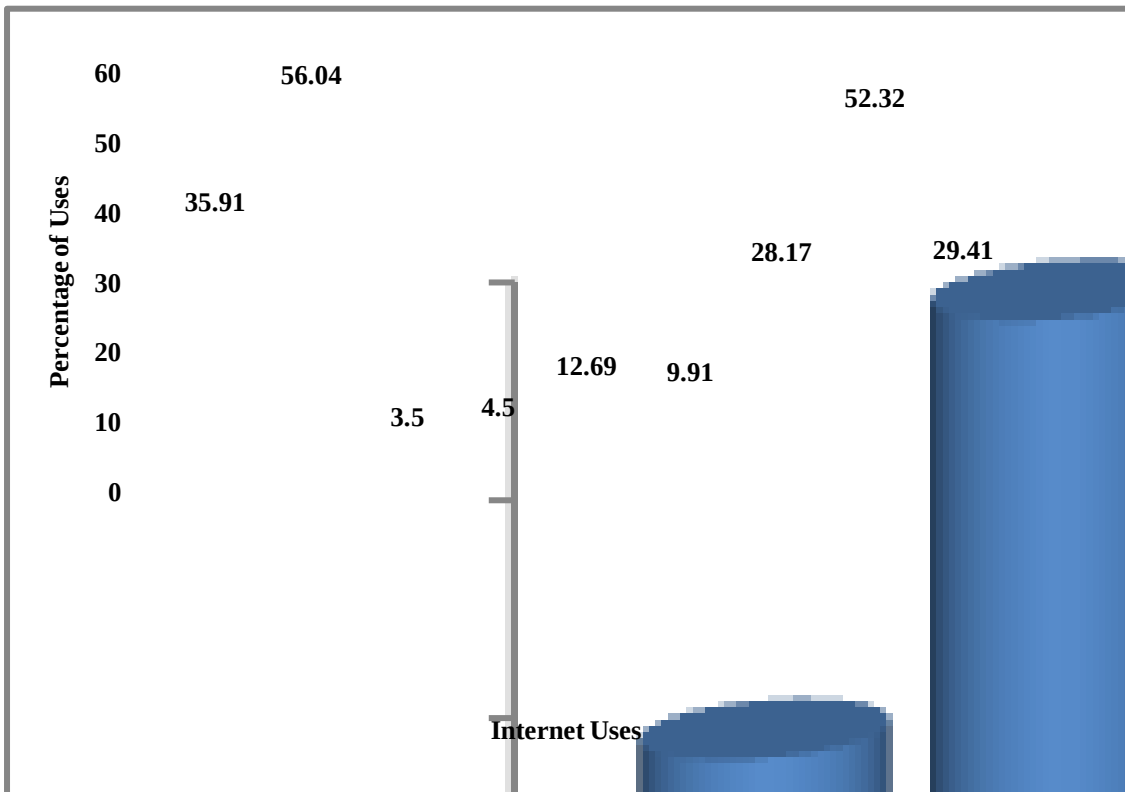


Figure 4: Internet (*MTN Universities Connect*) Uses Index

Figure 2 shows the various Internet uses (*MTN Universities Connect*). The bar chart shows that majority of students (56.04 per cent) use *MTN Universities Connect* to read one form of news or the other; this is followed closely by book download (52.32 per cent) while Internet gaming and gambling commanded the least attention with 12.2 per cent and 9.91

per cent respectively. The number of students that make use of *MTN Universities Connect* as platform for reading news and downloading books or materials was expected considering the purpose for which the ICT facility was established and the environment in which the facilities are situated.

Figure 3 on the other hand, shows the uses of cybercafé. The bar chart reveals that majority of the respondents (76.47 per cent) send electronic mail at the cybercafé; 67.8 per cent read news; 67.66 per cent were involved in social networking. The bar chart also shows that gambling and online gaming commanded the least uses with 18.58 per cent and 15.7 per cent respectively. Many things can be deduced from the two charts; first, in terms of social networking, students tend to use cybercafé more than the *MTN Universities Connect.* This disparity was actually expected because the Internet of MTN Universities Connect is regulated; users require password, username, and authentication before accessing the online resources. Also, at the MTN Universities Connect, they are some restricted sites, especially social networking sites. For *MTN Universities Connect,* 22.29 per cent of respondents do social networking while larger number of respondents (69.66 per cent) use cybercafé for social networking; secondly, there seems to be an agreement in terms of using Internet for gaming and gambling as evident in the two bar charts – online gaming and gambling are not popular among the respondents.

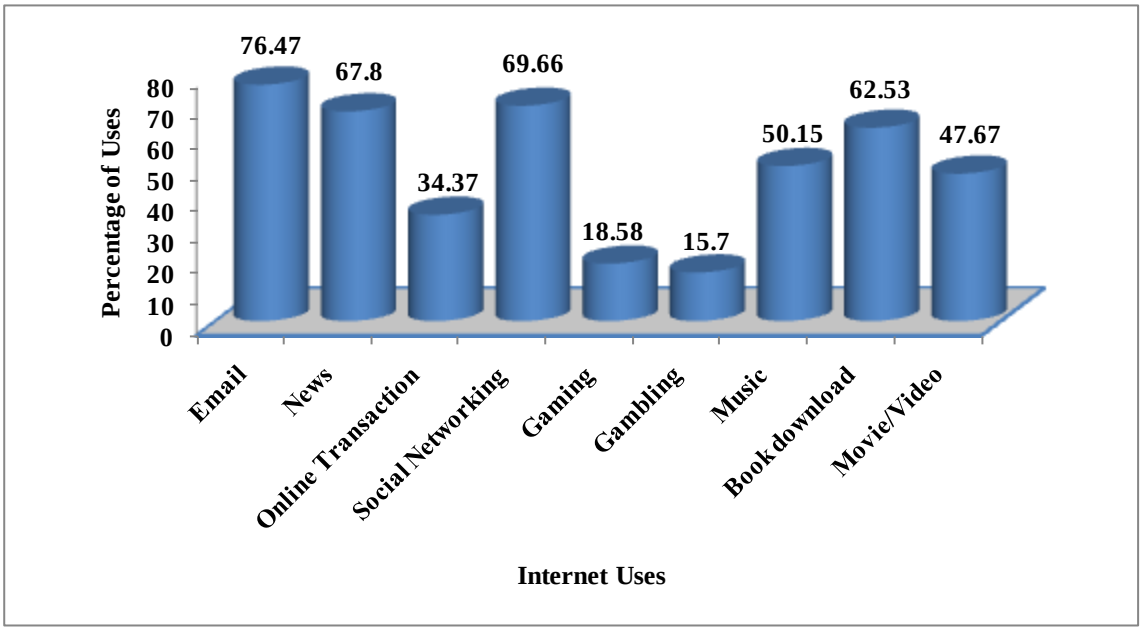


Figure 3: Internet (Cybercafé) Uses Index

4.4 Patterns of usage of the Internet

The Internet pattern of usage was measured in terms of how frequent visited the two access points. On a five-point Likert scale, ranging from 5(Very Often), 4 (Often), 3 (Rarely), 2 (Never), and 1(Don't Know) the chart below shows that majority of students (41.5 per cent) often visit MTN Universities Connect while 37.2 per cent "often" visit Cybercafé. Also, the number of students who visited the MTN Universities Connect "Very Often" was also higher than those for cybercafé. Consequently, those who have "never" used MTN Universities Connect (26.6 per cent) were higher than those who have "never" used cybercafé. The Bar Chart below shows the breakdown.

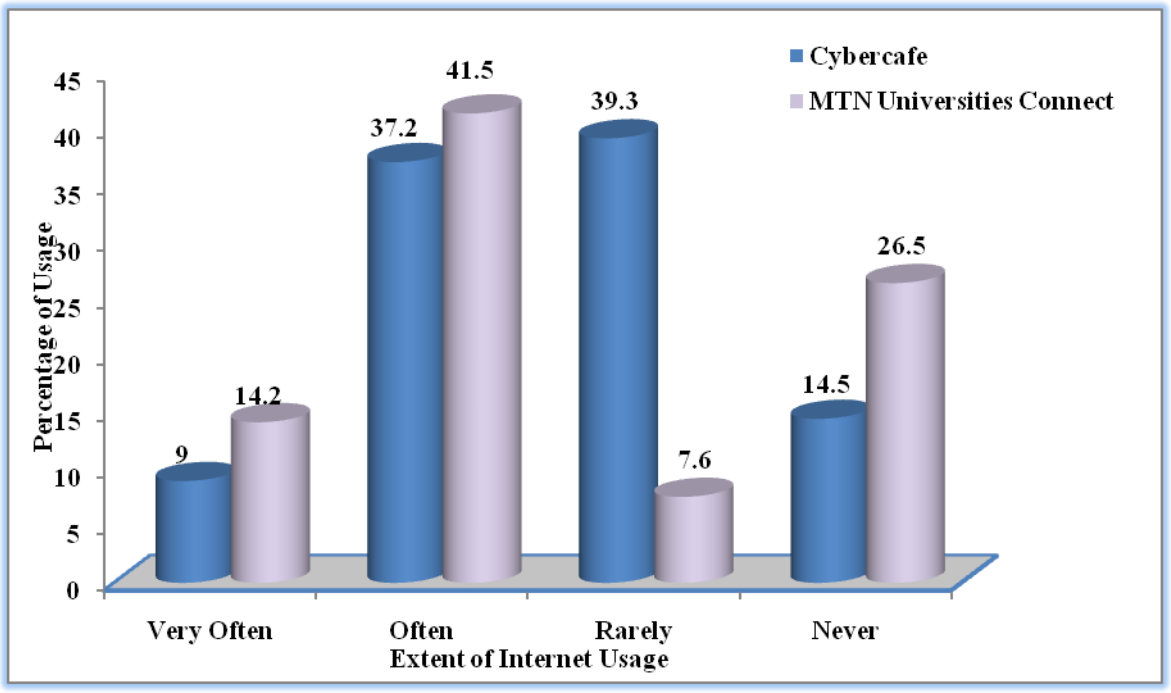


Figure 4: Frequency of Internet Usage across Access Points

The descriptive analysis of the data revealed that more students used MTN Universities Connect (Mean = 3.0650, SD= 1.80203, Variance = 3.247) as against cybercafé (Mean = 2.7368, SD = 1.11265, Variance = 1.238). It should be noted that the time spent accessing the Internet resources of the two access points was deliberately not included in the study because time spent by users of MTN Universities Connect on daily basis are usually regulated unlike that of Cybercafé. Thus, making comparison in terms of the number of minutes or hours spent would be invalid because they would have been on two different scales.

Table 5: Descriptive Analysis for *MTN Universities Connect* Uses

INTERNET USES	*MEAN*	*STD. DEVIATION*	*VARIANCE*
EMAIL	3.5882	1.74655	3.050
NEWS	3.9381	1.55116	2.406
SOCIAL NETWORKING	3.2693	1.79506	3.222
ONLINE TRANSACTION	3.2353	1.78165	3.174
GAMING	3.0960	1.80064	3.242
GAMBLING	3.0526	1.82129	3.317
MUSIC DOWNLOAD	3.3560	1.73926	3.025
BOOK DOWNLOAD	4.0186	1.58397	2.509
MOVIE DOWNLOAD	3.3746	1.72457	2.974

Using descriptive analysis, the table above shows the various uses of the Internet of MTN Universities Connect. The five-point Likert Scale ranging from 5(Very Often), 4(Often), 3(Rarely), 2(Never) and 1(Don't Know) revealed that MTN Universities Connect is mostly used for academic purpose since book download recorded the largest mean scores. This finding was expected considering the purpose for which the technology (MTN Universities Connect) was established. The table further shows that MTN Universities Connect also serve as an important medium through which the students have access to different forms of news. A cursory look at the table will also reveal that there is marginal difference between gaming and gambling. Hence, it can be said that students tend to use the MTN Universities Connect more for educational purposes than for entertainment.

For cybercafé uses, the descriptive analysis revealed similar information like that of MTN Universities Connect with few overt differences; Email (Mean = 4.1473, SD =

1.22612, Variance = 1.503); News (Mean = 3.7743, SD = 1.39152, Variance = 1.936; social networking (Mean = 4.0470, SD = 1.3807 and Variance = 1.907). Electronic mail, popularly known as e-mail recorded the highest use for Cybercafé unlike MTN Universities Connect where book download attracted the largest attention. However, gaming and gambling attracted lowest patronage, an indication that gaming and gambling is not popular among the sampled students. Also, the use of Internet for online transaction also showed marginal difference across the two Internet access points; MTN Universities Connect – Mean = 3.2353, SD = 1.78165, Variance = 3.174); cybercafé (Mean = 2.9843, SD = 1.53258, Variance = 2.349).

Is there difference between MTN Universities Connect and Cybercafé uses? The results of the two-paired sample T-Tests at 95% confident level showed statistically significant differences in some dimensions of Internet uses across the two access points. For example, there were observable marginal and statistically significant differences between MTN Universities Connect and Cybercafé uses in terms of electronic mail (e-mail), social networking, gaming, gambling and book download and the technology could be one of the reasons for these differences. However, there was no statistically significant difference in terms of news, online transaction, music and movie downloads. The Internet and similarities in uses across the two Internet access points could be as a result of the configuration and efficiency of each Internet technology. After all, when the students were asked of factors responsible for their preferred access point, reasons such as convenience, flexibility, cost and efficiency of the access point were adduced.

Table 5: Descriptive Analysis for Cybercafé Uses

INTERNET USES	*MEAN*	*STD. DEVIATION*	*VARIANCE*
EMAIL	4.1473	1.22612	1.503
NEWS	3.7743	1.39152	1.936
SOCIAL NETWORKING	4.0470	1.38079	1.907
ONLINE TRANSACTION	2.9843	1.53258	2.349
GAMING	2.6113	1.63087	2.660
GAMBLING	2.5925	1.63205	2.664
MUSIC DOWNLOAD	3.2790	1.58031	2.497
BOOK DOWNLOAD	3.6207	1.49117	2.224
MOVIE DOWNLOAD	3.2941	1.63146	2.662

4.5 Satisfaction index of Internet users

The respondents' satisfaction levels were measured, also, on a five-point Likert Scale, ranging from 5(Very Satisfied), 4(Satisfied), 3(Don't Know), 2(Dissatisfied), and 1 (Very Dissatisfied). Chart 5 below shows that 12.4 per cent of respondents were "Very Satisfied" compared to 11.5 per cent of the MTN Universities Connect; 57.3 per cent were "Satisfied" with cybercafé and 47.4 with MTN Universities Connect. Furthermore, 12.7 per cent of respondents were "Dissatisfied" with cybercafé as against 11.48 per cent for the MTN Universities Connect. Figure 5 gives the breakdown of the satisfaction level of respondents.

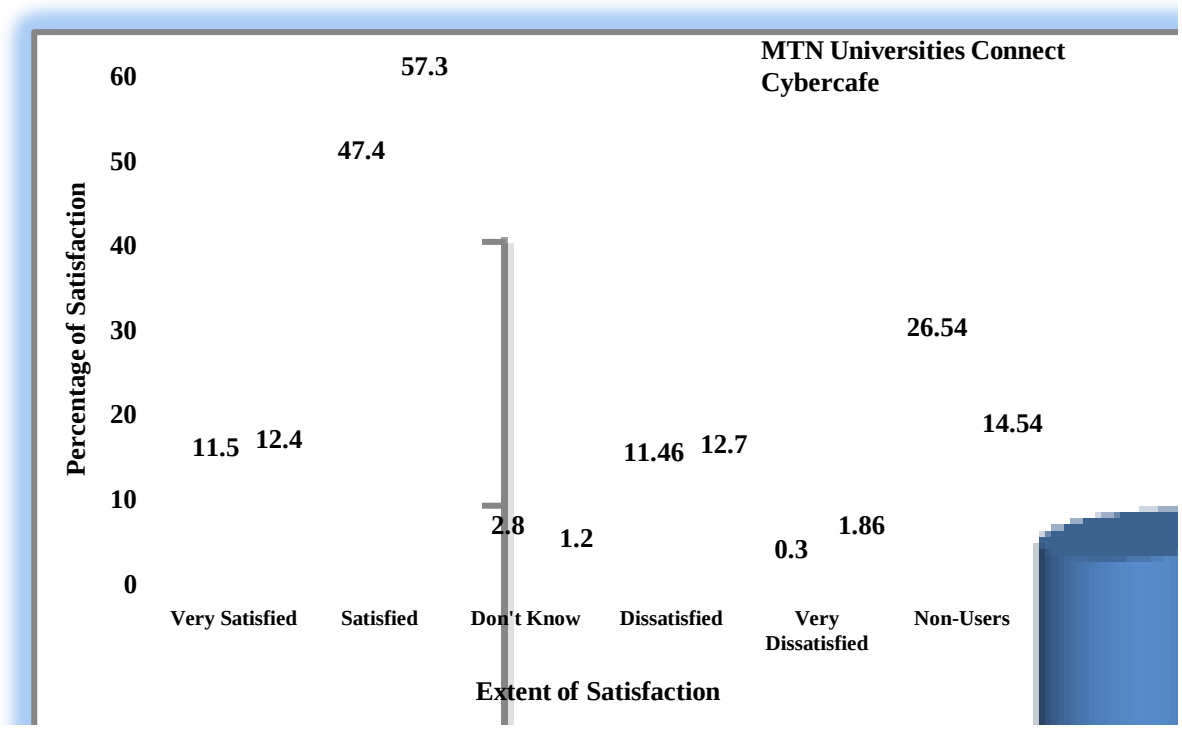


Figure 5: Satisfaction Index of Respondents

The descriptive analysis of users' satisfaction reveals that the satisfaction level of MTN Universities Connect level was higher than that of cybercafé. This is the breakdown: MTN Universities Connect (Mean = 3.1796, SD = 1.8123, Variance = 3.284) and Cybercafé (Mean = 2.7895, SD = 1.60906, Variance = 2.589). The result of the two-paired sample T-Test showed that the higher satisfaction of MTN Universities Connect above Cybercafé was statistically significant and did not happen by chance. That is, T (323) = 2.500, p = 0.013.

Table 7: Descriptive Analysis of Users' Satisfaction

DESCRIPTIVE ANALYIS	*MTN UNIVERSITIES CONNECT*	*CYBERCAFE*
MEAN	**3.1796**	**2.7895**
STD. DEVIATION	**1.8123**	**1.60906**
VARIANCE	**3.284**	**2.589**

4.6 Gratification dimensions across access points

To determine the various gratification dimensions of the two Internet access points, an exploratory factor analysis was conducted using the principal axis factoring method. The result of the exploratory factor analysis provides the latent constructs and gives insight into the underlying factors structure of the variables across the two Internet access points.

4.6.1 MTN Universities Connect users' motives

Table 7 above shows all the factors extractable from MTN Universities Connect gratification analysis along their eigen values. Also, the percentage of variance attributable to each of the two factors, the cumulative variance of the factors and the previous factors are also reflected on the table. For example, the first factor has the loading of 12.473 and this represents 69.296 per cent of the total variance. Furthermore, factor two has 1.629 loading and this figure represents 9.050 per cent of the variance. All in all therefore, the two factors extracted represents 78.346 per cent of the total variance.

Table 8: Total Variance Explained for *MTN Universities Connect*

Factor	*Initial Eigen values*			*Extraction Sums of Squared Loadings*			*Rotation Sums of Squared Loadings*		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	12.689	70.495	70.495	12.473	69.296	69.296	7.280	40.446	40.446
2	1.807	10.037	80.532	1.629	9.050	78.346	6.822	37.899	78.346
3	.538	2.990	83.522						
4	.396	2.198	85.720						
5	.361	2.008	87.728						
6	.341	1.897	89.625						
7	.314	1.744	91.368						
8	.279	1.552	92.920						
9	.216	1.200	94.120						
10	.200	1.110	95.230						
11	.157	.874	96.104						
12	.144	.801	96.905						
13	.128	.714	97.618						
14	.118	.656	98.274						
15	.102	.569	98.843						
16	.080	.443	99.286						
17	.073	.403	99.689						
18	.056	.311	100.000						

4.6.2 Cybercafé users' motives

The table below shows all the factors extractable from cybercafé gratifications analysis along their eigen values. Also, the percentage of variance attributable to each of the three factors, the cumulative variance of the factors and the previous factors are also reflected on the table. For example, the first factor has the loading of 11.100 and this represents 61.667 per cent of the total variance. Furthermore, factors two and three have the loadings of .784 and .690 and these represent 4.357 and 3.836 of the total variance respectively. All in all, cybercafé revealed three dimensions of Internet gratification. This means that cybercafé revealed wider gratification dimensions perhaps because users are less restricted in terms of sites allowed to be visited unlike in MTN Universities Connect where users are more regulated in terms of purpose and uses.

Table 9: Total Variance Explained for Cybercafé Uses

Factor	*Initial Eigen values*			*Extraction Sums of Squared Loadings*			*Rotation Sums of Squared Loadings*		
	Total	**% of Variance**	**Cumulative %**	**Total**	**% of Variance**	**Cumulative %**	**Total**	**% of Variance**	**Cumulative %**
1	11.389	63.273	63.273	11.100	61.667	61.667	4.556	25.310	25.310
2	1.087	6.037	69.309	.784	4.357	66.024	4.217	23.429	48.739
3	1.018	5.656	74.966	.690	3.836	69.860	3.802	21.121	69.860
4	.626	3.480	78.446						
5	.515	2.860	81.306						
6	.431	2.394	83.700						
7	.409	2.270	85.971						
8	.343	1.903	87.874						
9	.339	1.886	89.760						
10	.307	1.707	91.467						
11	.297	1.648	93.115						
12	.251	1.397	94.512						
13	.235	1.305	95.817						
14	.197	1.092	96.909						
15	.175	.972	97.881						
16	.151	.836	98.717						
17	.122	.677	99.394						
18	.109	.606	100.000						

4.7 Interpretation of factors and factor labeling

For easy interpretation, rotation through varimax method was conducted and **Table 10** below shows the rotated component (factor) matrix. Rotation does not necessarily change anything but makes interpretation of the analysis easier (Field, 2005). Using Kaiser Criterion, only factors with eigenvalues greater that 1.0 were retained (DeCoster, 1998). Furthermore, item for each factor had to meet the 0.40 factor loading criterion and in the case of cross loading, where an item had a loading greater than 0.4 across more than one factor, the item was retained to the factor where it had the highest loading (Costello and Osborne, 2005).

Table 10: Gratifications for Cybercafé Uses (After Extraction)

GRATIFICATION ITEM (WHY VISIT CYBERCAFE?)	FACTOR		
	1	2	3
1. To chat with people	.331	.281	.727
2. It provides information about jobs	.632	.343	.487
3. It provides scholarship information	.734	.243	.492
4. It widens my knowledge	.710	.312	.296
5. It makes me part of the world	.695	.189	.505
6. It's cheap	.320	.646	.433
7. It's fast	.316	.681	.328
8. Helps me in my assignment	.635	.571	.129
9. It's convenient	.303	.708	.307
10. To watch pornography	.066	.487	.390
11. To check results	.545	.516	.299
12. For course registration	.675	.471	.145
13. To pass time when bored	.444	.503	.532
14. To get information about events	.536	.515	.384
15. To keep in touch with family	.338	.457	.664
16. To follow sports update	.356	.451	.571
17. To get materials for project and thesis	.644	.361	.255
18. It introduces me to people	.401	.265	.742

Source: Field Survey, 2012

Table 10 reveals the extent of correlation of each variable to the three factors that were extracted. For instance, variable 1 which is to "Chat with people" is more correlated with factor 3 than factors 1 and 2. Likewise, variable 18, which is "It introduces me to people" is more correlated with factor 3 than factors 1 and 2. The above table shows that for cybercafé gratifications, three factors were retained and the items for each factor have been underlined for easy identification. For instance, for factor one, items like "it provides information about job", "it provides scholarship information", "it widens my knowledge", "to check results", "for course registration", "to get information about event" and "to get materials for project and thesis" had loadings above .04 and these items tend to be inclined towards information and can be labeled as "Information dimension." For the second factor,

items that were loaded high were: “it’s cheap”, “it’s fast” and “it’s convenient”. These items had the loadings of .646, .681 and .708 respectively. These three items attach importance to the technology itself and may be labeled as “technology dimension”. Hence, technological dimension is interpreted in terms of the intrinsic values or utilities of the technology itself. Finally, items like “to chat with people”, “to keep in touch with family”, “to follow sports updates” and “to pass time when bored” all loaded high on factor three and these items can be labeled “social dimension.” Hence, the three dimensions of gratification motives for cybercafé uses are information, technological and social dimensions.

Table 11: Gratifications for MTN Universities Connect (After Extraction)

GRATIFICATION ITEM (WHY VISIT MTN *UNIVERSITIES CONNECT*)	**FACTOR**	
	1	2
1. To chat with people	.318	.898
2. It introduces me to people	.369	.850
3. It provides information about jobs	.484	.737
4. It provides scholarship information	.552	.642
5. It widens my knowledge	.807	.347
6. It makes me part of the world	.782	.422
7. It’s cheap	.826	.267
8. It’s fast	.717	.432
9. It helps me in assignment	.876	.264
10. It is convenient	.792	.328
11. To watch pornography	.223	.908
12. To check my results	.675	.516
13. For course registration	.727	.480
14. To pass time when bored	.431	.767
15. To get information about events	.651	.553
16. To keep in touch with family	.354	.894
17. To follow sports updates	.460	.708
18. To gather materials for project or thesis	.819	.298

From the above table, two factors have been identified as motives for MTN Universities Connect uses. For the MTN Universities Connect, there is a deviation from normality and thereby making it factorially complex. However, from the two factors extracted and rotated, items for information and social dimensions were also highly loaded.

4.8 Internet access points index

Internet access points are those outlets through which Internet services can be accessed. The charts below shows the various Internet access points within the study area. The bar chart reveals that mobile phone is the most widely used and preferred point for accessing the Internet with 35.6 per cent followed by *MTN Universities Connect* and cybercafé with 23.5 per cent and 14.9 per cent respectively. The proliferation of Internet-compliant mobile phones with its flexibility, comfortable and relative cost may have led to the dwindling activities of cybercafés. If this trend continues, mobile Internet would "steal" many more users of cybercafé.

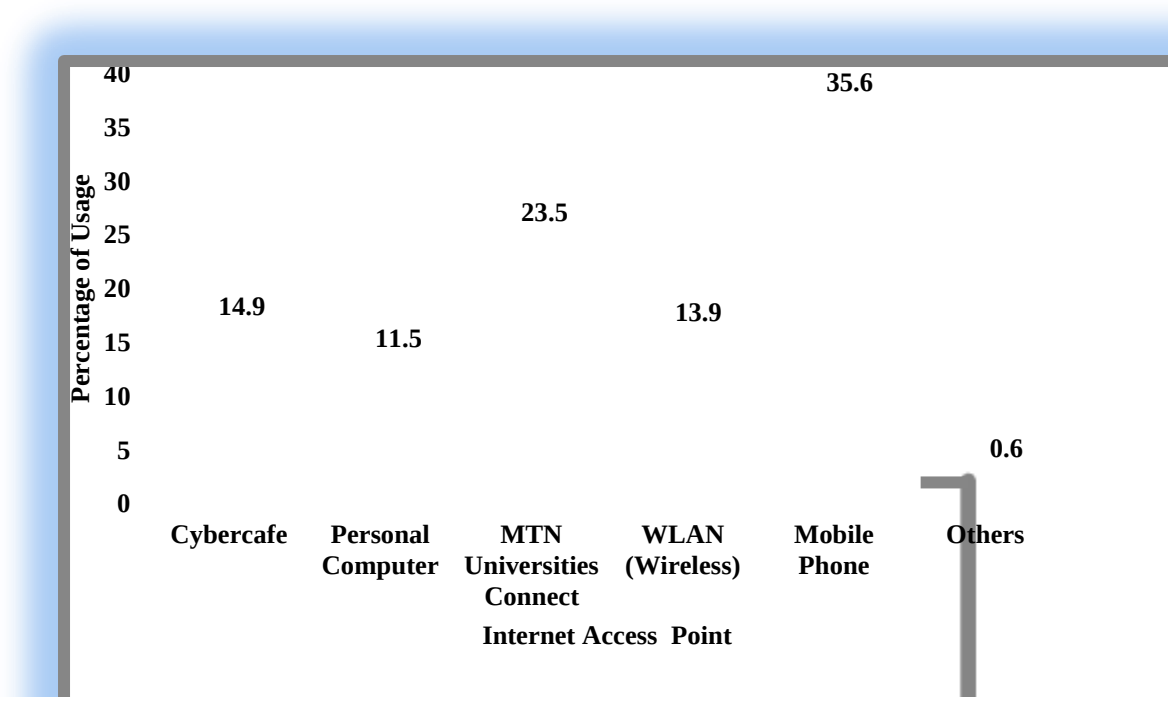


Figure 6: Preferred Internet Access Points

4.9 Discussion of findings

This study analyzed uses of Internet across two access points – MTN Universities Connect and Cybercafé in selected Universities in Nigeria. It also identified the various motives (gratifications) for using Internet across two Internet access points. Based on the various descriptive analytical tools adopted and the factor analysis conducted, the study revealed different uses and gratification dimensions across the two access points. First, there were observable marginal and statistically significant differences between MTN Universities Connect and Cybercafé uses in terms of electronic mail (e-mail), social networking, gaming, gambling and book download. However, there was no statistically significant difference in terms of news, online transaction, music and movie downloads. The differences and similarities of Internet uses across the two access points could be as a result

of the configuration and efficiency of each Internet technology. For example, while the MTN Universities Connect generated two gratification dimensions, Cybercafé, generated three dimensions of gratification. Further observation shows that irrespective of access point, the mean scores for Internet uses are higher in terms of electronic-mail, and book download while gambling, gaming and online transaction recorded lower mean scores. This finding is therefore in line with the contemporary global reality. For instance, Internet gambling is growing worldwide but the proportion of people who engage in it worldwide is still low (Wood and William, 2007). In 2006 for instance, Gambling Commission (2006) estimated that 2 per cent of United Kingdom had engaged in gambling in the past month and Welt, Barnes, Weiczorek, Tidwell and Parker (2002) found that United States had 2 per cent prevalence and this is higher among the youth segments (Derevensky, Gupta and MacBride, 2006).

Although previous studies have shown that social, economic and psychological factors interact with needs to produce motives but this study is showing that the utilitarian values of the technology (Cybercafé and *Universities Connect*) may as well shaped the needs of their various users, especially when the users are confronted with few options to choose from. In other words, Internet access point can be a predictor of its uses and gratifications. It can therefore be said that technology can either diminish the extent of audience activeness or facilitate it. If users are pulled to the technology that has cognate relevance to their predisposed needs, it then means that the users can equally jettison any technology that is not congenially predisposed towards such needs. The finding thus suggests that the nature of technology may as well be a necessary factor in uses and gratifications since the audience needs can be shaped by the available technology. After all,

relationship between need importance and actual usage of media is modified by availability of the media (Kippax and Murray, 1980). Finn (1997), in corroboration of the above, found that radio and television were used more simply because they were more accessibility. One can therefore argue that the availability and non-availability of technology can shape the needs of the audience. In other words, if there is gratification, there is also delayed-gratification; a situation where the active audience would have to prioritize his needs based on what the technology offer. For instance, users can alternate cyber café with MTN Universities Connect depending on their needs since the two access points generate different gratifications. Hence, users who want to be entertained will likely go to cybercafé.

In terms of skills and knowledge of Internet usage, the study found diverse skills among Internet users. The study found that majority of respondents rated their skills of Internet usage as "Intermediate" while few consider themselves as "professional" users, an indication that most of the respondents only have the basic skills on Internet usage. This is not surprising, after all there is a large variation of digital skills among different social segments (Hargittai, 2003). This digital skill is a very important factor in terms of Internet usage (Norris, 2001) and it is critical to functioning in an emerging economy like Nigeria (Anakwe, Simmers and Anandarajan, 2002).

Studies have shown that Internet skills are significantly correlated with Internet usage. Anakwe, Simmers and Anandarajan (2002) in their study on how skills, supports and attitudes affect Internet usage in Nigeria, found that the more the Internet skills, the greater the daily usage, the more time spent and the more activities are carried out by its users. However, with the versatility of Internet, the skills may vary from general skills to a more sophisticated skill. Van Deursen and Van Dijk (2011) proposed a wider range of

Internet skills that have theoretical foundation; operational Internet skills which is the basic skills; the formal Internet skills, which has to do with the understanding of the structures in which the medium is built; information skills which has to do with the ability to use the Internet to meet up with certain informational needs and finally, strategic skills which has to do with the ability to use the Internet to achieve professional goal. These four skills were broadly categorized into medium-related skills and content-related skills.

In terms of Internet access point, this study found that, cybercafé, mobile phone, wireless connection, MTN Universities Connect and personal computers were popular Internet access points among users in the study areas. These access points were also identified by Salau and Emmanuel (2012). In a study on uses and perception of social networking among selected Nigerian students, it was suggested that in order to surmount the difficulties of access, Internet users resort to different Internet access points depending on their needs, their economic strength, intended privacy and comfort (Salau and Emmanuel, 2012). Hence, social, economic and psychological factors could affect the Internet access point that may be selected and used by Internet users.

The current study also found that mobile phone is the preferred Internet access point among the population and when the students were asked of factors responsible for their preferred access point, reasons such as convenience, flexibility, cost and efficiency of the access point were adduced. Mobile Internet is a way of providing Internet services for those who cannot afford the traditional means of accessing the Internet (ITU, 2004). Osang (2012) while citing the recent figure by the National Bureau of Statistics (NBS) said that 95 per cent, representing167 million Nigerians may never have used the computer and Internet before. The report also said that the national Internet access rates stood at 3.6 per cent with

only 0.5 of the people who owned an Internet connection device. Another survey conducted by Opera also revealed that 90 per cent of Internet users in Nigeria were between the ages of 18-27 and they make use of mobile phones more than other Internet access points (Osang, 2012). Hence, proliferation of smart and iphones, and other Internet-compliant mobile phones in the country can be leveraged to deliver a more efficient, flexible and wider Internet service to Nigerians.

This study also showed that in terms of Internet satisfaction, there is a significant difference between the two access points. The mean scores of the satisfaction index revealed that the MTN Universities Connect was more satisfying than cybercafé and the two-paired sample t-test further confirmed that the difference is significant. Also, from the frequency of usage index, MTN Universities Connect had higher means score than Cybercafé and the result from the two-paired sample t-test also showed that the difference in the mean score is statistically significant. This shows that that users' satisfaction level may have shaped the frequency of usage. Study conducted by Goyal, Purohit and Bhaga (2011) also found similar results. In a study on satisfaction and usability of the Internet on students' performance, Goyal, Purohit and Bhaga (2011) found that there is a significant relationship between Internet usage and technology satisfaction. Thus, Internet usage is a predictor of technology satisfaction and also, technology satisfaction is a predictor of the Internet usage (Cho, Dezuniga, Rojas, and Sha, 2003).

In conclusion, there is relationship between Internet technology and its uses and gratifications. This study has shown that two different Internet technologies tend to command different uses and gratifications. By this, it could be said that Internet access point can also serve as a predictor for its uses and gratifications.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.0 Introduction

This chapter summarizes the various findings of the study. The chapter also contains the conclusion of the study, make relevant recommendations based on the findings.

5.1 Summary

Chapter One provides the background to the study by situating the research problem in a context. It also highlights the objectives of the study, the research questions and delineates the study.

Chapter Two is the literature review of the study. In the literature review, conceptual, empirical and theoretical reviews were done. In the literature review, views of different scholars on the state of Nigerian universities in terms of Internet facilities, were brought to fore. Also, the empirical review, the researcher found that the empirical studies on Internet uses and gratifications are broadly categorized into three; the uses and gratifications of Internet medium itself, Internet uses and gratifications in relations to users' demographic characteristics and finally, Internet uses and gratifications in relation to other forms of communication. Finally, theoretical review on the evolvement and basic tenets of uses and gratifications theory was done.

Chapter Three answers all questions as regard the methodology of the study. It defines the population and sampling techniques. The chapter also tells us the instrument for data collection and clearly defines how the various variables were measured while putting into consideration credibility, reliability and validity of the research instrument.

Chapter Four presents the various data gathered from the field and analyzed same using the appropriate statistical tools such as frequencies, mean, standard deviation, variance, factor analysis and two-paired sample t-test.

Finally, Chapter Five is all about the discussion of major finding, taking into cognizance the various objectives and research questions for the study. In the discussion, major findings were analyzed in the context of other studies conducted in the past. This Chapter also provides the summary and conclusion while recommendations made were based on the findings. It also makes suggestion for further studies.

5.2 Conclusion

In conclusion, in as much as social, political and economic factors affect uses and gratifications of Internet it is also pertinent to note that the technology itself and how it is accessed can also affect its uses. This assertion is enunciated and demonstrated in this study. In other words, the Internet access point (technology) has been identified as predictor of Internet uses and gratifications. Hence, the extent of usage of Internet technology may be influenced by the level of satisfaction derived by its users and where it is accessed. It can therefore be argued that in uses and gratification, the nature of technology can either diminish the activeness of the audience or facilitate it. If users are pulled to the technology that has cognate relevance to his predisposed needs, it then means that the users can equally jettison any technology that is not congenially predisposed towards such needs. To expand on this view, we can say that though the audience may be active in terms of what to access on the Internet and where to access it, but when he is confronted with limited alternatives to choose from, the available becomes the preferable. Consequently, the audience may

postpone the pursuit of such needs (delayed-gratification) or even forget about it (gratification unattainable).

5.3 Recommendations

Based on the findings, the following recommendations have been put forward:

1. Higher institutions of learning should raise awareness on the uses of Internet in academic environment and students should be given formal training and skills to attain information and strategic Internet skills. This can be done by treating Internet education as a general course for all students. Through this, students can be better equipped on how to explore diverse opportunities in using Internet technology to boost their learning experience.
2. In terms of design, Internet-based libraries and other ICT facilities that are established for academic purpose should be well and adequately regulated in order to forestall its possible abuses since the structure of these technologies can determine their usage.
3. The National ICT policy should not just emphasize on access to the basic infrastructures, efforts should also be made to create access to quality service through enhanced and congenial environment for telecommunication business to thrive since users' satisfaction also affect their uses.
4. Periodic conferences, workshops and seminars on how best to make use of Internet should be encouraged in Nigerian Universities where participants are being exposed to recent technologies, applications, devices and latest trends in the world of ICTs.

5.4 Suggestions for further studies

Similar cross-media studies should be conducted in the context of traditional media such as radio and television, newspaper and magazine. The findings would help media strategists to

uncover the underlying motives behind listening, watching, reading or generally being exposed to specific genre of media contents.

REFERENCES

Abdulkareem, M. Y. (2010). Characteristics and information-seeking behavior of cybercafé users in some Nigerian cities. *Journal of Library and Information Science*. 2(5).

Achimugu, P, Oluwagbemi, O, Oluwaranti, A, and Afolabi B (2009). Adoption of information and communication technologies in developing countries: an impact analysis. *Journal of Information Technology*. 9(1), 37-46. Retrieved from http://www.jiti.net/v09/jiti.v9n1.037-046.pdf

Adaramola, Z (2011). Increase competition has helped bring ICT access to billions – ITU, *Daily Trust*, Janaury 31, pp 43.

Adeniran, A.I. (2008). The Internet and the emergence of yahooboys sub-culture in Nigeria. *International Journal of Cyber Criminality*. July-December, 2(2), 368-381.

Adeya, B and Oyeyinka, C.N (2002). The internet in African universities: case study of Kenya and Nigeria. *NU/INTECH Discussion Paper*.

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

Adomi, E.E., Omodeko, F.S., and Otolo, P.U. (2004). The use of cybercafé at Delta State University, Abraka, Nigeria. *Library Hi Tech News.* 22(4), 383-388.

Agboola, A.T. (2000). Five decades of Nigerian universities libraries: a review. *Libri*, 50, 280-289.

Ahiakwo, C.O. (1998). *The role of internet connectivity in Nigeria.* Retrieved from http://www.isocnig.org.ng/ConferencePapers/paper17.htm

Akintude, S.A. (2006). State of ICTs in tertiary institutions in Nigeria: window on the universities. *Compendium of Papers Presented at the 44th Annual National Conference and AGM of Nigeria and Library Association,* Abuja, 123-13

Alabi, G.A. (1987). Computer usage in Africa: trends, problems and prospects. *Nigerian Library and Information Science Review,* 5(1&2), 1-6.

Al-Ansari, H. (2006). Internet use by the faculty members of Kuwait University. Emerald Group Publishing Limited: *The Electronic Library,* 24(6), 791-803.

Aluoch, A.A. (2006). The search for affordable quality Internet connectivity for African Universities. *AAU Newsletter, 12* (3).

Anakwe, U.P., Simmers, C., and Anandarajan, M (2002). Internet usage in an emerging economy: The role of skills, support, and attitudes. *Faculty Working Papers.* Paper 10. Retrieved from http://digitalcommons.pace.edu/lubinfaculty_workingpapers/10

Angleman, S. (2002). Uses and gratifications and Internet profiles: a factor analysis. Is Internet use and travel to cyberspace reinforced by unrealized gratifications? Paper presented at the Western Science Social Association Conference in Reno, NV. Retrieved from http://www.jrily.com/LiteraryIllusions/InternetGratificationStudyIndex.html.

Anyira, I.E (2011). Internet services in Nigerian private universities: a case study. In *Library Philosophy and Practice* Retrieved from http://www.webpages.uidaho.edu/~mbolin/anyira.pdf

Atinmo, M. (2006). Restructuring Nigerian libraries through resources sharing in cataloguing and classification in resource sharing in cataloguing Bibliographic and Indexing services in ICT Age: A compendium of Papers presented at the 26th Annual Conference of the cataloguing and classification section of the Nigerian library Association held in Abeokuta, Ogun State, October 29- November, 2006.

Avwokeni, A.J (2009). *Practical research methodology: design, analysis and reporting* (4th ed). Unicampus Publishing.

Baran, S.J., and Davis, D.K. (2006). *Mass communication theories: foundations, ferment and future* (5th Ed.). Boston: Wardsworth Cengage Learning.

Barthelemy, S., Bethell, M., Christiansen, T., Jarsvall, A., and Koinis, K. (2011). The Future of Print Media. *Capstone Report*. Retrieved from www.sipa.columbia.edu/academics/workshops/documents/WorldNewsmediaInnovationsStudy-CapstoneWorkshopSpring2011-ABRIDGED.pdf

Cai, X. (2004). Is the computer a functional alternative to traditional media? *Communication Research Reports,* 21(1), 26-38.

Castells, M. (2004) Informationalism, networks, and the network society: A theoretical blueprint. In Castells, M. (eds). *The network society: a cross-cultural perspective*. Retrieved from http://annenberg.usc.edu/images/faculty/facpdfs/Informationalism.pdf

Chaffee, S.H. and Metzger, M.J (2001). The end of Mass Communication? *Mass Communication and Society,* 4(4), 365-379.

Charney, T. R., and Greenberg, B. S. (2001). Uses and gratifications of the Internet. In Lin, C. and Atkin, D. (Eds.) *Communication, technology and society: New media adoption and uses* (pp. 379-408). Cresskill, NJ: Hampton Press.

Charney, T.R. (1996). *Uses and gratifications of the Internet*. (Masters Thesis, Michigan State University.) Retrieved from Masters Abstract International 35, 0612.

Chisenga, I (2000). Global information and libraries in sub-sahara Africa. *Library Management.* 21(4), 14-187.

Cho, J., Zuniga, H.G.D., Rojas, H., and Sha D.V. (2003). Beyond access: the digital divide and Internet uses and gratifications. *IT and Society,* 1(4), 46-72.

Choi, J., Watt, J., Dekkers, A. and Park, S. (2004). Motives of Internet use: Cross-cultural perspectives – the US, the Netherlands and South Korea. Retrieved from http://www.fontyspublicaties.nl/show.cgi?did=806

Coffman, K.G and Odlyzko, A.M. (2001). *Growth of Internet.* Retrieved from http://www.dtc.umn.edu~odlyzko/doc/oft.internet.growth.pdf.

Cohen, A.A., Levy. M.R., and Golden, K. (1988). Children uses and gratifications of home VCRs: evolution or revolution, *Communication Research,* 15(6), 772-780.

Cooper, A. (1997). The Internet and sexuality: Surfing its way into the new millennium. *Journal of Sex, Education and Therapy.* 22, 5-6

Costello, A. and Osborne, J. (2005). Best practices in exploratory factor analysis: Four recommendations for getting the most from your analysis. *Practical Assessment, Research and Evaluation,* 10(7), 1-9.

Covi, M.L. and Cragin, H.M. (2004). Reconfiguring control in library collection development: a conceptual framework for assessing the shift toward electronic collections. *Journal of American Society and Technology,* 55(4), 312-325.

December, J. (1996). Unit of analysis for Internet communication. *Journal of Communication,* 46 (1), 14-38.

DeCoster, J. (1998). Overview of factor analysis. Retrieved from http//www.stat-help.com/notes.html

Derevensky, J.L., Gupta, R., & McBride, J. (2006). Internet gambling among youth: A cause for concern. *Presentation at the Global Remote and E-Gambling Research Institute Conference.* August 31 - September 1, 2006. Amsterdam, Netherlands.

Dervin, B. and Song, M. (2005). *Reaching for phenomenological depths in uses and gratifications research: A quantitative empirical investigation*. Paper presented at the annual meeting of the International Communication Association, New York City, May. Retrieved from http://www.communication.sbs.ohio-state.edu/sense-making/art/artabsdervinsong05icaUG.html>

Domingo, D. and Heinonen, A. (2008). Weblogs and journalism: A Typology to Explore the Blurring Boundaries. *Nordicom Review,* 29 (1): 3-15.

Dominick, J.R (2009). *The dynamics of mass communication* (10th Ed). New York: McGraw-Hill Higher Education.

Echezona, R.I and Ugwanyi, C.F. (2010). African university libraries and Internet connectivity: challenges and the way forward. *Library Philosophy and practice*. Retrieved from http://digitalcommons.unl.ed/lipphilprac/421

Ehimen, O.R and Bola, A. (2010). Cybercrime in Nigeria. *Business Intelligence journal* (3)1, 93-98.

Eighmey, J. and McCord, L. (1998). Adding value in the information age: uses and gratifications of sites on the world wide web. *Journal of Business Research,* 41(3), 187–194.

Eshekels Associates (2001). *Trends in Internet usage in Nigeria*. Lagos: Information and Communication technologies (ICTs) Resource and research Centre.

Fabunmi, B.A (2009). Challenges and prospects of virtual libraries in universities in Nigeria. *European Journal of Scientific Research,* 33(1), 202-208.

Field, A.P. (2005). *Discovering statistics using SPSS* (2nd edition). London: Sage

Finn, Seth (1997), Origins of media exposure: Linking personality traits to TV, radio, print, and film use. *Communication Research,* 24, (5), 507-529.

Gambling Commission. (2006). *Annual Report 2005/2006.* Retrieved from http://www.gamblingcommission.gov.uk/UploadDocs/News/documents/annual_re

Gaur, A.S., and Gaur, S.S (2009). *Statistical methods for practice and Research: a guide to data analysis using SPSS* (2nd ed). New Delhi: Sage Publication

Gbaje, E.S. (2007). Provision of online information services in Nigerian academic libraries. *Nigerian Libraries*. 40, 1-4.

Gilson, D. (2007). Even better than the real thing. *Mother Jones,* May/June, 24-25.

Goldstuck, A. (2009). *Internet access in South Africa 2008: A comprehensive study of the internet access market in South Africa.* Pinegowrie: World Wide Worx.

Goyal, E, Purohit, S and Bhaga, M (2011). Study of satisfaction and usability of the Internet on students' performance. *International Journal of Education and Development using Information and Communication Technology (IJEDICT).* 7(1), 110-119.

Hafkin, N. and Taggart, N. (2001). *Gender, information technology, and developing countries: an analytic study for the Office of Women in Development Bureau for Global Programs, Field Support and Research, United States Agency for International Development (USAID).* Retrieved from http://www.usaid.gov/wid/pubs/hafnoph.pdf.

Hanjun, K. (2000*). Internet uses and gratifications: understanding motivations for using the Internet.* Paper Presented at the Annual Meeting of the Association for Education in Journalism and Mass Communication, March.

Hargittai, E., (2003). *How wide a Web? Inequalities in accessing information online*. (Doctoral Dissertation. Sociology Department, Princeton University, NJ).

Howe, W. (2007). *An anecdotal history of the people and communities that brought about the Internet and the web*. http://walthowe.com/navnet/history.html

International Telecommunication Union (ITU). (2004). *Africa: the world's fastest growing mobile market.* Retrieved from http://www.itu.int/newsarchive/press_releases/2004/04.html

Internetworldstats (2013). *Internet usage reports.* Retrieved from http://www.interentworldstats.com/usage.htm

Internetworldstats (2009). *Africa: Internet usage and Telecommunication Reports*. Retrieved from http://iiternetworldstats.com/africa.html

Jagboro, K.O (2003). A study of Internet usage in Nigeria universities: a case study of Obafemi Awolowo University, Ile-Ife, Nigeria. *First Monday* 8(12). Retrieved from http://www.firstmonday.orgissues/issue82/jagboro/index.html

Jagboro, K.O. (2007). Digitization of library materials: the Obafemi Awolowo University experience in: *Compendium of Papers Presented at the National Workshop on Digitization of Library Materials: Processes and Tools* held on 16th – 20th July, 2007 at the University of Jos. P.7

Jensen, M. (2002). *The African Internet: A Status Report.* Retrieved from http://www3.sn.apc.org/africa/afstat.htm

Jensen, M. (2005). *The African experience: building both supply and demand*: a presentation at the InfoDev workshop, March 14, 2005 at the World Bank Office, Paris. Retrieved from http://www.infodev.org/en/Publication.52.html.

Jere, M.G and Davis, S.V (2011). An application of uses and gratifications theory to compare consumer motivations for magazine and Internet usage among South African women's magazine readers. *Southern African Business Review*, 15 (1).

Joinson, A.N (2008). 'Looking at', 'looking up' or 'keeping up with people? Motives and uses of Facebook. *ACM.*

Kargaonkan, K. P., and Wolin, L. D. (1999). A multivariate analysis of web usage, *Journal of Advertising*. March/April, 53-68.

Karofi, U.A and Mwanza, J (2006). Globalization and crime. *Bangladesh e-Journal of Sociology.* 3(1), 70-87.

Kaye, B.K (1998). Uses and gratifications of the World Wide Web: from couch potato to web potato. *The New Jersey Journal of Communication*. 6(1), 21-40.

Kink, N. and Hess, T. (2008). Search engines as substitutes for traditional information sources: An investigation of media choice. *The Information Society,* 24(1), 18–29.

Kippax, S and Murray, J.P. (1980). Using the mass media: need gratification and perceived utility. *Communication Research.*

Kolawole, T (2008). The potential of the internet in Nigeria. Barcamp Africa, Mountain view, Ca. Sturvs Inc.

Kraut, R., Patterson, M., Lundmark, V., Kiesler, S., Mukhopadhyay, T., and Scherlis, W. (1998). Internet paradox: A social technology that reduces social involvement and psychological well-being? *American Psychologist, 53*(9), 1017-1031.

LaRose, R., Mastro, D. A., and Eastin, M. A. (2001). Understanding Internet usage: A social cognitive approach to uses and gratifications. *Social Science Computer Review,* 19:4, 395-413.

Leung, L and Wei, R. (2000). More than just on the move: uses and gratifications of the cellular phone. *Journalism and Mass Communication Quarterly,* 77(2), 308-320.

Levy, M. R. and Windahl, S. (1984). Audience activity and gratifications: a conceptual clarification and exploration. *Communication Research,* 11, 51-78.

Li, S. and Chung, T. (2006): Internet function and internet addictive behaviour. *Computer in Human Behaviour,* 22(6) 1067-1071.

Lievrouw, L.A. (2000). Babel and beyond: languages on the Internet, *ICA News,* 28, 6-9.

Lin, C. A. (1993). Exploring the role of the VCR use in the emerging home entertainment culture. *JournalismQuarterly, 70,* 833–842.

Livaditi, J., Vassilopoulou, K., Lougos, C and Chorianopoulos, K. (2002). *Needs and gratifications for interactive TV application: implications for designers.* Proceeding of the 36th Hawaii International Conference on System Sciences.

Loges, W.E. and Jung, J.Y. (2001). Exploring the digital divide: Internet connectedness and age. *Communication Research, 28*, 536-562.

Longe, O.B and Chiemeke, S.C. (2008). Cybercrime and criminality in Nigeria – what roles are Internet access point playing? *European Journal of Social Sciences,* 6(4).

Luo, X (2002). Uses and gratifications theory and e-consumer behavior: a structural equation modeling study. *Journal of Interactive Advertising,* 2(2), 34-41.

Manda, P.A. (2006). *State of ICTs in LIS curriculum in Tanzania*. A paper presented at the IFLA workshop on integrating ICTs in LIS curriculum in Africa. 21-23 November 2006 at Safari Court Hotel, Windhoek – Namibia.

McQuail, D. (2005). *McQuail's mass communication theory* (5th ed.). Los Angeles: Sage Publication.

Minishi-Majanji, M.K (2007). *Integration of ICTs in and library and information science education in sub-saharan Africa*. Retrieved from www.ifla.org/IV/ifla73/index.htm

Mondi, K., Woods, P., and Rafi, A. (2008). A uses and gratifications expectancy model to predict students perceived e-learning experience. *Educational Technology and Society,* 11(2), 241-261.

Monette, D.R., Sullivan, T.J., and DeJong, C.R (2002). *Applied social research.* Orlando, FLA: Hacourt Press.

MTN Universities Connect. (2011). Retrieved from www.mtnonline.com/univeritiesconnect

Newhagen, J.E and Rafaeli, S. (1996). Why communication researcher should study the Internet: a dialogue. *Journal of Communication,* 46, 4-13.

Norris, P. (2001). *Digital divide: civic engagement, information poverty and the internet worldwide*, Washington, DC: Cambridge University Press.

Nyland, R. (2007). *The gratification niches of Internet social networking, e-mail and face-to-face communication.* (A master's thesis, Brigham Young University).

O'Toole, K. (2000). Study offers early look at how internet is changing daily life, *Stanford Online Report*. Retrieved from http://news.stanford.edu/news/2000/february16/ internetsurvey-216.html.

Ogunshola, L.A. and Aboyade, W.A. (2005). Information and communication technology in Nigeria: a revolution or evolution. *Journal of Social science,* 11(1), 7-4.

Ogunsola, L.A. and Okusaga, T.O. (2006). Developing countries and the need for virtual libraries: problems and prospects. *Journal of Social Sciences,* 13(3): 221-229.

Ojedokun, A.A and Owolabi, E.O (2003). Internet access competence and the use of Internet for teaching and research activities by university of Botswana academic staff. *African Journal of Library. Archives and Information Science.* 13(1), 43-53.

Ojedokun, A.A. (2001). Internet access and usage by students of the University of Botswana. *African Journal of Archive Library and Information Science,* 11(2), 97-107.

Ojedokun, A.A. (2007). *Information literacy for tertiary education students in Africa.* Ibadan: Third World Information Services Limited.

Okebukola, P. (2002). Key issues in the development of the national virtual library. *Education Today: A Quarterly Journal of Federal Ministry of Education*. 4(1): 3-8.

Olanike, A.A. (2009). *The state of scientific information in Nigeria: a call for collaboration.* A paper presented at the 100th Annual Conference of the Special Libraries Association, Washington DC, USA, June 14-17.

Olatokun, W.M (2007). Availability, accessibility and use of ICTs by Nigerian women academics. *Malaysian Journal of Library & Information Science, 12, (2),13-33*

Olatunji, S. (2009). *MTN Nigeria inaugurates digital library in ABU*. Retrieved from http://www.nigerianbestforum.com/generaltopics/?p=5658

Omotayo, B.O (2006). A survey of Internet access and usage among undergraduates in an African university. *The International Information and Library Review,* 38,215-24. on television satisfaction.

Ono, H (2003). Gender and the Internet, *Social Science Quarterly,* 84(1), 11-121.

Osang, F. (2012). Internet access in Nigeria: perception of National Open University of Nigeria (NOUN) students. *International Journal of emerging Technology and Advanced Engineering,* 2(10), 492-497.

Oyewusi, F.O and Oyeboade, S.A. (2009). An empirical study of accessibility and use of library resources by undergraduates in a Nigerian state university of technology. *Library Philosophy and Practice.*

Papacharissi, Z., and Rubin, A. M. (2000). Predictors of Internet usage. *Journal of Broadcasting & Electronic Media, 44*, 175-196.

Patwardhan, P. (2004). Exposure, involvement and satisfaction with online activities: A cross-national comparison of American and Indian Internet users. *The International Journal of Communication Studies.* 66 (5), 411-436.

Perse, E. M., and Ferguson, D. A. (1993). The impact of the newer television technologies on television satisfaction. *Journalism Quarterly,* 70 (4), 843-853.

Perse, E.M and Courtright, J.A. (1993). Normative images of communication media: mass and interpersonal channels in the new media environment. *Human Communication Research,* 19(4).

Raacke, J. and Bonds-Raacke, J (2008). Myspace and Facebook: applying the uses and gratifications theory to exploring networking sites, *CyberPsychology and Behaviour,* 11(2).

Ribadu, N. (2007). *Cybercrime and commercial fraud: a Nigerian perspective*. Paper presented at a Congress to celebrate the fortieth annual session of UNCITRAL, Vienna. 3-12, July.

Rosengren, K. E., Johnson-Smaragdi, U., and Sonesson, I. (1994). For better and for worse: effects studies and beyond. In Rosengren, K. E. (Ed.), *Media effects and beyond: Culture, socialization and lifestyles* (pp. 302–315). New York: Routledge.

Roy, S.K. (2008). Determining uses and gratifications for Indian Internet users. CS-BIGS 2(2) 78-91. Retrieved from http//www.bentley.edu/csbigs/vol2-1/roy-pdf.

Rubin, A.M (2002). Media uses and effects: a uses and gratifications perspective. In Bryant, J and Zillman, D (Eds.) *media effects: advances in theory*, 525-544. New Jersey: Lawrence Erlbaum.

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

Sairosse, T.M and Mutula, S.M (2004). Uses of cybercafé: study of Gaborone city, Bostwana. *Program: Electronic Library and Information Systems,* 28 (1), 60-66.

Salau, S and Emmanuel, N.O (2012). Social networking in virtual community centres: uses and perception among selected Nigerian students. *International Journal of Research in Commerce, IT and Management,* 2(10), 26-31.

Schaefer, R.T. (2005). *Sociology* (9th ed). New York: McGraw Hill.

Shiloba, G.E (2005). Setting up and managing ICT laboratory in a Nigerian library school: Ahmadu Bello University, Zaria Experience, *African Journal of Archive and Information Science,* 15(1), 51-58.

Singh, A.M. (2002). The Internet strategy for optimum utilization in South Africa. *South Africa Journal of Information,* 4(March).

Spears, R. and Postmes, T. and Lea, M. and Wolbert, A. (2002). When are net effects gross products? The power of influence and the influence of power in computer-mediated communication. *Journal of Social Issues,* 58 (1), 91 – 107.

Stafford F.T and Gillenson, M.L (2004). *Motivations for mobile devices: uses and gratifications for M-Commerce.* Proceeding of the Third Annual Workshop on HCI Research in MIS, Washington D.C, December 10-11.

Stafford, F.T., Stafford, R.M., and Schkade, L.L (2004). Determining uses and gratifications for the Internet. *Decision Sciences,* 35(2), 259-288.

Stringer, G. (2005).*The Internet: MIT2114/2214* Retrieved from http://services.exeter.ac.uk/cmit/modules/the_internet/MITxx14-notes.pdf

Taylor, W.J., Zhu, G.X., Dekkers, J., and Marshall, S (2003). Socio-economic factors affecting home Internet usage patterns in Central Queensland, *Informing Science Journal,* 6.

Tella, A. (2007). University of Botswana undergraduate uses of the internet: implications on academic performance. *Journal of Educational Media and Library Sciences,* 45(2), 161-185.

Teo, S.H.T. and Lim, K.G.V (1997). Usage patterns and perceptions of the Internet: the gender gap, *Equal Opportunities International,* 16(6/7), 1-8.

Tewksbury, D and Althaus, S.L (2000). An examination of motivations for using the World Wide Web. *Communication Research Reports,* 17(2), 127-138. Retrieved from http://www.communication.illinois.edu/salthaus/Publications/tewksbury_althaus_2000_crr.pdf

Thayer, S. E and Ray, S (2006). Online communication preferences across age, gender, and duration of Internet use. *CyberPsychology and Behaviour,* 9, 432-440.

UNDP. Evaluation Office (2001). Information communication technology for development. *Research Report*. 5, 1-13.

Ureigho, R.J., Oroke, G.U., & Ekruyota, G.O. (2006). The impact of internet usage: A case study of Delta State (Nigeria) tertiary institutions, *Scientific Research and Essay*, 1(2), 54-56.

Van Deursen, A.J.A.M. and Van Dijk, J.A.G.M. (2011). Internet skills and the digital divide. *New Media and Society*, 13(6), 893-911

Waldman, D. (2003). Freshman's use of library electronic resources and self-efficacy. *Information Research*, 8(2), 150. Retrieved from http://informationr.net/ir/8-2/paper150.html

Waples, D., Berelson, B., and Bradshaw, F.R (1940). *What reading does to people.* Chicago: University of Chicago Press.

Weiser, E. (2000). Gender differences in Internet use patterns and Internet applications preferences: a two-sample comparison, *CyberPsychology and Behaviour*, 4, 167-178.

Wells, J.G (2000). Walls, effects of an online computer communication course, prior computer experience and Internet knowledge and learning styles on students' Internet attitudes: computer-mediated technologies and new educational challenges. *Journal of Industrial Teacher Education,* 37 (3), 22-53.

Welte, J.W., Barnes, G. M., Wieczorek, W. F., Tidwell, M., and Parker, J. (2002). Gambling participation in the U.S. -- Results from a National Survey. *Journal of Gambling Studies*, 18(4), 313-337

Williams, F., Rice, R.E., and Rogers, E.M. (1988). *Research methods and the new media:* New York: Free Press.

Wimmer, R. D., and Dominick, J. R. (2003). *Mass Media Research: An Introduction*. Belmont, CA: Thomson Wadsworth.

Womboh, B.S.H., and Abba, T. (2008) The state of Information and Communication Technology (ICT) in Nigerian university libraries: The experience of Ibrahim Babangida Library, Federal University of Technology, Yola. *Library Philosophy and Practice*. Retrieved from http://unllib.unl.edu/LPP/womboh.htm.

Wood, R.T., and William R.J. (2007). Internet Gambling: Past, Present and the Future in Smith, G., Hodgins, D., and Williams R.J (eds.). *Research and Measurement Issues in Gambling Studies,* 491-514. San Diego: Elsevier Publishing.

APPENDIX I

QUESTIONNAIRE

For Official Use Only:

QUES ID/UNI: _____AP_____/NO: ____/

Dear Respondent,

I am a postgraduate student conducting research on **Nigerian University Students' Internet Uses and Gratifications: A Comparative Study of two Selected Internet Access Points."** Kindly provide the appropriate information to the following questions, please. Note that all information you shall provide will be treated with confidentiality and used only for academic and research purpose. Your cooperation is highly appreciated.

Tick the appropriate option

1. Sex: Male [ ]Female [ ]
2. What is your age (years)?
   18- 25 [ ] 26-32 [ ] 33-39 [ ] 40 and above [ ]

3. What educational qualification are you pursuing?
   Diploma/Pre-degree[ ] Bachelor's Degree [ ] PGD[ ] Masters[ ] PhD[ ]

4. How would your describe your knowledge of the Internet? (Choose just one)
   Beginner[ ] Intermediate[ ] Advanced[ ] Don't Know[ ]

5. Do you visit MTN Universities Connect Library?
   Yes [ ] No [ ]

6. If **NO,** go to question 11 and if **YES**, proceed to question 7
7. How often do you visit MTN Universities Connect Library?
   Very Often[ ] Often[ ] Rarely[ ] Never [ ] Don't Know[ ]

8. State why you go to MTN Universities Connect Library (Tick the appropriate option). Please, note that 5 stands for **Very Often'**, 4 – **Often**, 3 – **Rarely**, 2 – **Never** and 1 stands for **Don't Know**

		1	2	3	4	5
a.	To chat with people	[ ]	[ ]	[ ]	[ ]	[ ]
b.	It introduces me to people	[ ]	[ ]	[ ]	[ ]	[ ]

c.	It provides information about jobs	[ ]	[ ]	[ ]	[ ]	[ ]
d.	Provides scholarship information	[ ]	[ ]	[ ]	[ ]	[ ]
e.	Widens my knowledge	[ ]	[ ]	[ ]	[ ]	[ ]
f.	Makes me to be part of the world	[ ]	[ ]	[ ]	[ ]	[ ]
g.	Gives me ideas	[ ]	[ ]	[ ]	[ ]	[ ]
h.	It is cheap	[ ]	[ ]	[ ]	[ ]	[ ]
i.	It is fast	[ ]	[ ]	[ ]	[ ]	[ ]
j.	Helps me in assignment	[ ]	[ ]	[ ]	[ ]	[ ]
k.	It is convenient	[ ]	[ ]	[ ]	[ ]	[ ]
l.	To watch pornography	[ ]	[ ]	[ ]	[ ]	[ ]
m.	To check my results	[ ]	[ ]	[ ]	[ ]	[ ]
n.	For course registration	[ ]	[ ]	[ ]	[ ]	[ ]
o.	To pass time when bored	[ ]	[ ]	[ ]	[ ]	[ ]
p.	To get information about events	[ ]	[ ]	[ ]	[ ]	[ ]
q.	To keep in touch with family	[ ]	[ ]	[ ]	[ ]	[ ]
r.	To follow sports updates	[ ]	[ ]	[ ]	[ ]	[ ]
s.	To register my courses	[ ]	[ ]	[ ]	[ ]	[ ]
t.	For my assignment, project or thesis	[ ]	[ ]	[ ]	[ ]	[ ]
		1	2	3	4	5

9. What do you use the Internet of MTN Universities Connect for? Choose as applied. Please, note that 5 stands for **Very Often**, 4 – **Often**, 3 – **Rarely,** 2 represents **Never** and 1 stands for **Don't Know**.

	1	**2**	**3**	**4**	**5**
a. E-mail	**[ ]**	**[ ]**	**[ ]**	**[ ]**	**[ ]**
b. News/sports	**[ ]**	**[ ]**	**[ ]**	**[ ]**	**[ ]**
c. Social networking e.g facebook, twitter	**[ ]**	**[ ]**	**[ ]**	**[ ]**	**[ ]**
d. Online transaction	**[ ]**	**[ ]**	**[ ]**	**[ ]**	**[ ]**
e. Gaming	**[ ]**	**[ ]**	**[ ]**	**[ ]**	**[ ]**
f. Gambling	**[ ]**	**[ ]**	**[ ]**	**[ ]**	**[ ]**
g. Job search	**[ ]**	**[ ]**	**[ ]**	**[ ]**	**[ ]**
h. Music download	**[ ]**	**[ ]**	**[ ]**	**[ ]**	**[ ]**
i. Book/material download	**[ ]**	**[ ]**	**[ ]**	**[ ]**	**[ ]**
j. Movie/video download	**[ ]**	**[ ]**	**[ ]**	**[ ]**	**[ ]**
k. Dating	**[ ]**	**[ ]**	**[ ]**	**[ ]**	**[ ]**
l. Chatting	**[ ]**	**[ ]**	**[ ]**	**[ ]**	**[ ]**
m. For research	**[ ]**	**[ ]**	**[ ]**	**[ ]**	**[ ]**
	1	**2**	**3**	**4**	**5**

10. What other use do you put the Internet of MTN Universities Connect to? Specify below if any

    a._____

    b._____

11. How satisfied are about the Internet services of MTN Universities Connect Library? (Tick one option only)

a. Very Satisfied [ ]
b. Satisfied [ ]
c. Don't know [ ]
d. Dissatisfied [ ]
e. Very Dissatisfied [ ]

12. Do you go to Cybercafé? Yes [ ] No [ ]

13. If **NO**, go to question 17 and if **YES**, proceed to question 14

14. How often do you visit Cybercafé?
    Very Often [ ] Often [ ] Rarely [ ] Never [ ]

15. Why do you go to Cybercafé? (Tick the appropriate option). Please, note that 5 stands for **Very Often**, 4 – **Often**, 3 – **Rarely** and 2 represents **Never** and 1 stands for **Don't Know**.

		1	**2**	**3**	**4**	**5**
a.	To chat with people	**[ ]**	**[ ]**	**[ ]**	**[ ]**	**[ ]**
b.	It introduces me to people	**[ ]**	**[ ]**	**[ ]**	**[ ]**	**[ ]**
c.	It provides information about jobs	**[ ]**	**[ ]**	**[ ]**	**[ ]**	**[ ]**
d.	It provides scholarship information	**[ ]**	**[ ]**	**[ ]**	**[ ]**	**[ ]**
e.	It widens my knowledge	**[ ]**	**[ ]**	**[ ]**	**[ ]**	**[ ]**
f.	It makes me to be part of the world	**[ ]**	**[ ]**	**[ ]**	**[ ]**	**[ ]**
g.	It gives me ideas	**[ ]**	**[ ]**	**[ ]**	**[ ]**	**[ ]**
h.	It is cheap	**[ ]**	**[ ]**	**[ ]**	**[ ]**	**[ ]**
i.	It is fast	**[ ]**	**[ ]**	**[ ]**	**[ ]**	**[ ]**
j.	Helps me in assignment	[ ]	[ ]	[ ]	[ ]	[ ]
k.	It is convenient	[ ]	[ ]	[ ]	[ ]	[ ]
l.	To watch pornography	[ ]	[ ]	[ ]	[ ]	[ ]
m.	To check my results	**[ ]**	**[ ]**	**[ ]**	**[ ]**	**[ ]**

n. For course registration	**[ ]**	**[ ]**	**[ ]**	**[ ]**	**[ ]**
o. To pass time when bored	**[ ]**	**[ ]**	**[ ]**	**[ ]**	**[ ]**
p. To get information about events	**[ ]**	**[ ]**	**[ ]**	**[ ]**	**[ ]**
q. To keep in touch with family	**[ ]**	**[ ]**	**[ ]**	**[ ]**	**[ ]**
r. To follow sports updates	**[ ]**	**[ ]**	**[ ]**	**[ ]**	**[ ]**
s. To register my courses	**[ ]**	**[ ]**	**[ ]**	**[ ]**	**[ ]**
t. For my project or thesis	**[ ]**	**[ ]**	**[ ]**	**[ ]**	**[ ]**
	1	**2**	**3**	**4**	**5**

16. What do you do at the Cybercafé? Please, note that 4 stands for **Very Often**, 3 – **Often**, 2- **Rarely** and 1 represents **Never**

	1	**2**	**3**	**4**	**5**
a. E-mail	**[ ]**	**[ ]**	**[ ]**	**[ ]**	**[ ]**
b. News/sports	**[ ]**	**[ ]**	**[ ]**	**[ ]**	**[ ]**
c. Social networking e.g facebook, twitter etc	**[ ]**	**[ ]**	**[ ]**	**[ ]**	**[ ]**
d. Online transaction	**[ ]**	**[ ]**	**[ ]**	**[ ]**	**[ ]**
e. Gaming	**[ ]**	**[ ]**	**[ ]**	**[ ]**	**[ ]**
f. Gambling	**[ ]**	**[ ]**	**[ ]**	**[ ]**	**[ ]**
g. Job search	**[ ]**	**[ ]**	**[ ]**	**[ ]**	**[ ]**
h. Music download	**[ ]**	**[ ]**	**[ ]**	**[ ]**	**[ ]**
i. Book/material download	**[ ]**	**[ ]**	**[ ]**	**[ ]**	**[ ]**
j. Movie/video download	**[ ]**	**[ ]**	**[ ]**	**[ ]**	**[ ]**
k. Dating	**[ ]**	**[ ]**	**[ ]**	**[ ]**	**[ ]**
l. Chatting	**[ ]**	**[ ]**	**[ ]**	**[ ]**	**[ ]**
m. For research	**[ ]**	**[ ]**	**[ ]**	**[ ]**	**[ ]**
	1	**2**	**3**	**4**	**5**

17. What other use do you put Cybercafé to? State below if any

a.

b.

17. How satisfied are you about the Internet services of the Cybercafé? (Tick one option only)

    a. Very Satisfied [ ]

b. Satisfied [ ]
c. Don't know [ ]
d. Dissatisfied [ ]
e. Very Dissatisfied [ ]

18. As a student, which of the following Internet access point do you use most? (Choose one option only).

a. Cybercafé [ ]
b. Personal Computer (Modem) [ ]
c. MTN Universities Connect Library [ ]
d. WLAN (Wireless network) [ ]
e. Mobile Phone [ ]
f. Others (Specify)_____

19. Give reason or reasons for the answer above

A.

B.