USES AND GRATIFICATIONS OF THE INTERNET AMONG COLLEGE STUDENTS IN KENYA: A CASE STUDY OF KENYA SCHOOL OF PROFESSIONAL STUDIES

BY

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DECLARATION

This is my original work and has not been presented to any other university for a degree award or anywhere else for academic purposes.

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DEDICATION

To my Late Wife; Rebecca Wangui Ngunjiri, who passed on in the course of my studies.

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However, all errors and omissions, views and interpretations remain mine and should not be attributed to any one of the above mentioned persons.

ABSTRACT

This study set to investigate college students' uses and motives of the Internet at Kenya School of Professional Studies (KSPS). The hypotheses predicted that there was a positive relationship between exposure to Internet services/resources and uses/gratifications sought by KSPS students. Data was collected from 294 respondents using questionnaires, focus group discussions and content analysis of websites accessed by respondents. The data were analyzed using SPSS Version 12.0.

Results indicated that the most frequently used Internet services were: e-mail, World Wide Web, Instant Messaging and File Transfer Protocol. Very few respondents indicated using the e-learning resources provided. Respondents used and were motivated to use the Internet more for communication, information seeking, developing and maintaining online and social interactions than for entertainment, coping with peer pressure, escape from problems, improving personal status and aesthetic experiences. Internet interactivity was also a factor motivating respondents to use the Internet. The uses and gratifications sought by students were influenced by various demographic antecedents.

The major challenges faced by students in Internet use were noted as; insufficient awareness on the educational e-resources available to KSPS library users, lack of encouragement from some lecturers and lack of adequate Internet use skills.

The two hypotheses that there was a positive relationship between exposure to Internet services/resources and uses/gratifications sought by KSPS students were supported by the results of this study. College students use and get motivated to use the Internet for many purposes, least of which is for accessing the e-learning resources provided by the institution. The researcher recommends that students be trained on how to use the Internet. Technical/ operational measures should be used to control the non-educational use of the Internet resources and services.

ABBREVIATIONS AND ACRONMYS

ADL:	African Digital Library
ARCC:	African Regional Centre for Computing
ARPANET:	Advanced Research Projects Agency Network
CHE:	Commission of Higher Education
FGD:	Focus Group Discussion
E- resources:	Electronic resources
E-mail:	Electronic mail
FTP:	File Transfer Protocol
ICT:	Information and Communications Technology
IM:	Instant Messaging
IRC:	Internet Relay Chat
IS:	Information Sciences
ISP:	Internet Service Providers
KSPS:	Kenya School of Professional Studies
M:	Mean
Internet:	Internet
Non-IS:	Non- Information Sciences
PERI:	Programme for Enhancement of Research Information
r_s	Spearman's rank correlation coefficient
SD:	Standard Deviation
SPSS:	Statistical Package for Social Sciences

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CHAPTER ONE
INTRODUCTION

1.1 Background to the study

The Internet is a global network of linked computers that allows participants to share and exchange information. Through the Internet, services such as electronic mail (e-mail), World Wide Web (WWW), mailing lists and Usenet Newsgroups are accessible. Severin and Tankard (2001) acknowledge that the most popular Internet services are: e-mail, WWW, newsgroups and mailing lists.

The origins of the Internet can be traced back to the 1950s when Russia launched a satellite called Sputnik, the Cold War and the development in the U.S. of Advanced Research Projects Agency Network (ARPANET). However, the Internet really took off in the 1980s when the National Science Foundation used ARPANET to link its five regional supercomputer centers. Wolpers and Mo (1997) recognize that the greater adoption and use of the Internet can be traced to the 1990s, when it became globally and freely accessible to the public.

The Internet has transformed all facets of human life ever since it became globally accessible to the public in the 1990s. This transformation is witnessed by the rising number of Internet users globally. According to *Computer Industry Almanac* (2006), "the worldwide number of Internet users surpassed one billion in 2005, up from only 45 million in 1995 and 420 million in 2000." With the growing number of users, the Internet has reached the mass use stage. Therefore, it is now considered as a powerful communication media and this necessitates research to establish how and why audiences use the Internet.

Initially the Internet was used by scientists and university professors. This explains why educational institutions have been early adopters of the Internet (Defleur and Dennis, 2002). According to Mutula (2001), in educational institutions, the Internet has become the preferred technology to improve

instruction, increase access to information, enhance distance education and raise productivity of students and lecturers. Dawson (2005) adds that the strengths of the Internet for academic work include; currency of online information sources, accessibility to multi-media resources and information not limited by distance or time constraints.

With the improved Internet connectivity, educational institutions in the developing countries are now beginning to tap into the many opportunities offered by the modern information societies (International Network for the Availability of Scientific Publications, 2003). The increased use of the Internet in academic institutions worldwide has made communication and educational media researchers recognize the significance of understanding how and why students use it. Studies on Internet use among college students are desirable as students are heavy users of the Internet compared to the general population and that the use of the Internet among them is a daily routine (Jones, 2002).

One of the theories that has been used to study audience uses of mass media in general and new media in particular is the uses and gratifications theory. Rice and Williams (1995) say that "the new media provide fertile test beds for many of our theories and models." They add that the uses and gratifications model is ideal for the analysis of new media such as the Internet. This explains why the present study was conducted based on the uses and gratifications approach.

1.1.1 Uses and gratifications theory

With the increased use of the Internet world over, the concern of many communication scholars and theorists is on the need to answer two primary questions. First, "What do people do with the Internet?" Second, "Can the old communication theories still apply to the Internet?" One of the old communication theories that is relevant to Internet utilization is the uses and gratifications theory. Supporting this, Rice and Williams (1995) state that one mass media theory that has repeatedly been cited as holding promise for the

analysis of new media such as the Internet is the uses and gratifications theory. This theory originally arose in the 1940s and under went revival in the 1970s and 1980s.

According to Severin and Tankard (2001), the uses and gratifications theory is an approach to the media that involves a shift of focus from purposes of the communicator to the purposes of the receiver to determine what functions mass communication is serving for audience members. Defleur and Ball-Rokeach (1988) further clarify that the rise of the uses and gratifications perspective was a shift from the old view that audience were passive (a dominant concept in the magic-bullet theory) to the realization that mass media users were active in their selection of preferred content and messages from the media.

One of the tenets of the uses and gratifications model is that audiences are active and seek to find out mass media that satisfy their gratifications. The Internet has enabled audience to have more options from which they are able to select the websites and Web pages that satisfy their specific needs. The Internet also allows audiences to be in more control of the media. Ko (2000) comments that Internet interactivity makes the uses and gratifications model appropriate to its study as the theory emphasizes "audience activity." On the WWW, a user interacts with the Web browser, Web pages and hyperlinks.

Studies on the uses and gratifications of the Internet among students have shown that the students use the Internet for entertainment and diversion, social interaction, passing time, escape, information, to maintain communication, and website preference (Kaye, 1998; Charney, 1996). Past studies conducted on the use of the Internet by students based on the uses and gratifications perspective show that the Internet is least used for educational purposes. A study by Kwanya (2005) on uses and gratifications of the Web among five secondary schools' students in Nairobi concluded that most of the students did not visit websites for academic purposes. According to this study, students do not think the Web to be

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an educational tool rather they view it as an information reservoir that they exploit for many uses, of which education is the least important.

Several studies have been conducted on Internet use among the students' population based on the theoretical foundations of the uses and gratifications theory. However, most of these studies have primarily focused on U.S. audience (Papachararissi and Rubin, 2000). It is for this reason that the researcher decided to conduct the current study in order to find out Internet uses and motives among college students at Kenya School of Professional Studies (KSPS). College students were selected for this study because as Jones (2002) acknowledges, they are heavy users of the Internet compared to the general population.

KSPS is a middle-level private college established in 1983. It is located in Inoorero centre on Forest Road in Parklands, Nairobi. The college established free Internet services to its students and staff way back in 2000. Access to Internet services to students and staff is provided in the college through over 200 computers in seven computer laboratories, library, staff rooms and other staff offices. The KSPS Wireless Local Area Network also allows students, lecturers and other staff to have un-tethered Internet access from their laptops when in classrooms, computer laboratories, canteen, staff rooms and even hallways of the school's building.

The college has a website: http://www.ksps.ac.ke. Through this website, information relating to the school is provided. The students and staff have access to a wide range of e-resources in various academic disciplines through the Programme for Enhancement of Research Information (PERI). Such access includes full-text journal articles, abstracting and indexing services.

1.1.2 Internet in Kenya

The genesis of the Internet in Kenya can be traced to 1993. According to Mweu (2003), the Internet first became available in Kenya to a small group of technical

enthusiasts in 1993. The Centre for International Development and Conflict Management (1998) notes that the African Regional Centre for Computing (ARCC) inaugurated full Internet connectivity in Kenya in October 1995.

The first commercial Internet Service Provider (ISP), Formnet began operating in 1995. At present there are over 100 licensed ISPs of which about half are operational. Some of the ISPs in operation are; KenyaWeb, Swift Global (K) Ltd, UUNET Kenya Ltd, Nairobi Net Ltd, KENET, Todays Online Ltd and SimbaNet Com Ltd. By the end of 1995, Nairobi area had 100 Internet users and by 2000, there were about 200,000 Internet users in Kenya. This number has grown very fast and now we have approximately 1.5 million Internet users in Kenya (*The 2006 Kenya ICT Strategy*).

A number of initiatives demonstrate that the Internet has been adopted in academic institutions in Kenya. Schools, colleges and universities have websites through which course and other information is disseminated to the students and the rest of the public. Many libraries in colleges and universities in Kenya have embraced the e-resources concept. This is widely done through Programme for Enhancement of Research Information (PERI).

1.2 Statement of the problem

Many academic institutions have invested a lot in Information and Communications Technology (ICT). One of these investments is in the provision of computers and free Internet services to students, faculty and other staff. Contributing on the role of the Internet to college students, Jones (2002) points out that the Internet has opened new academic opportunities for students. First, through the Internet, online study groups thrive. These study groups allow students who do not live in the same vicinity to meet and discuss class work. Second, e-mail allows students to turn in assignments, communicate with lecturers, peers and parents at any time, and also maintain contact easily with their

friends. Thirdly, the Internet allows social connections already developed to continue to be cultivated in addition to allowing new ones to be formed.

The Internet is considered important to students in many ways. However, while previous studies show that students heavily use the Internet, it is not used to further their academic or educational goals. For example, a study by Wambilyangah (2006) revealed that "the youth in Nairobi did not consider the Internet as an academic hub." A study by Kwanya (2005) found out that most of the students did not visit websites for academic purposes. Jones (2002) concurs with these findings, and says that it is not surprising to find out that college students use the Internet more as a medium for social communication than for educational or professional communication.

Another ICT investment by academic institutions is the provision of e-resources. Libraries in colleges and universities subscribe to e-resources as additional sources of information to their print resources. However, it is discouraging to note that these e-resources are not adequately utilized. In his study on college students' use of the Internet in the library, Jones (2002) noted that majority of the students' time was not spent on using e-resources. Students dominantly indicated using the Internet for e-mail, instant messaging and Web surfing. This situation calls upon an investigation to establish why and how students are using the Internet services and resources.

Several reasons exist to justify the inadequate use of the Internet by students for a wide range of purposes. The major reason for failure to use the Internet effectively is lack of skills among the students in the utilization of the Internet (Luambano and Nawe, 2004). They further add other two reasons. One, there is insufficient awareness of Internet resources that could enhance learning. Two, lack of motivation for the students as some lecturers don't encourage students' use of Internet resources but rather place all emphasis on printed resources.

Mutula (2001) points out that in East Africa, users are not provided with the necessary skills required for effective Internet utilization. Jones (2002) further observes that although academic resources are offered online, it may be that students have not yet been taught or have not figured out how to locate these resources. It is also important to note that many people still think of the Internet as simply a tool for e-mail communication and are not fully aware of other Web-based applications (Centre for International Development & Conflict Management, 1998).

It is disappointing to note that there is increased expenditure in the provision and maintenance of Internet services and resources to students in schools, colleges and universities in Kenya yet few students utilize them to further their academic goals. This trend in the use of Internet services and resources causes a lot of concern to the faculty and administrators in colleges and universities. It also causes concern to those involved in designing e-learning websites and resources. As Kwanya (2005) rightly says, if the students do not fully utilize the e-resources and services and the e-learning opportunities available, then money invested in their development and provision will go to waste.

The extensive use of the Internet since the 1990s has made the study of the Internet become a focal point for many communication researchers. In view of this, it is necessary that user needs and expectations towards the Internet should be examined to better understand its uses and gratifications. Therefore, this study aims at investigating college students' uses and motives of the Internet with a focus on one college, Kenya School of Professional Studies (KSPS).

1.3 Objectives of the study

The specific objectives of this study were to:

(i) Examine the main e-services and resources provided in the institution and determine their frequency of use among students.

(ii) Identify the uses of the Internet among college students.

(iii) Determine the motives/gratifications sought by students using Internet resources and services.

(iv) Establish the demographic characteristics of the college students and determine how these demographics affect their uses and gratifications of the Internet resources and services.

(v) Identify the challenges faced by students when using the Internet.

1.4 Hypotheses of the study

The two hypotheses tested in this study were as follows:

(i) There is a positive relationship between exposure to Internet services/resources and uses among KSPS students.

(ii) There is a positive relationship between exposure to Internet services/resources and gratifications sought by KSPS students.

1.5 Significance of the study

Information collected in this study relating to the uses and motives of Internet users can be helpful in building profiles and predicting behaviours. These data is useful in a number of areas including marketing, design, education and psychology. Internet Service Providers (ISPs) and website designers would benefit from conceptualizations of and Internet usage motivations identified in this study. After all, much of the ISP management revolves around helping customers get what they want and understanding their expectations in order to meet them.

Investors and who would-be-investors involved in the provision of Internet access services and website operators can also benefit from the conceptualization of Internet audience usage motivations identified in this study. Understanding uses and gratifications for students using the Internet guides ISP managers in fine-tuning their offering to satisfy the needs of the audience.

A research into the use of the Internet among college students such as the present one has important implications for e-education policy makers and funding initiatives. While a study such as the current one is only a small step in the quest to assess the value of the Internet, it is important in that it permits identification of the motivations of individual Internet users.

The results of this study are useful to education policy makers and project officers in designing e-learning resources' websites. The e-learning resources and website designers can use these research findings to design websites with features or incentives that can motivate students to utilize the Internet more for a wide range of important uses.

The results of this research have added to the scarcely available information in Kenya on uses and gratifications of the Internet and this is useful in advancing theoretical development of the uses and gratifications theory. To the communication scholars and researchers, this study forms a foundation for future researchers who would like to pursue a study in the area of uses and gratifications of new media, especially Internet based media.

1.6 Scope and limitations of the study

This study was restricted to the uses and gratifications of the Internet among college students pursuing full-time diploma and undergraduate level courses at KSPS. This is a middle-level private college established in 1983 and located in Inoorero centre on Forest Road in Parklands, Nairobi.

The limitations underlying this study arose because of the inadequate time available to the researcher to conduct the study on a large student population over a longer time frame. Lack of adequate funding to cater for the research expenses is another factor contributing to these limitations.

1.7 Definition of important terms

In the framework of this study, the following terms are restricted to the definitions and explanations stated here:

Demographic characteristics: Internet use is affected by demographic characteristics of the audience. In this study, demographic characteristics or antecedents refer to the variables about college students that have an effect on Internet use. These demographic antecedents include; fields/areas of study, levels of study, years of study, gender, age and hours spent online per week.

Internet: A Wide Area Network connecting millions of computers globally for the purpose of allowing people to access information, contact each other and share information resources.

Internet services: A generic term that encompasses e-mail, World Wide Web, Usenet newsgroups, File Transfer Protocol, instant messaging/Internet Relay Chat and Listservs/mailing lists.

Internet resource: Any document that is available and accessible on the Internet, for example, e-journals, e-newspapers and e-books. Internet resource in this case is used synonymously with electronic resource or digital resource.

Exposure to Internet services/resources: Refers to the access and use of Internet services and resources.

Gratification: The satisfaction of any need being met.

Uses: Within the uses and gratifications model *"use"* is defined as a person's selection of a certain communication channel to perform a particular activity or activities. Therefore, *"Internet uses"* refer to the reasons that college students

report for using Internet services. For example, a use would be if a college student reports using the Internet to search for information.

Motive/motivation: The gratifications an audience seeks from a particular mass media, which in this case is the Internet. According to Rechiutti (2003), another term that can be used to describe a motive is *gratification sought.* For example, a college student may indicate that the motive for using the Internet is that it allows him/her to communicate for 24 hours.

CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

The purpose of this chapter is to review literature that is directly related to the current study. A survey of the literature related to the uses and gratifications of mass media and especially the Internet was done and those that are related directly to the aim and objectives of this research are brought out in this chapter. The review is done under headings pertinent to the present study. The literature review provides a sound conceptual, theoretical and practical understanding of the uses and gratifications theory in general and the Internet in particular.

2.2 Historical overview of the Internet

Korgen, Odell and Schumacher (2001) define Internet as "a huge network of computers and smaller networks linked worldwide which allows people to access information and contact each other. Franklin et al. (2005) traces the origins of the Internet to 1957 when Russia launched Sputnik, the first artificial satellite that was to herald the beginning of global communication era. After the launch of Sputnik, ARPANET began conducting military and academic research to develop an experimental computer network which would function even if part of it had been destroyed in war.

Defleur and Dennis (2002) say that the Internet was first used by scientists and university professors. According to these authors, an important aspect of Internet development was the introduction in 1993 of Mosaic, a Web browser. With a Web browser, a user views Web pages that may contain text, images, and other multimedia and navigates between them using hyperlinks. However, the Internet took off in the 1980s when the National Science Foundation used ARPANET to link its five regional supercomputer centers (*The Internet,* 1999).

The African continent has not been left behind in the adoption and use of the Internet since its global accessibility in the 1990s. However, there is lack of well-documented information on the history of the Internet in the continent; however the adoption of the Internet has grown rapidly in most urban areas in Africa. By mid 2002, the number of dial-up Internet subscribers was close to 1.7 million. The latest estimates put the number of Internet users in Africa at 333, 334,800 (*Internet World Stats: Usage and Population Statistics*, 2007).

It is important to note that in Africa, each computer with an Internet or e-mail connection usually supports a range of three to five users. Countries such as those in North Africa and Southern Africa have better economies and ICT infrastructure and consequently have larger populations of Internet users. Most of these countries were also among the first on the continent to obtain Internet access (*The African Internet- A Status Report*, 2002).

2.3 Origins of the Internet in Kenya

Mweu (2003) asserts that the Internet first became available in Kenya to a small group of technical enthusiasts in 1993. It was accessed only through Gopher that offered access to text-based information. African Regional Centre for Computing (ARCC), a Non-Governmental Organization based in Nairobi became the first provider of Web-based information services by providing their subscribers with the first ever Web browser called Mosaic. Connection to the global Internet was through analogue leased lines. While there are differences on when actually the Internet came to Kenya, it is evident that the country tapped into the global public accessibility of the Internet when it first emerged in the early 1990s.

Kenya has experienced phenomenal growth in Internet and it is ranked fifth among the top ten countries in Africa for numbers of Internet users. The country also leads the number of Internet users within East Africa. It has approximately 1.5 million Internet users while Uganda and Tanzania have 500,000 and 333,000

users respectively (*The* 2006 *Kenya ICT strategy; Internet World Stats: Usage and Population Statistics*, 2007).

2.4 Features of the Internet

The Internet is regarded as a powerful communication medium due to its unique characteristics. As a modern communication medium, the Internet has enhanced the characteristics of the old media as well as added other features not inherent in the traditional mass media. According to Severin and Tankard (2001), the primary features of the Internet are interactivity, hypertexuality and multimediarity.

Interactivity is one of the most cited characteristic of the Internet in as far as uses and gratifications model is concerned. This feature makes Internet audience to be active, a core issue in the uses and gratifications research. Interactivity is the "degree to which participants in a communication process have control over, and can exchange roles, in their mutual discourse" (Severin and Tankard, 2001 while quoting Williams, Rice and Rogers).

Interactivity is related to the term, "control," that is people can control what information they see, for how long, how many times, and in what order. Roehm and Haugtvedt (1999) note that interactivity has two dimensions: (1) control, and (2) message. The control dimension refers to who controls the nature of interactivity. The message-width of interactivity has two elements; (a) *Form-oriented interactivity:* This refers to the use of interactivity to manipulate the message form, and (b) *Content-oriented interactivity:* This refers to the use of interactivity to manipulate the content of the communication (Roehm and Haugtvedt, 1999). Greenfield (1999) further adds that Internet interactivity has two aspects: (1) human-computer, for example WWW is very easy to use hence enhancing human-computer interactions. (2) interpersonal, for example chatrooms and e-mails facilitate interpersonal interactions.

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Hypertexuality is an important feature of the Internet. Commenting on hypertextuality, Severin and Tankard (2001), note that WWW uses hyperlinks, which are points on a web page that a user can click on to be moved to some other point, either in the same Web document, the same website or some other website.

Multimediarity is another feature of the Internet. Severin and Tankard (2001) say that multimedia is "a communication system that offers a mixture of text, graphics, sound, video, and animation. More recently, WWW has featured streamlining multimedia or live audio and video available through a website." This feature is further enhanced by hyperlinks or hypertext whereby users can click on links to bring up a sound sample or video. As a multimedia, the Internet, integrates the characteristics of television, print, and radio into a single medium. This explains why the Internet is able to meet the old media gratifications such as surveillance, entertainment and personal identity.

There are other features of the Internet that make it amiable to uses and gratifications study. The Internet combines innovative features of its predecessors, such as bridging great distances and reaching a mass audience. One of the novel features of this new medium is the relative anonymity afforded to users and the provision of group venues in which to meet others with similar interests and values. Information richness also defines the characteristics of the Internet. The range and depth of information on the Internet is greater than in traditional media. The Internet allows for communicating to audience substantially more content-rich product information.

In a nutshell, Chou (2001) remarks that college students appreciate interactivity, ease of use, availability and breadth of information accessed on the Internet. This view is acknowledged by Greenfield (1999) who asserts that accessibility, intensity of information accessed online, and the potency of its contents are unique characteristics, which contribute to Internet addiction.

2.5 Internet services and resources

For students to make effective use of the Internet, they must know the services and resources available on the Internet and what they are used for. These services include; e- mail, WWW, instant messaging/Internet Relay Chat (IRC), FTP, Usenet newsgroups, and Listservs or mailing lists among others. According to Gauntlett (2000), e-mail refers to "messages sent via Internet from one user to another." E-mail is one of the Internet services that is most heavily used both by the general public and students in particular. Sairosse and Mutula (2004) concur with this and say that majority of the users visit cyber cafes for e-mail communication. Adomi, Okiy and Ruteyan (2003) further add that teenagers and young adults, most of whom are students usually use e-mail to communicate with their boyfriends or spouses.

Aiken et al. (2003) note that college students spent a large amount of their time sending and receiving e-mails. This is in agreement with the findings of the PEW Internet and American Life Project study reported by Jones (2002). This study indicated that e-mail is the most frequently used Internet communication tool among college students. Another survey by Laite (2000) involving 406 graduate and undergraduate students from Shippensburg University, U.S. indicated that all the students used e-mail services.

The World Wide Web often abbreviated as WWW, Web or W3 is an important Internet service or resource developed by Tim Berners-Lee in 1990-91 and which caught up in 1993, when a freely available Web browser called Mosaic started the Web revolution. The World Wide Web is "a global web of interconnected pages which (ideally) can be read by any computer with a Web browser and Internet connection" (Gauntlett, 2000). Gauntlett further notes that WWW and the Internet are not the same. He says that:

> The Web is something that runs on the Internet. It is a popular face of the Internet. It is not, however, the same as the Internet. The Internet is a network of computers.

Instant messaging, the third Internet service involves holding live-keyboard conversations with other people on the Internet. Instant messaging was launched in 1996 with the introduction of free, user-friendly instant messaging utilities (Hauang and Yen, 2003). Recchiutti (2003) defines instant messaging as a form of mediated communication technology in which users communicate with others in real-time. A user sends a message to another user, which appears on the receiver's computer screen. The receiver then immediately responds by sending a message back. One of the commonly used instant messaging software is *Yahoo Messenger.*

Instant messaging is a popular service among students. Acknowledging this, Flanagin (2005) says, "People of typical college age constitute a considerable and important population of instant messaging users." On the other hand Jones (2002) notes that the popularity of instant messaging has taken hold on the college student population, as they are twice as likely as the average Internet audience to use it.

Another Internet service is Usenet newsgroups, the world's biggest e-discussion forum which provides a way for people all over the world to participate in discussions on thousand's of topics in specific areas of interest, called newsgroups. Contributing on this, Gauntlett (2000) says that newsgroup is "a public online space where messages are posted for public consumption and response". He further adds that the widely used newsgroup is Usenet, which contains thousands of newsgroups devoted to a variety of topics.

Gauntlett (2002) further expounds on two Internet services namely; File Transfer Protocol (FTP) and Listservs or mailing lists. According to Gauntlett, FTP is "a method of transferring one file or more files from one computer to another on a network. Listservs refer to: (a) the software that makes possible automated mailing lists distribution systems, and (b) the online communities that arise from such lists.

Instant messaging, the third Internet service involves holding live-keyboard conversations with other people on the Internet. Instant messaging was launched in 1996 with the introduction of free, user-friendly instant messaging utilities (Hauang and Yen, 2003). Recchiutti (2003) defines instant messaging as a form of mediated communication technology in which users communicate with others in real-time. A user sends a message to another user, which appears on the receiver's computer screen. The receiver then immediately responds by sending a message back. One of the commonly used instant messaging software is *Yahoo Messenger.*

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Many authors generally agree that e-mail, World Wide Web, Instant Messaging and File Transfer Protocol are the most highly used Internet services (Kumar and Kaur, 2005; Jones, 2002, Chou, 2001; Kaur, 2000; Kooganurmath and Jange, 1999; Flanagin, 2005 and Severin and Tankard, 2001). The Internet is also considered a reservoir of information. On the Internet users are able to access electronic resources either freely or at a fee. Some of the material resources found on the Internet include; e-journals, e-books, e-newspapers and e-databases, among others.

2.6 Benefits of Internet in education

Luambano and Nawe (2004) recognize that the Internet has become an important component in academic institutions as "it plays a pivotal role in meeting information and communication needs of institutions." They sum up that the Internet: (1) increases access to information from allover the world; (2) provides scholars and academic institutions an avenue to disseminate information to a wider audience worldwide; (3) enables scholars and students at different locations on the globe to be able to exchange ideas on various fields of study; (4) has enabled the growth of distance learning both within nations and across international borders; (5) provides students and lecturers a communication system that they can use to communicate to each other irrespective of distance, and (6) assists students achieve their academic purposes.

The Internet has widened the distance learning opportunities through what is referred to as "e-learning". Okuogo (2006) points out that e-learning offer less expensive, more convenient, and richer ways of becoming educated and of coming into contact with more diverse groups of fellow learners than ever before.

2.7 Historical background of the uses and gratifications theory

The uses and gratifications theory also called usage and gratifications or needs and gratifications theory has a long history. In support of this, McQuail (1994) says that the study of the gratifications that motivate or drive people to be

attracted to certain media is as old as empirical mass communication research itself.

During the 1940s, communication researchers became interested in studying the reasons for audience viewing different radio programmes, such as soap operas and quizzes, as well as daily newspapers. Many different reasons for audience use of certain media were established during these early researches of uses and gratifications of mass media. For example, radio soap operas were found to satisfy their listeners with advice, support, or occasions for emotional release. Newspapers were not only offering information but also discovered to be important to give readers a sense of security, shared topics of conversation and a structure to the daily routine (Berelson, 1949). For these diverse dimensions of usage satisfaction, Psychologist Herzog marked them with the term "gratifications."

The uses and gratifications approach became dominant in the late 1950s till 1970s when television had "grown up". Some core assumptions of the uses and gratifications model were proposed during this period. Elihu Katz is recognized as one of the scholars who contributed immensely to establishing the structure of the uses and gratifications approach. In a study by Katz, Gurevitch and Haas (1973), the uses and gratifications research was explored. These researchers "viewed the mass media as a means by which individuals connect or disconnect themselves with others and found out that people bend the media to their needs more readily than the media overpower."

Blumler and Katz published a collection of essays on gratifications in 1974 which were entitled; *"The Uses of Mass Communication."* They suggested that media users seek out a medium source that best fulfills their needs and they have alternative choices to satisfy their needs. It was further discovered that mass media served the functions of surveillance, correlation, entertainment and cultural transmission for both society and individuals.

2.7.1 Core assumptions of the uses and gratifications model

The uses and gratifications model attempts to explain the uses and functions of the mass media for individuals, groups, and society in general. This theory seeks to explain how individuals use mass communication to gratify their needs, to discover underlying motives for individuals' media use, and to identify the positive and the negative consequences of individual media use. Katz, Blumler, and Gurevitch (1974) further suggest that uses and gratifications researchers were concerned with seven aspects: (1) the social and the psychological origins of (2) needs which generate (3) expectations of (4) the mass media or other sources which lead to (5) differential exposure (or engaging in other activities), resulting in (6) need gratification and (7) other consequences, perhaps mostly unintended ones.

Generally, it is acknowledged by uses and gratifications theorists that a medium will be used more when the existing motives to use the medium leads to more satisfaction. In his contribution, Littlejohn (2002) points out that the uses and gratifications approach considers two important beliefs. First, belief in a thing and secondly, belief about a thing. For example, a student may believe in the Internet as the only source of true and accurate information. Another student may believe that the Internet contains many sources of information on any number of subjects.

The uses and gratifications approach is based on five basic assumptions. Katz, Blumler, and Gurevitch (1974) explain these assumptions. The first assumption is that "the audience is conceived as active." This assumption considers that the media audiences are goal-oriented and attempt to achieve their goals through the media source. The Internet successfully helps its audience achieve this core assumption. For example, the two-way nature of Internet services such as e-mail, bulletin boards and chat rooms require audience members to be active users.

The second basic assumption is that "in the mass communication process much initiative in linking need gratification and media choice lies with the audience

member". This assumption encompasses the idea that audience use the media to their advantage more often than the media uses them. The receivers determine what is going to be absorbed and does not allow the media to influence them otherwise. The individual opinion is more powerful than what the media is portraying.

The third basic assumption is that "the media competes with other sources of need satisfaction". This focuses on the idea that each individual has several needs. In response to this, they have created a wide range of choices that will meet these needs. The strongest rival to media-based sources includes face-to-face communication. This can often help an individual cope with circumstances surrounding them most effectively.

The fourth central assumption according to Katz, Blumler and Gurevitch (1974) is that "many of the goals of media use can be derived from data supplied by the individual audience members themselves." This idea claims that people are very aware of their motives and choices and are able to explain them verbally if necessary. There have been several studies in all parts of the world that have sampled viewers and come to the conclusion about the type of media used as well as the content explored. The studies show that audience members use these media forms to shape their own identities.

The final basic assumption of the uses and gratifications model is that "value judgments about cultural significance of mass communication should be suspended while audience operations are explored on their own terms". The uses and gratifications theorists believe that the audience can only determine the value of the media content. It is the individual audience members who make the decision to use the media; therefore, they place the value on it by their individual decision to use the media.

2.7.2 Paradigm shifts in the uses and gratifications theory

Communication scholars recognize that the uses and gratifications theory has undergone renewed revival since the 1970s. According to Baran and Davis (2006), the revival of this theory can be traced to three developments; one, methodological and, two, theoretical. The emergence of new survey research methods and data analysis techniques has allowed the development of new strategies for studying and interpreting audience uses and gratifications. For example, researchers have developed innovative questionnaires that have allowed audience's reasons for using mass media to be measured systematically and objectively. The new data analysis techniques that have emerged provide more objective procedures for developing categories and for assigning reasons for them. For example, in the present study, elaborate responses from completed questionnaires were easily analyzed using computer software called Statistical Package for Social Sciences (SPSS) Version 12.0.

As earlier noted, theoretical developments have helped revive the uses and gratifications approach. First, Baran and Davis (2006) acknowledge that during the 1970s some media researchers developed increasing awareness that people's active use of the media might be an important mediating factor that made effects more or less likely. These authors argue that a member of an active audience can decide whether certain media effects are desirable and set out to achieve these effects. For example, a student might have decided to read an online book to learn about communication theories. Such a student would intend the online book to have this effect on him or her, and he or she works to induce this effect. If the student makes the online book to serve his or her purpose of learning, then he or she shares the perspectives of the uses and gratifications theorists.

On the second theoretical development, Baran and Davis (2006) note that some researchers became concerned that mass media effects research was focusing too much on unintended negative media effects while ignoring positive media uses. The development and diffusion of the Internet and Web which are interactive

digital media has motivated researchers to find out the applicability of the uses and gratifications theory to these media. The Internet and Web which provide a wide range of unregulated content makes the audience activity of uses and gratifications theory even more applicable.

A number of paradigm shifts have been noticed as advances in the uses and gratifications approach are witnessed. The first paradigm shift is the change of the conceptualization of audience as active to treating individual's activities as a variable, for example using the Internet is considered as a variable. The second paradigm shift is the focus on mass media use for satisfying particular needs, such as the ability of the mass media to relieve loneliness (Severin and Tankard, 2001). Previous studies show that information seeking, amusement, surveillance, personal relationship, identity, establishing status, acquisition are the most recurrent factors for gratifications received (Charney and Greenberg, 2001; LaRose, Mastro and Eastin, 2001, Papacharissi and Rubin, 2000).

2.8 Uses and gratifications of mass media

There are various sources of audience gratifications just as there are many gratifications sought and derived from media use. Katz, Blumler and Gurevitch (1974) point out that studies have shown that audience gratifications can be derived from at least three distinct sources; media content, exposure to the media per se, and social context that typifies the situation of exposure to different media. This demonstrates that the audience spends time using the media in various ways, whether they are "killing time" or using it as a social tool, each medium is unique in its purpose.

The uses and gratifications model assumes that the users have alternative choices to satisfy their needs as the mass media compete with other sources of gratifications, but gratifications can be obtained from a medium's content (for example accessing a particular website), from familiarity with a genre within the medium (such as accessing an online game website), from general exposure to the

medium (accessing the Internet), and from the social context in which it is used (accessing the Internet with a friend).

Different authors have conceptualized the types of media gratifications in different ways. Culter and Danowski (1980) remark that results from existing uses and gratifications researches suggest that people use the mass media either for content carried by the medium (for example information or entertainment) or the simple experience of the media usage process, for example browsing the Internet. Content gratifications are concerned with the messages carried by the medium while process gratifications relate to the actual use of the medium itself.

Song et al. (2004) points out that content gratifications are parallel to Rubin's (1994) "instrumental" use while process gratification relate to "ritualized" use. Rubin conceptualized ritualized and instrumental media use motives so as to distinguish between audience whose media use behaviour is out of habit with less-defined gratification goals and whose media usage is more intentional and more involved with media content. This conceptualization gave a better way to understand audience activity. Table 1 indicates the relationship between media needs and uses and gratifications.

Table 1: Ritualized (Diversionary) vs. Instrumental (Utilitarian) media needs

Media needs	**Uses and gratifications**
Ritualized	Entertainment, companionship, escape
Instrumental	Information, news

Source: Researcher

From Table 1, it can be seen that ritualized media needs relate to uses and gratifications of entertainment, companionship and escape. Instrumental media needs match the uses and gratifications relating to information and news.

Content and process gratifications can be applied to the Internet. For example, users of specific Internet websites may be motivated by the desire for specific-website information content. Internet users may be motivated by process-

medium (accessing the Internet), and from the social context in which it is used (accessing the Internet with a friend).

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Content and process gratifications can be applied to the Internet. For example, users of specific Internet websites may be motivated by the desire for specific-website information content. Internet users may be motivated by process-

gratification through random browsing and website navigation. Preliminary indications show that website content may be more gratifying to Internet users than process gratifications of Web surfing (Song et al., 2004). Contributing on this, Miller (1996) remarks that online activity is mainly motivated by seeking gratifications through interaction, along with escape and entertainment (which are process-oriented gratifications) and surveillance.

It should be appreciated that there are as many reasons for using mass media as there are media users. Basic needs, social situation, and the individual's background, such as experience, interests, and education affect people's ideas about what they want from the media and which media best meet their needs. Thus, audience members are aware of and can state their own motives and gratifications for using different media. In a model of "media-person interactions", McQuail, Blumler, and Brown (1972) identified four important media gratifications: (1) Diversion- escape from routine or problems; emotional release; (2) Personal relationships -companionship; social utility; (3) personal identity- self reference; reality exploration; value reinforces; and (4) Surveillance (forms of information seeking).

Dominick (1993) asserts that several communication researchers have assembled the various uses and gratifications of mass media into a four-fold category system; cognition, diversion, social utility and withdrawal. According to Dominick, "cognition means the act of coming to know something. When a person uses a mass medium to obtain information about something, then he is using the medium in a cognitive way." This individual audience's cognitive use of a mass medium is parallel to the surveillance function of mass media at the macro-analytical level.

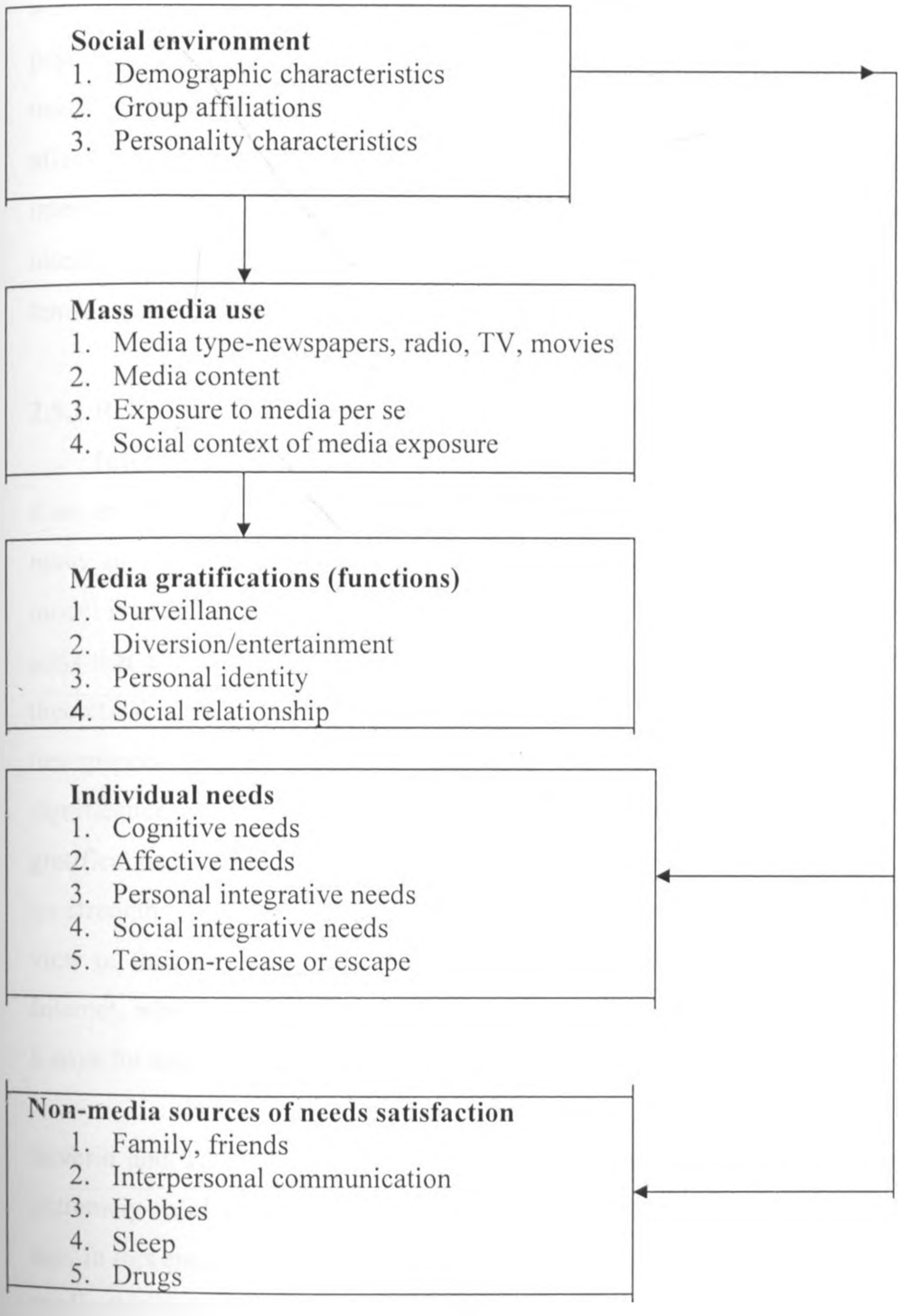
Diversion takes many forms, some of which have been identified by researchers as; stimulation or seeking relieve from boredom or the routine activities of everyday life; relaxation or escape from pressures and everyday problems, and emotional release of pent-up emotions and energy. Social utility is the media

function that addresses the social intergrativeness which springs from an individual's need to affiliate with others. Mass media provide a common ground for social conversations, and many audience use things that they have read, seen or heard as topics of discussion when talking with others (Dominick, 1993).

The fourth category of mass media uses and gratifications is withdrawal. As earlier discussed people use mass media for relaxation. Dominick (1993) adds that they also use the media "for the purposes that are best described as withdrawal uses," for example; people use mass media to create a barrier between themselves and other people or other activities. A student may put off his or her class assignment until he or she has finished watching a given TV programme.

McQuail (1994) identified several reasons for mass media use. The first reason for mass media use is: (1) *Information.* That involves finding out about relevant events and conditions in immediate surroundings, society and the world; seeking advice on practical matters or opinion and decision choices; satisfying curiosity and general interest learning; self-education and gaining a sense of security through knowledge; (2) *Personal identity.* This encompasses finding reinforcement for personal values; finding models of behaviour; identifying with valued others (in the media) and gaining insight into oneself; (3) *Integration and social interaction.* This covers gaining insight into the circumstances of others; social empathy; identifying with others and gaining a sense of belonging; finding a basis for conversation and social interaction; having a substitute for real-life companionship; helping to carry out social roles and enabling one to connect with family, friends and society and (4) *Entertainment.*This relates to escaping, or being diverted from problems; relaxing; getting intrinsic cultural or aesthetic enjoyment; killing time; emotional release and sexual arousal.

Figure 1: Mass media uses and gratification model



Adapted from: Katz, E., Gurevitch, M. & Haas, H. (1973). The use of the mass media for important things. *American Sociological Review*, 38, 164-181.

From figure 1, it can be seen that there are five categories of mass media needs. Katz, Gurevitch and Haas (1973) developed 35 needs taken from the social and psychological functions of the mass media and put them into five: (1) cognitive needs which include acquiring information, knowledge and understanding; (2) affective needs which encompass emotion, pleasure and feelings; (3) personal integrative needs which covers credibility, stability and status; (4)social integrative needs which include interacting with family and friends; and (5) tension release needs which relate to escape and diversion.

2.8.1 Relevance of the uses and gratifications theory to the study of the Internet

Rice and Williams (1995) say that *"the new media provide fertile test beds for many of our theories and models."* They add that the uses and gratifications model is ideal for the analysis of new media such as the Internet. Ruggerio (2000) adds that the uses and gratifications theory has always provided a cutting-edge theoretical approach in the initial stages of each new mass medium, such as newspapers, radio, television, and now the Internet, which receives the significance via this approach. Ruggerio further says that the uses and gratifications theory has been advocated for examining new technologies, due to its strengths in assessing new media given their specific technical attributes. In view of this, the researcher opted to utilize this theory to study the use of the Internet, which is considerably a new mass medium having been in existence in Kenya for approximately fourteen years.

Severin and Tankard (2001) admit that the uses and gratifications approach is extremely valid as technology moves the universe into the electronic information age. In this era, people have more options and are willing to continue selecting the media that satisfy their specific needs. For example, Internet services (such as e-mail and chat rooms) have allowed the audience to be more in control of the media. The two-way nature of Internet services such as e-mail, bulletin boards and chat rooms require audience members to be active users.

Web users actively search for information by clicking on Web links or search engines, thus demonstrating that Web use is goal-directed and that users are aware of the needs they are attempting to satisfy (Lin and Jeffres, 1998; Leung, 2003; Eighmey, 1997; Kaye, 1998). From a uses and gratifications perspective, the Internet has a wide range of information materials, thus those who utilize its services and resources should be able to satisfy a wide array of needs.

2.8.2 Internet uses and gratifications

Angleman (2000) acknowledges that new media such as the Internet often create new gratifications and motivations among various audience groups. This underpins the need of identifying Internet uses and gratifications' dimensions. Although motivations for Internet use may vary among individuals, situations, and media vehicles, most uses and gratifications researches explore them based on some or all of the following dimensions; relaxation, companionship, habit, passing time, entertainment, social interaction, information/surveillance, arousal, and escape (Lin, 1999).

Charney and Greenberg (2001) identified eight dimensions of Internet use; keeping informed, diversion-entertainment, peer identity, good feelings, communication, sites and sounds, career and coolness. It is worth noting that keeping informed seems most similar to the original uses and gratifications dimension of surveillance. Supporting this, many uses and gratifications scholars assert that the Internet tends to satisfy entertainment, or interaction needs (Kaye, 1998). It has been found out that more people use the Internet for entertainment, social interaction or escape.

In the study by Kaye, an open-ended question revealed that more than 40 % of the respondents said that they used the Web primarily for information and educational/research while others listed entertainment (17.7 %), news (8.8%), self- enhancement (8.4 %) and social interaction (5.2 %) as important uses.

In a study involving 498 students at two Midwestern Universities, Song et al. (2004) identified seven factors that motivate audience to use the Internet. Table 2 presents these seven factors. These seven factors relate to virtual community, information seeking, aesthetic experience, monetary compensation, diversion, personal status and relationship maintenance. The table also categorizes these factors into either process or content gratifications.

Table 2: Internet Gratifications

No.	Factor	Type of gratifications
1	**Virtual community** (i) Develop a romantic relationship (ii) Find more interesting people than in real life (iii) Get people think I'm "cool" (iv) Meet someone in person whom I met on the Internet (v) Find companionship (vi) Meet new friends (vii) Improve my standing in the world (viii) Feel like I belong to a group (ix) Get support from others	Predominantly process gratifications but also with characteristics of content gratifications
2	**Information seeking** (i) Learn about local community events (ii) Get useful housing information (iii) Find employment listings that fit me (iv) Get information about local community and government programmes (v) Get information to improve my health (vi) Get immediate knowledge of big news events (vii) Get useful information about products or services	Content gratifications
3	**Aesthetic experience** (i) Find cool new web pages (ii) See attractive graphics (iii) Find new interactive features (iv) See web pages with pleasing colour schemes (v) Find web pages that are easy to navigate	Process gratifications

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4	**Monetary compensation** (i) Find bargains on products and services (ii) Find ways to make more money (iii) Get products free (iv) Find profitable financial information (v) Save money on phone calls	Content gratifications
5	**Diversion** (i) Have fun (ii) Feel excited (iii) Feel entertained (iv) Feel relaxed	Process gratifications
6	**Personal status** (i) Improve my future prospects in life (ii) Get up to date with new technology (iii) Find information that reflects my culture	Predominantly process gratifications but also with characteristics of content gratifications
7	**Relationship maintenance** (i) Get in touch with people I know (ii) Get through to someone who is hard to reach	Predominantly process gratifications but also with characteristics of content gratifications

Source: Researcher

Ferguson and Perse (2000) identify four primary motivations for Internet use, namely; entertainment, passing time, relaxation/escape and social information. Hanjun Ko (2000) also established four significant motives for using the Internet; social escapism, passing time, interactive control and information. On his part, Lin (1996) says that Internet use is linked to a series of instrumental as well as entertainment-oriented gratifications.

An important Internet use motivation is group support. The Internet provides a relatively safe avenue to exchange information, give support and serve as a meeting place without fear of persecution. Korenman and Wyatt (1996) support this view and add that the Internet provides an accessible environment where one can easily find others who share similar interests and goals.

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Social interactions and group support motives are enhanced by the anonymity. McKenna and Bargh (2000) acknowledge that people use the security of the online community to interact freely and develop healthy friendships and gratify their need to socialize. Choi and Haque (2002) have identified anonymity as a new motivation factor for Internet use. Anonymity drives users to speak more freely on the Internet than they would in real life.

2.8.3 Dimensions of Internet uses and gratifications among college students

Previous studies point out that the use of the Internet by students is beyond doubt a common occurrence. Mishra, Yadav and Bisht (2005) studied Internet utilization patterns of undergraduate students at the G B Pant University of Agriculture and Technology, Pantnagar, where the findings of the study indicated that a majority of the students (85.7%) used the Internet.

Robinson (2005) examined Internet use among African-American college students and established that 47% of the respondents indicated that they spent an average of two hours per day on-line. A small percentage of the students spent 5-6 hours per day on the Internet. 43% of the students used the Internet primarily to learn and find school resources. These findings are in consistency with a previous study by Kumar and Kaur (2005). The study which investigated Internet use in the Engineering colleges of Punjabi involved 808 students and 334 teachers. Out of the 808 students, 524 (64.8 %) respondents reported using the Internet for less than 7 hours. Students using the Internet for less than 10 hours accounted for 81.4 % (N=658) of the students' sample.

Findings from a study on "*Internet addiction among Taiwan students*" by Chou (2001) revealed that: (1) most of the respondents spend approximately 4-5 hours weekday online during the school semester and more online during weekends and school breaks; (2) Bulletin Board System (BBS), e-mail, and WWW were reported used by 95 % of the subjects studied; (3) the interviewees indicated that they use WWW mainly to search for information about homework, personal

interests and life activities such as movie times, concert tickets and school events; (4) the students indicated that BBS and WWW was good for "killing time," and (5) most respondents in this research expressed that the Internet is good for both work and entertainment, and provides audience some degree of fun and gratification.

A 1995 study of college students' use of the Web resulted in six motivational categories namely; entertainment, social interaction, passing time, escape, information and website preference (Kaye, 1998). This closely relates to a research on Internet use by university students conducted by Charney (1996). Charney concluded that the Internet is used by students to keep them informed; for entertainment and diversion; to maintain communication and to look for sights and sounds of the Internet; but most frequently for entertainment and diversion.

Within East Africa, a study conducted by Luambano and Nawe on *"Internet use by students of the University of Dar-es-Salaam"* (2004) revealed that: (1) majority of the students (86.3 %) used the Internet; (2) most of the students (47 %) accessed the Internet from faculty computer laboratories. Those who accessed Internet from the University library were 38.8 percent; and Internet cafés (31.3 %); (3) most respondents (56.3 %) spent between 1-2 hours per one Internet session; fewer than two hours accounted for less students (27.7 %); or more than two hours (2.5 %). It should be noted that students tend to spend more time on the Internet where access was free; (4) the findings revealed that most respondents acquired their Internet use skills through teaching by friends (53.8 %); and self-teaching (37.5 %); only 5 percent of the students had acquired their skills through library orientation. Others acquired their Internet use skills through reading of books, attending a course and normal information technology lectures.

Other notable findings of the research by Luambano and Nawe (2004) were as follows: (1) most of the respondents used the Internet less frequently, 16.3 percent of them indicated using it once a day, 5 percent of them more than once a

day, 23.8 percent of them once a week, 23.8 percent of them more than once a week, 10 percent of them once a month and 7.5 percent of them more than once a month; (2) Internet facilities were reported used for communication purposes, e-mail sending and receiving; browsing WWW, and using it to access online journals.

On the use of WWW, Luambano and Nawe (2004) found out that it was used for gathering academic materials, general browsing, entertainment and sports, accessing news, e-mailing and viewing pornography. An elaboration on the respondents' use of e-mail revealed that it was used to communicate with friends and relatives to communicate with other students, to communicate with lecturers and for participating in discussion groups. The findings of this study demonstrate that many respondents were not using the Internet for academic purposes. The study findings indicated that most of the respondents used search engines more than subject gateways or Web directories in order to locate information on the Internet. They reported their favourite search engines as; *Google* (57.5 %) and *Yahoo* (47.5 %).

Luambano and Nawe (2004) noted that most respondents (63.8 %) were given assignments that required them to use the Internet. The factors that hamper effective use of the Internet were identified as; inadequate computers with Internet facilities, slow Internet connection, lack of skills and frequent power cuts. Therefore, the respondents recommended that the number of computers connected to the Internet, Internet access points and Internet access speed all be increased. Provision of training in Internet use and ensuring a permanent supply of electricity were also among the suggested recommendations.

The findings of the studies reviewed in this section shaped the formulation of questions in the data collection instruments for the present study. The findings provided the areas of focus in establishing the demographic profile of Internet users, their uses and motivations.

2.8.4 Demographics of students using Internet services and resources

Demographics play an important role in as far as Internet use among college students is concerned. It is evident that Internet use dimensions differ from one demographic variable to another as demonstrated by several college students' Internet demographics. In respect of gender, females use the Internet for interpersonal communication and communicate through e-mail more often than males who use it more for leisure (Weiser, 2000). On the other hand, males use instant messaging to pass time while females used it to maintain relationships (Leung & Wei, 2000). On gender a study by Korgen, Odell and Schumacher (2001) found out that males were more likely than females to research purchases. It also established that males indicated playing computer games compared to females.

Age and year in college is an important Internet use demographic variable. Recchiutti (2003) says that age and year in college indicates differences in Internet usage. Closely related to this variable is the course undertaken by students. Anderson's (2001) study notes that Internet use differs across academic majors. College students in hard sciences majors are more likely to become dependent on the Internet than those undertaking arts and sciences groups or liberal arts group. Hard science students spent more time online than did the arts or sciences groups or liberal arts groups.

Other demographics that influence Internet use among college students include computer ownership/availability and Internet access at home. Korgen, Odell and Schumacher (2001) acknowledge that previous studies indicate that computer ownership/availability and Internet access at home strongly influences students' use of the Internet. Students with a computer in their home of origin use the Internet for more hours per week than those without. Lastly, hours spent by the student studying also influences Internet use. Students who dedicate more hours per week studying also log more hours online than those who devote less time on their academic work.

Another demographic variable that influences Internet use is the students' computer skills and Internet skills. This assertion is supported by Kwanya's (2005) study on uses and gratifications of the World Wide Web (WWW) among five secondary school students in Nairobi, Kenya. He found out that students with more advanced computing skills use the WWW better than those with limited computing skills. This could be attributed to the fact that in order to use the Internet effectively, the user should have some skills for searching and retrieving Web resources, and downloading files, among others.

In view of this wide range of demographics, the researcher limited his demographic antecedents to fields/areas of study, levels of study, years/stages of study, gender and time spent by respondents online per week. These demographic variables were used in data analysis.

2.9 Strengths, criticisms and problems of the uses and gratifications theory

The uses and gratifications model just like other communication theories has its own strengths and weaknesses. Baran and Davis (2006) sum up the strengths of the uses and gratifications approach as follows: (1) the theory focuses attention on individuals in the mass communication process; (2) it respects intellect and ability of media consumers/audience; (3) the approach provides insightful analyses of how people experience mass media content; (4) it differentiates active use of media from more passive uses; (5) the uses and gratifications approach studies the use of media as a part of everyday social interaction, and (6) it provides useful insights into adoption of new media such as the Internet which is the focus of this study.

Communication theorists generally accept that with every theory, some criticism must be expected and therefore the uses and gratifications approach is no exception to this act. According to McQuail (1994), the uses and gratifications theory has not provided much successful prediction or causal explanation of media choice and use. Much mass media use is circumstantial and weakly

motivated; hence the approach seems to work best in examining specific types of media where motivation might be presented.

It is hard to keep track of exposure patterns through observation hence the uses and gratifications theory relies on self-reports. Self-reports are based on personal memory which can be problematic and such respondents might inaccurately recall how they behave in media use and thus distortion might occur in the study (Nagel, Hudson and Abowd, 2004; Katz, 1987). Recognizing the demerits of self-reports, the present study used a multi-data collection methodology involving not only the use of self-administered questionnaires, but also the use of Focus Group Discussions and content analysis of websites in order to further establish the accuracy and validity of the responses reported in the questionnaires.

In their criticisms of the uses and gratifications theory, Baran and Davis (2006) note that the theory relies on functional analysis which can create status quo, the approach cannot easily address the presence or absence of effects, measurements of key concepts is criticized and the theory is too oriented towards the micro-level. Other critics argue that the broader public does not effect individual decisions regarding the media.

According to Defleur and Ball-Rokeach (1988), the uses and gratifications approach is less an independent theory in its own right than it is a rather limited restatement of certain aspects of selective influence theories. They point out to the fact that its main proposition is that individual needs and the rewards that they obtain influence people's patterns of attention to media content and the uses to which they put the information obtained there. This is essentially a simple version of the individual differences theory based on considerations of cognitive structure.

Another shortcoming of the uses and gratifications approach is that researches based on it have generated little more than lists of "reasons" for which audience claim they choose and attend to different categories of media content or lists of

"satisfactions" that audience say that they obtain from attending to the mass media. They continue to add that the uses and gratifications perspective " does not provide much in the way of systematic explanation beyond that." There is no guarantee that these reported reasons and satisfactions to mass media use may be real (Defleur and Ball-Rokeach, 1988).

In a nutshell, Severin and Tankard (2001) acknowledge that the uses and gratifications model is non-theoretical, being vague in key concepts, and being nothing more than a data collecting strategy. This approach has weaknesses in operational definitions. It also has a weak analytical mode. According to these authors, the theory focuses too narrowly on the individual and neglects the social structure and place of the media in that structure. The uses and gratifications perspective is criticized by media hegemony advocates who say that it goes too far in claiming that people are free to choose the media fare and the interpretations they want.

In spite of the weaknesses that have threatened the validity and reliability of the results of uses and gratifications researches, replication and consistent findings from numerous uses and gratifications studies as well as preparation for dealing with such criticisms have helped to refine its theoretical framework and consequently provide additional developments in this theory (Rubin, 1994; Lin, 1999). The uses and gratifications approach has been widely used, and also is better suited for studies of Internet use. In the Internet environment, users are even more actively engaged communication participants, compared to other traditional media (Ruggiero, 2000).

Katz, Blumler and Gurevitch (1974) argue that available media choice compete to satisfy individual needs. Thus, there exists competition not only between the Internet and other traditional media, but among each option in the Internet itself as well. These strengths of the uses and gratifications theory have motivated the researcher to conduct a study on its application to the Internet. With the multi-

CHAPTER THREE
METHODOLOGY

3.1 Introduction

This chapter examines in detail the methodology adopted in carrying out the study. It covers the following aspects; research design, location of the study, population of the study, sample and sampling method, instruments for collecting data, procedure for collecting and analyzing data. The researcher has discussed these aspects by highlighting the reasons why some techniques were selected for the research design.

3.2 Research design

The research design used in this study is a descriptive survey that sought to find out Internet uses and motives among KSPS students. According to Orodho (2003), a study concerned with obtaining information by interviewing or administering a questionnaire to a sample of respondents is a descriptive survey.

Copper and Emory (1994) remark that a descriptive design is used to determine the who, what, when, where, and the how of a research topic. From a mass media research point of view, Rubin (1981) asserts that survey research is a predominant uses and gratifications method that has been consistently validated by past studies. This underscores the choice of a descriptive survey design in conducting the present study.

3.3 Location of the study

This study focuses on the Internet uses and motives among students of Kenya School of Professional Studies (KSPS).The college is located in Inoorero centre on Forest Road in Parklands, Nairobi. KSPS was chosen because it is recognized by the Ministry of Education and has been given consent to issue certificates and diplomas to its internal courses. It is also among the first colleges to be issued with a certificate of validation by the Commission of Higher Education (CHE).

This demonstrates that KSPS has met the expected CHE's standards for post-secondary institutions in Kenya.

3.4 Population of the study

Olive and Abel Mugenda (2003) define population as "a complete set of individuals, cases or objects with some common observable characteristics." The population of interest for this study comprised of 1,409 full-time diploma and undergraduate students in the courses offered at KSPS. These students are allowed to access Internet services/resources at KSPS free of charge through the computer laboratories, library and on their laptops using the school's Wireless Local Area Network.

The students selected for this study consisted of those pursuing full-time diploma and undergraduate courses in the Faculties of Information Science and Technology, Commerce and Law. This study selected college students because they are heavy users of the Internet compared to the general population and that the use of the Internet among them is a daily routine, and the Internet has always been a part of their world (Jones, 2002).

3.5 Sample population and sampling method

According to Saravannel (1991), a sample is composed of some fraction or part of the total number of elements or units in a defined population. In this study, the sample population size was 318 KSPS students. Sampling was adopted in this study because the population studied is big but was well covered through a sample. Through a small sample, the costs of undertaking the study were reduced.

Stratified sampling was adopted in this research. According to Line (1982), stratified sampling involves dividing the population into subgroups (strata) and a sample drawn from each subgroup. Using stratified sampling, the sample of this study was divided into nine (9) courses studied by the students during the May – August 2007 Semester. Stratified sampling was adopted as it ensures that no

significant group of respondents can remain unrepresented. This indicates that this survey had a wide variety of courses and classes selected in order to ensure a broad representation of the full-time programmes offered at KSPS.

Proportionate stratified sampling was used to select the respondents. In proportionate stratified sampling, the strata sample sizes are made proportional to the strata population sizes. Therefore, different sample sizes for students in the nine (9) courses were proportionately identified. Within each strata or group of students, systematic random sampling was used to select the respondents.

Table 3: Respondents selected for the study

Faculty	**Course**	**Sample size**
Information Science & Technology	Diploma in Information Technology	112
	Diploma in Information Studies	20
	Bsc. in Information Technology	51
Commerce	Diploma in Marketing	8
	Diploma in Business Management	8
	Diploma in Business Administration	8
	Diploma in Business and Office Management	7
	Bachelor of Commerce and Business Administration	49
Law	Diploma in Law	55
Total		**318**

Source: Research Data

When performing systematic sampling, every K^{th} element from the list (sampling frame) is selected from a randomly selected starting point. In the case of this research, there were 1,409 students from whom the researcher selected 318 respondents. In this case, every forth student from the students' attendance sheets (sampling frame) accessing the Internet (at the scheduled time for each class studied) was selected until the desired sample size in each strata and the total of 318 students for the entire sample population was attained. A number from 1 to 4 was randomly selected to act as the starting point. Systematic sampling is deemed appropriate to this study because it is practical and ensures greater data accuracy (Welman and Kruger, 2001).

3.6 Data collection

There are many methods and instruments for collecting data. However, as noted by Line (1982), the choice of any one of them depends on the type of data to be collected, time available, money and personnel available to assist the researcher in gathering data. These factors helped the researcher decide on which data collection instruments and methods to use in this study. The principal data collection tool was a self-completion questionnaire. These were supported by Focus Group Discussions (FGD) and content analysis of websites accessed by the students in the KSPS computer laboratories and library.

3.6.1 Questionnaire

A self-completion/self-report questionnaire, the main tool of data collection was used to gather data from the 318 students identified for the study. A draft questionnaire copy was prepared by the researcher and pre-tested on a sample of the population. Hereafter, the final questionnaire was prepared and the 318 copies printed. The final questionnaire is presented in Appendix I. Conway and Rubin (1991) acknowledge that self–report questionnaires have been useful for analyzing motivations and patterns of using mass media.

The researcher and his research assistants personally distributed the questionnaire copies to the students when they were accessing the Internet at their scheduled/time-tabled times in the computer laboratories at KSPS. Data was collected over a two-weeks' period so as to be able to cover all scheduled classes targeted for data collection. The respondents were given time (10-30 minutes) while in the computer laboratories to complete the questionnaires. Thereafter the researcher/research assistants collected the completed questionnaires from the students. This was meant to ensure maximum return of the completed questionnaires.

The questionnaire was divided into four (4) parts. Part one focused on the bio-data of the respondents. Part two contained questions on the use and frequency of use

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The questionnaire was divided into four (4) parts. Part one focused on the bio-data of the respondents. Part two contained questions on the use and frequency of use

of various Internet services and resources. Part three concentrated on the uses and motivations of using the Internet and Part four sought to find out the problems facing students in using the Internet. The items relating to the uses and motives for using the Internet included those from previous Internet uses and gratifications studies (Aiken et al., 2003; Luambano and Nawe, 2004; Ko, 2000; Recchiutti, 2003; Ebersole, 2000; Lin, 1996, Kwanya, 2005; Fergunson and Perse, 2000). Additional adapted and supplemented items were also included. These items reflect uses and motives for: aesthetic experiences, communication, coping with peer pressure, developing and maintaining online and social interactions, entertainment, habit, escape from problems, improving personal status, coping with peer pressure, information seeking and interactive control.

3.6.2 Focus group discussions

Focus group discussions were conducted with selected students. According to Bryman (2004), focus group discussion is a method of interviewing that involves more than one, usually at least four interviewees. This method allows respondents to develop an understanding about why people feel the way they do, which is the core area of focus in this study as it relates to how and why students use the Internet. According to Kombo and Tromp (2006), the researcher decides beforehand the topics to be discussed and then uses a predetermined list of open-ended questions to gather the data from the discussions. Focus group discussion is a form of group interview. The focus group interview guide is presented in Appendix II.

The researcher conducted focus group discussions with 30 students purposively selected and covering all the demographics of students involved in this study. On the size of a focus group, Kombo and Tromp (2006) note that it is "usually composed of 6-8 individuals who share certain characteristics, which are relevant to the study." Therefore, five (5) focus groups were held, with each group having 6 students.

3.6.3 Content analysis

Microsoft's Internet Explorer, a Web browsing software used at KSPS generates a cache or 'global history' file that resides on the user's hard drive and which retains a list of Web addresses (Uniform Resource Locators) of WWW sites last visited. At the start of the data collection phase the cache files on the computers in the computer labs and library were deleted. At the end of the data collection period (two weeks), the cache files on fifty randomly selected computers were copied to a flash disk and then used for analysis.

From the cache files, a content analysis of the selected websites accessed by students was done in order to assess the nature of their contents. Content analysis of websites accessed by students was used to better understand the nature of the content being consumed by the students. This is important because in an educational set up it is expected that most websites accessed should be of educational value to the students (Ebersole, 2000). Babbie (2004) defines content analysis as the study of recorded human communications, such as books, websites, paintings and laws. In content analysis, it necessary that the unit of analysis is clarified. Therefore, for the purposes of this study, a website is a collection of pages or files linked together and available on the Web.

In conducting the content analysis of websites accessed by the students, the researcher sought to establish the number of occurrences of websites from five generic top–level domains (commercial [.com], .Kenya [co.ke], organization [.org], Internet [.Net] and education [.edu]. The broad area on the nature of each website content was also examined. The website homepages were analyzed and when the home page did not provide information that could help establish the website content, a two-drill down of the website was done by the researcher/research assistants.

3.7 Operational dimensions of uses and gratifications of the Internet

Demographic antecedents: These were considered by an indication by each respondent of his or her field/area of study, level of study, year of study, gender, age and hours spent online per week.

Exposure to the Internet: This was considered by an indication by the respondents on how many hours per week (in a semester/term) they use the Internet services/resources.

Uses of the Internet: This was measured by presenting the respondents with a list of 5-point Likert-scale statements relating to the uses of Internet services/resources. A total of 38 use statements were provided to the respondents to make their agreement/disagreement.

Motives for using the Internet: This was measured by presenting the respondents with a list of 5-point Likert-scale statements relating to the motives driving them to use the Internet resources/services. 25 statements on motives for using the Internet were provided to the respondents to make their agreement/disagreement.

3.8 Data analysis

The analysis of data was based on the responses from the completed questionnaires, focus group discussion reports and content analysis of websites. Data collected for the five objectives of this study were analyzed using SPSS Version 12.0. Content analysis was used to analyze open-ended questions in the focus group discussions.

Descriptive statistics involving the use of percentages, tables and mean scores were used during data analysis. Reasons and features motivating respondents' use of Internet services/resources were assessed by various items in the questionnaire

based on a 5-point Likert-type scale anchored by 1= "Strongly disagree" and 5= "Strongly agree". Inferential statistics involving the use of Spearman's rank correlation coefficient (r_s) was used to establish the relationships between five demographic variables and the use and motive statements/dimensions.

3.9 Hypotheses testing

The decision to reject and/or accept each of the two hypotheses for this study was based on testing the significance of correlation coefficient at a significance level of 0.05 using the t-test. Spearman's rank correlation coefficient (r_s) was calculated using the following formula:

$$r_s = 1 - \frac{6\sum d^2}{n^3 - n}$$

degree of freedom (*df*) = n-2

where *d* is the difference in the ranks in each of the values and *n* is the number of pairs.

CHAPTER FOUR
DATA ANALYSIS AND DISCUSSION

4.1 Introduction

This chapter presents a comprehensive analysis and interpretation of data on the uses and gratifications of the Internet among KSPS students. Out of 318 participants targeted for the study, 294 (92.4%) responded. This high response can be attributed to the good cooperation from the respondents.

Table 4: Respondents by faculties

Faculty	Frequency	%
Faculty of Information Science and Technology	163	55.4
Faculty of Commerce	76	25.9
Faculty of Law	55	18.7
Total	**294**	**100**

Source: Research Data

From Table 4, it can be seen that 163 (55.4%) participants were from the Faculty of Information Science and Technology, 76 (25.9%) respondents were from the Faculty of Commerce and 55 (18.7%) participants were drawn from the Faculty of Law. This distribution of respondents across the three KSPS Faculties was due to the proportionate sampling technique adopted for selecting the sample population.

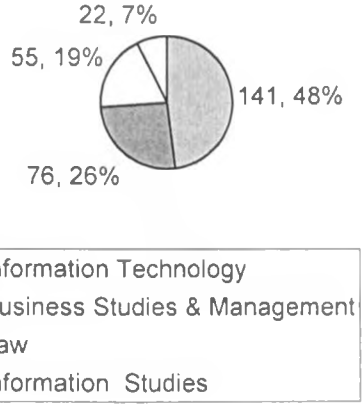
4.2 Characteristics of Respondents

The uses and gratifications of the Internet among college students are influenced by demographic variables. The respondents' demographics were restricted and analyzed in terms of five areas; fields/areas of study, levels of study, years/stages of study, gender and amount of time spent per week using the Internet. These demographic variables were used in correlation analysis of the uses and motivations of the Internet among the respondents.

4.2.1 Fields/areas of study

A study by Anderson (2001) concluded that there are differences in Internet uses among students in various academic majors. In view of this, the researcher sought to find out the respondents' fields/areas of study. Figure 2 summarizes these results.

Fig. 2: Respondents' fields/areas of study



Source: Research Data

Figure 2 reveals that 141 (48%) respondents were pursuing Information Technology courses, 76 (26 %) respondents were Business Studies and Management students, 55(19%) participants were studying Law and 22 (7%) research subjects were pursuing Information Studies.

At the time of conducting this study, those pursuing courses in the field of Information Technology on full-time basis were; Diploma and Bsc. in Information Technology students. The field of Business Studies and Management covered five courses namely; Diploma in Business and Office Management, Diploma in Marketing, Diploma in Business Management, Diploma in Business Administration, and Bachelor of Commerce and Business Administration. The respondents in the area of Law were Diploma in Law students. The field of Information Studies covered students pursuing Diploma in Information Studies.

For purposes of further statistical analysis based on this demographic antecedent, the fields of study were grouped into two: (1) Respondents pursuing Information Sciences courses which cover the fields of Information Studies and Technology. This first group accounted for 163 (55.4%) respondents, and (2). The second group comprised of those pursuing Non-Information Sciences fields which embraced Business Studies and Management, and Law. This second group constituted of 131 (44.6%) respondents.

The categorization of respondents into the above two groups was arrived at due to the appreciation that Information Sciences courses at KSPS involve many Information Technology Practicals which equip students with computer, Internet and e-resources' use skills more than those students pursuing the other fields of study. This means that the Internet use and e-resources' skills of Information Sciences respondents are higher than for those students in other fields of study.

4.2.2 Levels of study

The level of study may have an influence on how students utilize Internet services and resources. Therefore, the respondents were instructed to indicate their level of study at KSPS by ticking it from two choices provided. Diploma students accounted for 66 % (N= 194) and Undergraduates 34 % (N= 100) of the sample.

4.2.3 Years/stages of study

Recchiutti (2003) acknowledges that there may be differences in Internet uses between first and second year students and those in their third and fourth years in U.S colleges and universities. This implies that there may be differences between students in their initial years of study (first and second years) and those in their final years of study (third and fourth years).

Table 5 reveals that 106 (36.1 %) respondents were first year diploma students, 88 (29.9 %) participants were in their second year of their diploma courses. For undergraduates those respondents in first year and second year accounted for 31

(10.5 %) and 45 (15.3 %) respondents respectively. 24 (8.2 %) undergraduate respondents were in their third year of study.

Table 5: Respondents by years/stages of study

Level of study	Years/Stage of study	Frequency	%
Diploma	I	106	36.1
	II	88	29.9
Undergraduate	I	31	10.5
	II	45	15.3
	III	24	8.2
Total		**294**	**100**

Source: Research Data

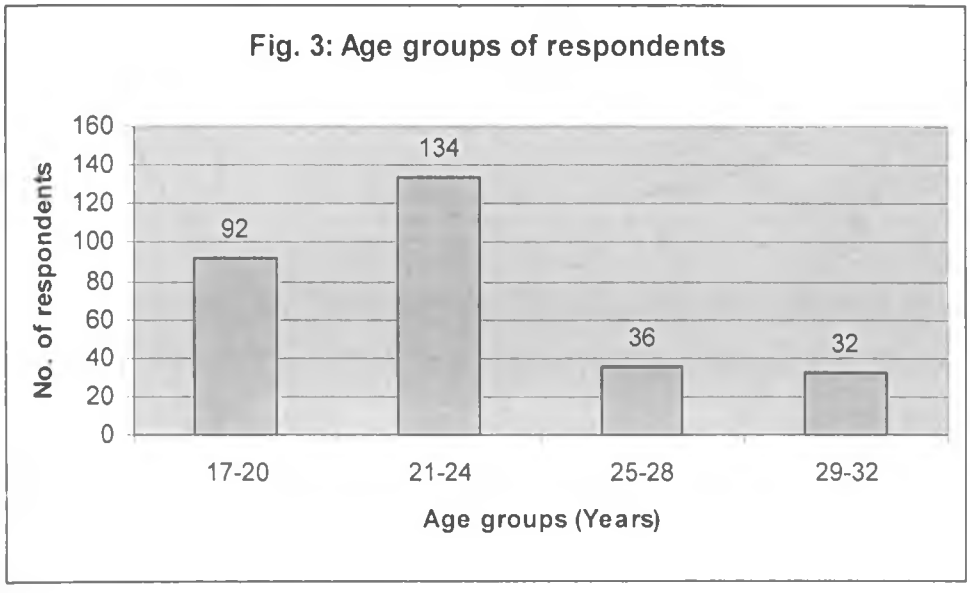
It should be noted that the diploma and undergraduate courses included in this study take two and three years respectively. Diploma and undergraduate students in their first years and second year undergraduates were regarded to be in their initial years of study. The diploma students in their second year and undergraduates in third year were considered to be in their final years of study. Therefore, for further statistical analysis, the respondents were divided into two: (1) Respondents in their initial years of study. This group comprised of 182 (61.9%) respondents, and (2) Respondents in the final years of study. They accounted for 112 (38.1%) respondents.

4.2.4 Gender of respondents

Many authors have acknowledged that Internet use dimensions differ from one gender to another (Recchiutti, 2003; Weiser, 2000 and Leung, 2000). Therefore, the researcher established the gender of the respondents. The sample of this study was 51.7% (N=152) male and 48.3 % (N=142) female.

4.2.5 Age groups of respondents

Recchiutti (2003) remarks that age is an important Internet use demographic variable. From the data gathered, the researcher established that the respondents ranged from 17 to 32 years of age, with the mean age being 22.6 years (SD=3.78). Figure 3 presents a summary of the age-groups' distribution of the respondents.



Source: Research Data

From Figure 3, it can be observed that 134 (46 %) of the respondents were in the 21-24 years age group, 92 (31%) respondents were 17-20 years of age, 36 (12%) and 32 (11 %) research participants were in the 25-28 years and 29-32 years of age respectively.

Given that there are very few differences in the age groups of majority of the respondents, the researcher opted not to use age as a variable for further statistical analysis of the data collected. However, the year/stage in college was used instead of the calendar years of respondents. This assertion is supported by Recchiutti (2003) who asserts that while most college students are within relatively small age differences from each other, previous studies indicate that there may be differences between first and second year students and those in third and fourth years.

4.2.6 Time spent per week using the Internet

Respondents were asked to indicate how many hours per week (in a semester) they spent online by ticking from a list of options provided in the questionnaire. Table 6 presents responses to this question.

Table 6: Time spent by respondents in using the Internet

Average hours per week	Frequency	%
Less than 2 hours	66	22.4
2-4 hours	127	43.2
5-7 hours	77	26.2
8-10 hours	24	8.2
More than 10 hours	-	-
Total	**294**	**100**

Source: Research Data

Table 6 reveals that, 127 (43.2 %) respondents use the Internet for an average of 2-4 hours per week, 77 (24.2 %) respondents reported being online for 5-7 hours per week, 66 (22.4 %) of the subjects investigated use the Internet for less than 2 hours per week and a small number of 24 (8.2%) respondents use the Internet for 8-10 hours per week. No respondent indicated using the Internet for more than 10 hours. The mean amount of time spent online per week by respondents was 3.83 hours (SD= 2.40).

The above findings demonstrate that majority of the respondents (that's 91.8 %, N= 270) used the Internet for less than 8 hours per week. These findings are in consistency with a previous study by Kumar and Kaur (2005) which found out that 64.8 % (N=524)) of the students reported using the Internet for less than 7 hours. Students using the Internet for less than 10 hours accounted for 81.4 % (N=658) of the students' sample.

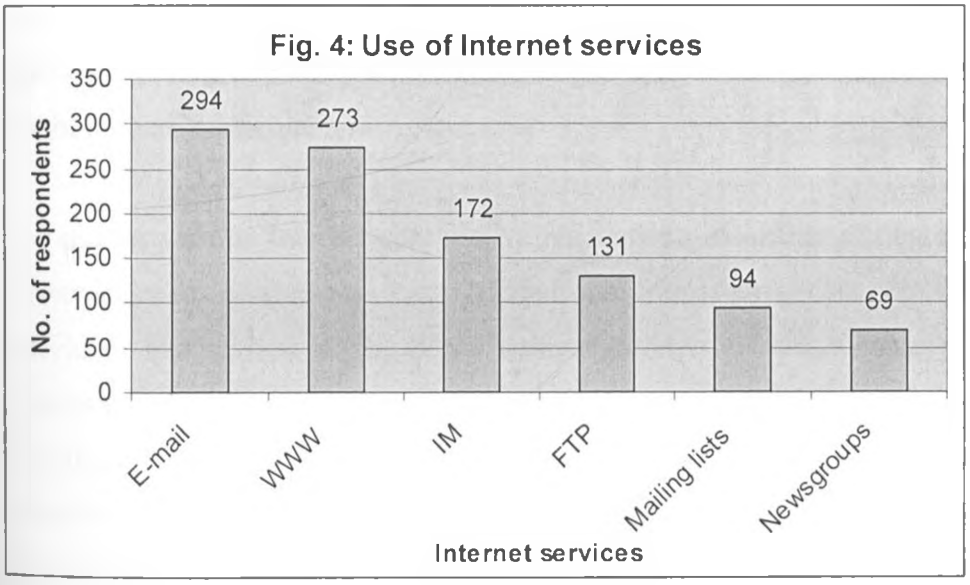
The low time spent by respondents in using the Internet could be attributed to the reason that most of the students at KSPS rely on accessing Internet services and resources at the college. Majority of those research participants interviewed in the Focus Group Discussions (FGD) reported that they mostly access the Internet at KSPS during scheduled computer lab sessions and in the library. Internet access at KSPS for the students is free, hence their preference for Internet use at the college. This finding implies that the reported uses and gratifications of Internet among KSPS students were greatly based on their access and access time of the Internet at college.

4.3 Use of Internet services and resources

The Internet provides several online services and resources. Some of the commonly provided Internet services include; Electronic mail (E-mail), World Wide Web (WWW), Instant Messaging (IM), Mailing lists, File Transfer Protocol (FTP), and Newsgroups. Through the Internet, a wide range of e-resources are provided which can support the educational needs of students. This wide range of Internet services and resources are provided to the KSPS students.

4.3.1 Internet services used by respondents

The researcher sought to identify which Internet services available at KSPS are used by the respondents. Figure 4 indicates that all the 294 (100%) respondents reported using e-mail. Out of 294 respondents, 273 (92.9 %) participants indicated using WWW. IM was reported used by 172 (58.5%) respondents. FTP was selected by 131 (44.6 %) respondents and 94 (32 %) of the respondents indicated using mailing lists. The least used Internet service was Newsgroups which accounted for 69 (23.5 %) respondents.



Source: Research Data

From the findings presented in Figure 4, it is evident that e-mail, WWW, IM and FTP are the most highly used Internet services. This finding is in line with

previous researches by Kumar and Kaur (2005), The PEW Internet & American Life Project reported by Jones (2002), Chou (2001), Kaur (2000), Kooganurmath and Jange (1999). These studies found out that the most commonly used Internet services among others were; e-mail, WWW, IM, and FTP. These results are further in conformity of previous studies and remarks by Flanagin (2005), Severin and Tankard (2001) and Jones (2002). No significant differences in Internet services were noticed among the respondents in various demographics.

The students' use of e-mail, WWW and IM points out to the uses and gratifications theory concept that the 'audience is conceived active'. This is because the Internet services require audiences to be active and in control of their Internet use (Aiken, et al, 2003 and Severin and Tankard, 2001).

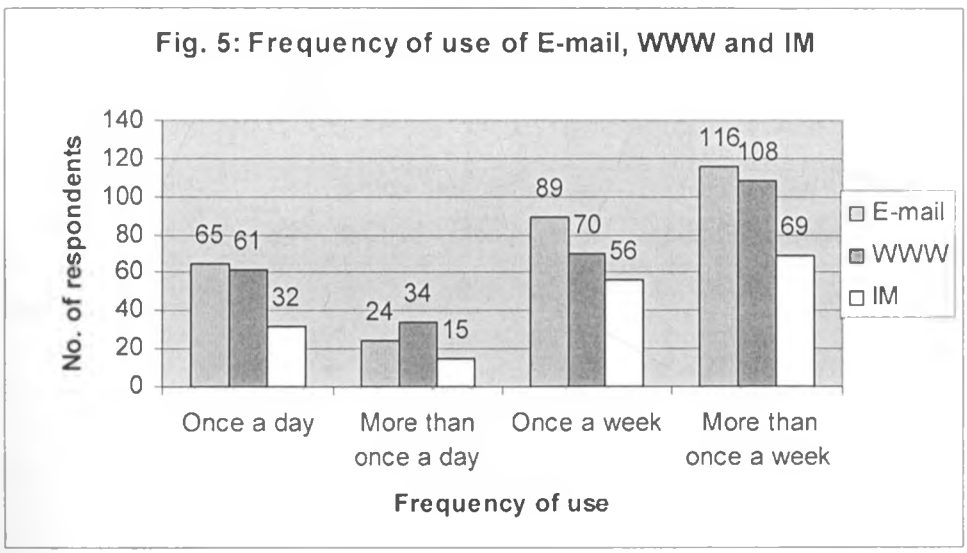
The Focus Group Discussions revealed that most respondents were familiar with e-mail, WWW and Instant Messaging. This may indicates why certain Internet services were not chosen as the respondents did not know what they are. In fact majority of the respondents in the group discussions who said that they use FTP, mailing lists and newsgroups were from the groups undertaking Information Sciences. This group of students know about these other services as they are taught in their curricula.

The use of various Internet services by respondents could be attributed to the variety of needs of students. Katz, Blumer and Gurevitch (1974) note that each individual has several needs, hence audiences have created a wide range of choices that will meet these needs. Chou (2001) concurs with this and notes that according to the uses and gratifications theory and the play theory of mass communication, students have a variety of needs (social, academic, personal, etc) to use the Internet. Hence this leads to different degrees of exposure to various Internet services (e-mail, WWW, etc.) which result into varying degrees of gratifications and pleasure experiences.

4.3.2 Frequency of use of various Internet services

Analysis of the responses on the question on frequency of use of various Internet services by those respondents who had selected are presented in Figures 5 and 6 for the first three highly used Internet services.

Figure 5 reveals that out of 294 respondents who reported using e-mail, 116 (39.4 %) of them use it for more than once a week, 89 (30.5 %) respondents use e-mail once a week, and 65 (22.1%) research participants indicated using e-mail once a day. 24 (2.2 %) respondents use e-mail more than once a day.

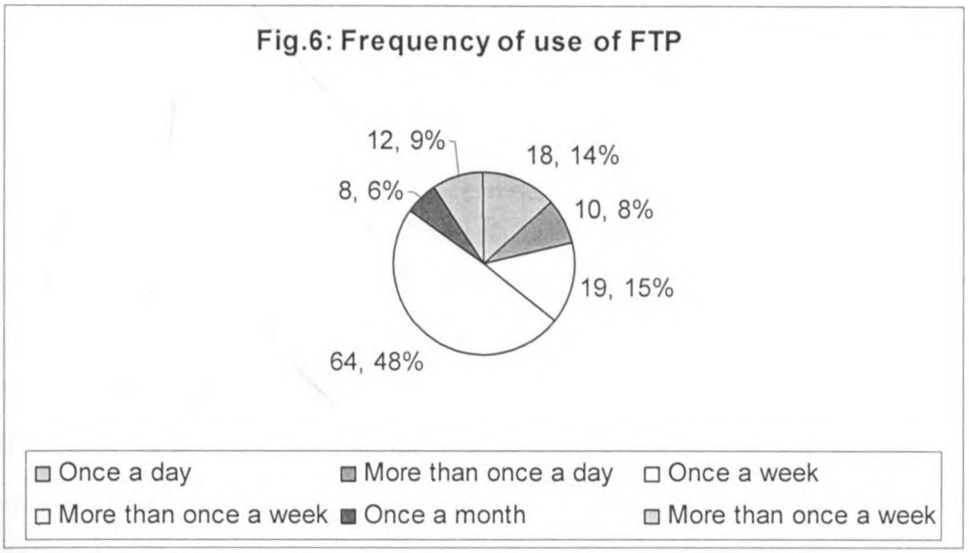


Source: Research Data

With respect to WWW, 108 (39.6 %) respondents use it for more than once a week, 70 (25.6 %) respondents reported using the Web once a week, 61 (22.3 %) research participants use the Web once a day and 34 (12.5 %) respondents use WWW more than once a day.

Out of 172 respondents using IM, 69 (40.1 %) respondents use it more than once a week, 56 (32.6 %) respondents chose once a week, 32 (18.6 %) research subjects use IM once a day and 15 (8.7 %) respondents indicated using Instant Messaging more than once a week.

As observed in Figure 6, 64 (48 %) respondents indicated using FTP more than once a week, once a week was selected by 19 (15 %) participants while 18 (14 %) respondents chose once a day. More than once a day and once a month accounted for 12 (9.2 %) and 10 (7.6 %) respondents respectively.



Source: Research Data

Table 7: Frequency of use of mailing lists and newsgroups

Frequency of use	Mailing lists		Newsgroups	
	Frequency	%	Frequency	%
Once a day	8	8.5	-	-
More than once a day	-	-	-	-
Once a week	15	16	21	30.4
More than once a week	38	40.4	23	33.3
Once a month	11	11.7	-	-
More than once a month	22	23.4	25	36..3
Total	**94**	**100**	**69**	**100**

Source: Research Data

Table 7 indicates that out of 94 respondents, 38 (40.4 %) of them indicated using mailing lists more than once a week, 22 (23.4 %) respondents selected more than once a month, 15 (16 %) and 11(11.7 %) respondents reported using the mailing lists once a week and once a month respectively. With respect to newsgroups, it

was found out that 25 (36.3 %) respondents use them more than once a month, 23 (33.3 %) and 21 (30.4 %) research subjects selected using newsgroups for more than once a week and once a week respectively.

A clear pattern of frequency of use of various Internet services can be observed from findings discussed in this section. Those Internet services which were identified as significantly used had a high frequency of use. For example, e-mail which was reported used by all respondents had 116 (39.4 %) respondents using it for more than once a week while newsgroups, the least used Internet service was not reported used more than once a week. E-mail was also indicated used for once and more than once a day by 65 (22.1%) and 24 (2.2 %) respondents respectively while newsgroups was not reported used in this way of frequency. This is a clear indicator that the higher an Internet service is reported used, the more frequently it is likely to be used. The highly used Internet service gratify the users more, hence their frequent rate of utilization of the service.

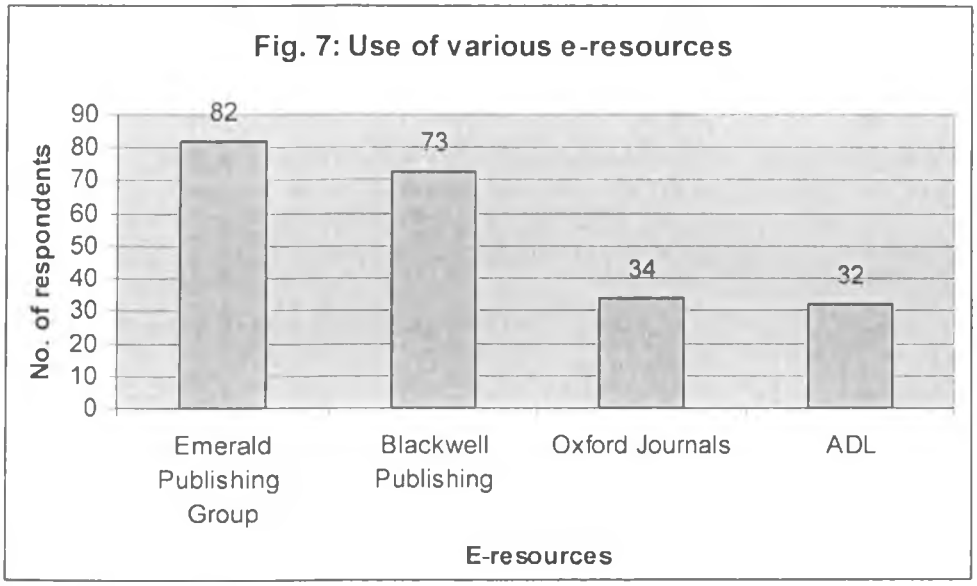
4.3.3 E-resources used

The eight e-resources provided at KSPS were identified as; Emerald Publishing Group, Blackwell Publishing, Oxford Journals, African Digital Library (ADL), EBSCO, Wiley Interscience, Gale and Springer. Appendix III provides the Website addresses of these e-resources with a brief description of each.

Use of e-resources is an indicator of the information seeking gratification dimension among respondents. From the data collected, it was found that out of the 294 respondents conducted, 205 (69.5 %) respondents indicated they do not use the KSPS e-resources. Only 89 (30.5 %) confirmed using the e-resources. These findings are in line with results of previous studies which concluded that majority of the students don't use the Internet for educational purposes (Wambilyangah, 2006); Kwanya, 2005, Luambano and Nawe, 2004).

In a previous finding in this study, it was found out that the majority (92.9 %, N=273) of the respondents indicated that they use WWW. However, with only a small number of the respondents (30.5%, N=89) admitting using e-resources, this demonstrates that the respondents in this study do not mainly use WWW for searching for educational materials. This is because WWW is used to access the e-resources.

In a previous finding of this study, it was established that majority of the respondents also indicated using e-mail, IM and FTP. These Internet services are used to facilitate communication and computer files transfer and not educational use directly. As Jones (2002) rightly points out, it is not surprising to find out that college students use the Internet more as a medium for social communication than for educational or professional communication.



Source: Research Data

From Figure 7, it can be observed that Emerald Publishing Group is used by 82 (92.1 %) respondents, Blackwell Publishing is used by 73 (82 %) respondents, 34 (38.2 %) and 32 (36 %) respondents use Oxford Journals and ADL respectively. When probed in the Focus Group Discussions why they mainly use these e-resources, majority of the respondents said that they contain up-to-date and

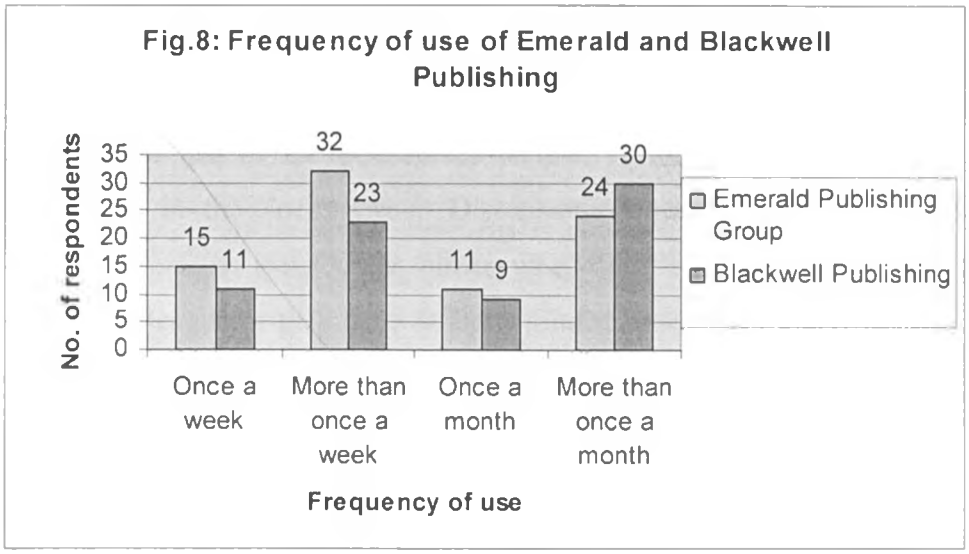
relevant documents to their areas of study. These findings further show that out of the eight e-resources provided at KSPS, only 4 (50 %) are reported used by respondents. Those not used include; EBSCO, Wiley Interscience, Gale and Springer.

The respondents interviewed revealed many reasons for their lack of using the e-resources. Majority of the respondents acknowledged two factors inhibiting their use of e-resources at KSPS; (1) Lack of awareness on the existence of e-resources, and (2) Lack of adequate skills in searching for information from e-resources. These two principal factors are in accord with those reported in a study by Luambano and Nawe (2004). This study found out that the major reason for failure to use the Internet effectively is lack of skills among the students in the utilization of the Internet and insufficient awareness of Internet resources that could enhance learning. Jones (2002) further observes that although academic resources are offered online, it may be that students have not yet been taught or have not figured out how to locate these resources.

4. 3.4 Frequency of use of e-resources

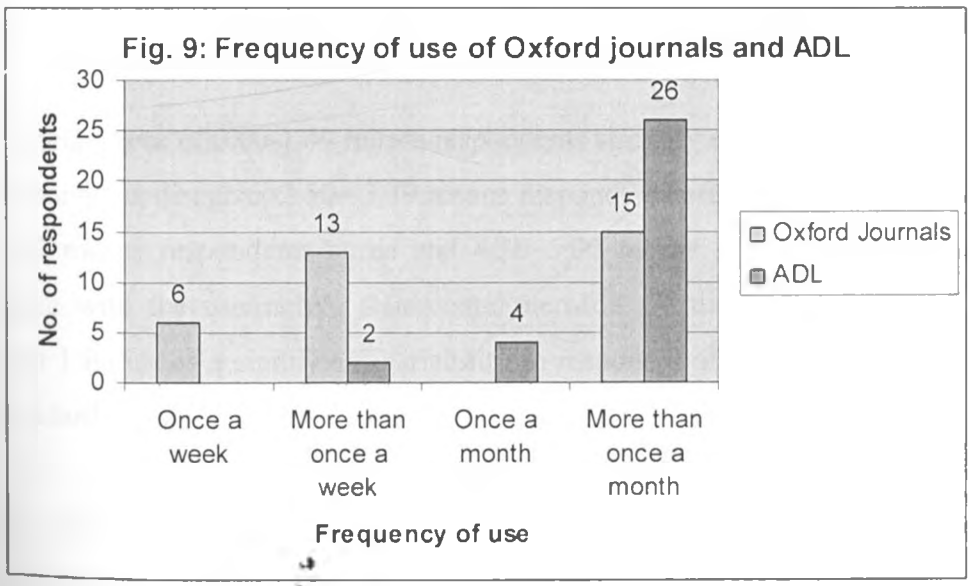
The respondents were asked how frequently they used the e-resources they had selected. Figure 8 indicates that Emerald Publishing Group e-resources are used more than once a week by 32 (39 %) respondents, 24 (29.3 %) use them more than once a month, 15 (18.3 %) and 11 (13.4 %) participants reported using them once a week and once a month respectively.

Figure 8 shows that out of 73 participants using Blackwell Publishing e–resources, 30 (41.1 %) respondents use them more than once a month, 23 (31. %) respondents indicated using them more than once a week, 11 (15.1 %) and 9(12.3 %) respondents once a week and once a month respectively.



Source: Research Data

Figure 9 reveals that 15 (44.2 %) respondents use Oxford Journals more than once a month, 13 (38.2 %) and 6 (17.6 %) participants reported using them more than once a week and once a week respectively. ADL e –resources were used more than once a month by 26 (81.2 %) respondents, once a month accounted for 4 (12.5 %) respondents and only 2 (6.3 %) respondents use them more than once a week.



Source: Research Data

The findings on the frequency of use of e-resources further show the low usage of Internet for educational purposes by KSPS students. This is because the frequency of use of the e-resources is low. A further investigation from the respondents in the Focus Group Discussions revealed that in most cases the participants access e-resources either when they have been referred to by a lecturer, colleague or they have failed to find relevant information from the print resources in the library.

A clear pattern of frequency of use of e-resources similar to the one reported for the various Internet services can be observed from these findings. Those e-resources which were identified as greatly used had a high frequency of use. This indicates that the higher an e-resource is reported used by respondents, the more frequently it is likely to be used. The highly used e-resource gratify the users more, hence its frequent rate of utilization.

4.4 Uses of the Internet

A total of 38 use statements categorized into eight use dimensions were presented to the respondents. The participants were instructed to agree/disagree with each of these use statements based on a 5 point Likert-scale (that's 1="Strongly disagree", 2= "Disagree", 3="Neutral", 4="Agree" and 5= "Strongly agree").

A mean score of 0.00-1.49 means respondents strongly disagree, 1.50–2.49 means respondents disagree, 2.50– 3.49 means respondents are neutral/undecided, 3.50–4.49 means respondents agree and 4.50–5.00 means that respondents strongly agree with the use/motive statement/dimension. A standard deviation of more than 1 indicates a significant variability in responses obtained and vice-versa for standard deviation of less than 1.

For Spearman's rank correlation coefficient; 0.00 means that there is absolutely no relationship, 0.00 + or – 0.20 implies that there is slight/almost negligible relationship, 0.21 + or – 0.40 means low correlation, 0.41 + or – 0.70 stands for

moderate correlation, 0.71 + or – 0.90 depicts high correlation, 0.91 + or – 0.99 represents very high correlation and + or – 1 denotes perfect relationship.

Table 8 reveals that under the communication dimension, respondents strongly agreed with six use statements. These use statements were; "to communicate with my friends" (M=5.00, SD=0.00), "to communicate with my parents/relatives" (M=5.00, SD=0.00), "to communicate with my romantic partner(s)" (M=5.00, SD=0.00), "to communicate with my classmates" (M=4.93, SD=0.31), "to communicate with my lecturers" (M=4.56, SD=0.27) and "to exchange computer files" (M=4.54, SD=0.27). From the FGDs, it was noted that students use the Internet to communicate to their classmates who are away from college on what is happening in the college, e.g. class assignments, time-tables, etc. Communication with parents/relatives was made for various reasons, e.g. request for school fees payments, upkeep allowances and enquiries about family affairs.

Respondents agreed with three use statements namely; "to communicate with members of the online study that I belong to" (M=3.76, SD=0.21), "to receive and turn in assignments to lecturers"(M=3.63, SD=0.20) and "to communicate with members in the newsgroup(s) I belong to" (M=3.60, SD=0.20).Respondents were undecided/neutral on only one communication use statement, namely; "to receive feedback/information from my lecturer(s)" (M=3.29, SD=0.19).

Under the information seeking dimension, opinion was divided amongst the participants in regard to the use statements given. Strongly agree was attributed to four statements. These statements were; "to access information from various sources allover the world" (M=5.00, SD=0.00), "to find information that is not available in my library" (M=5.00, SD=0.00), "to gather academic/educational materials for the course I am currently pursuing" (M=4.91, SD=0.31) and "to find information on other colleges and universities" (M=4.54, SD=0.27).

Table 8: Descriptive statistics of Internet uses

No.	Internet use dimensions and uses	Mean	Standard Deviation
A	**Communication**	**4.33**	**0.25**
1	To communicate with my friends	5.00	0.00
2	To communicate with my parents/relatives	5.00	0.00
3	To communicate with my romantic partner(s) (i.e. boyfriend, girlfriend or spouse)	5.00	0.00
4	To communicate with my classmates	4.93	0.31
5	To communicate with my lecturers	4.56	0.27
6	T o exchange computer files	4.54	0.27
7	To communicate with members of the online study/class group(s) that I belong to	3.76	0.21
8	To receive and turn in assignments to lecturers	3.63	0.20
9	To communicate with members in the newsgroup(s) I belong to	3.60	0.20
10	To receive feedback/information from my lecturer(s)	3.29	0.19
B	**Information seeking**	**4.16**	**0.24**
11	To access information from various sources allover the world	5.00	0.00
12	To find information that is not available in my library	5.00	0.00
13	To gather academic/educational materials for the course I am currently pursuing	4.91	0.31
14	To find information on other colleges and universities	4.54	0.27
15	To access online class materials such as class notes, assignments, study manuals and time-tables from my lecturer(s)/college	3.76	0.21
16	To find employment listings that fit me	3.59	0.20
17	To get up-to-date news and information	2.68	0.19
18	To find information on products and services I want to buy	1.54	0.27
C	**Developing and maintaining online and social interactions**	**3.88**	**0.22**
19	To contact my friends	5.00	0.00
20	To talk with other people on what is going on	4.54	0.27
21	To make new friends	4.17	0.24
22	To develop romantic relationships	3.26	0.19
23	To get advice to support me from online friend(s)	2.43	0.20
D	**Entertainment**	**3.40**	**0.19**
24	To pass time	4.69	0.29
25	To play online computer games	3.78	0.23
26	To listen to and download audio music	2.68	0.19
27	To watch and download music and movie videos	2.43	0.20

E	**Coping with peer pressure**	**2.98**	**0.18**
28	To share information with my peers so as to be at par with them	4.60	0.28
29	To follow up what my peers are doing	1.35	0.28
F	**Escape from problems**	**2.76**	**0.19**
30	To forget about college or any other chores in life	4.19	0.24
31	To experience things I can't in the real world	3.25	0.19
32	To get away from my family and friends	2.22	0.21
33	To escape from real world problems	1.39	0.28
G	**Improving personal status**	**2.65**	**0.19**
34	To improve my future prospects in life	4.23	0.24
35	To improve my standing in the world	2.33	0.20
36	To find information that reflects my identity	1.40	0.28
H	**Aesthetic experiences**	**2.40**	**0.20**
37	To find interesting new Web pages and websites	3.26	0.19
38	To see attractive graphics	1.54	0.27
Overall mean and standard deviation		**3.32**	**0.19**

Source: Research Data

Table 8 shows that participants agreed with two information seeking use statements, namely; to access online class materials such as class notes, assignments, study manuals and time-tables from my lecturer(s)/college" (M=3.76, SD=0.21) and "to find employment listings that fit me" (M=3.59, SD=0.20). Respondents who were undecided selected only one use statement namely; "to get up-to-date news and information" (M=2.68, SD=0.19).Respondents disagreed with one information seeking statement which is "to find information on products and services I want to buy" (M=1.54, SD=0.27).

Under the dimension for developing and maintaining online and social interactions, various choices were made. Strongly agree was attributed to two statements which were; "to contact my friends" (M=5.00, SD=0.00) and "to talk with other people on what is going on" (M=4.54, SD=0.27). Respondents agreed with the statement "to make new friends" (M=4.17, SD=0.24). Those who were neutral attributed their choices to two use statements namely; "to develop romantic relationships" (M=3.26, SD=0.19) and "to get advice to support me from online friend(s)" (M=2.43, SD=0.20).

E	**Coping with peer pressure**	**2.98**	**0.18**
28	To share information with my peers so as to be at par with them	4.60	0.28
29	To follow up what my peers are doing	1.35	0.28
F	**Escape from problems**	**2.76**	**0.19**
30	To forget about college or any other chores in life	4.19	0.24
31	To experience things I can't in the real world	3.25	0.19
32	To get away from my family and friends	2.22	0.21
33	To escape from real world problems	1.39	0.28
G	**Improving personal status**	**2.65**	**0.19**
34	To improve my future prospects in life	4.23	0.24
35	To improve my standing in the world	2.33	0.20
36	To find information that reflects my identity	1.40	0.28
H	**Aesthetic experiences**	**2.40**	**0.20**
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Overall mean and standard deviation		**3.32**	**0.19**

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With respect to the entertainment dimension, strongly agree was chosen for the use statement "to pass time" (M=4.69, SD=0.29). "To play online computer games" was agreed upon by the respondents (M=3.78, SD=0.23). Participants who were neutral were for the statement; "to listen to and download audio music" (M=2.68, SD=0.19). Respondents disagreed with one use statement namely; to watch and download music and movie videos" (M=2.43, SD=0.20).

The summary of responses to the dimension on coping with peer pressure from Table 8 indicate that strongly agree was attributed to one use statement which is "to share information with my peers so as to be at par with them" (M=4.60, SD=0.28). Respondents strongly disagreed with the use statement "to follow up what my peers are doing" (M=1.35, SD=0.28).

From Table 8 it can be observed that the dimension on escaping from problems was rated variously. Respondents agreed with the use statement; "to forget about college or any other chores in life" (M=4.19, SD=0.24). Participants were neutral on the statement; "to experience things I can't in the real world" (M=3.25, SD=0.19). Respondents disagreed with one use statement namely; "to get away from my family and friends" (M=2.22, SD=0.21). Respondents strongly disagreed with the response; "to escape from real world problems" (M=1.39, SD=0.28).

On the dimension of improving personal status, the statement "to improve my future prospects" was agreed upon by the respondents (M= 4.23, SD=0.24). Respondents were undecided on the statement; "to improve my standing in the world" (M=2.33, SD=0.20). Strongly disagree was attributed to the use statement, "to find information that reflects my identity" (M=1.40, SD=0.28).

Finally, Table 8 shows that under the dimension for aesthetic experiences, respondents were undecided on one response; "to find interesting new Web pages and websites" (M=3.26, SD=0.19). Disagreement was noted for one use statement, namely; "to see attractive graphics" (M=1.54, SD=0.27).

The summary of the mean scores for the eight use dimensions shown in Table 8 indicates that two use dimensions were generally agreed with among the respondents. These dimensions were; communication (M= 4.33, SD=0.25) and information seeking (M=4.16, SD=0.24). Participants agreed with the dimension of developing and maintaining online and social interactions (M=3.88, SD=0.22). Respondents were undecided on four dimensions as follows; entertainment (M=3.40, SD= 0.19), coping with peer pressure (M=2.98, SD=0.18), escape from problems (M=2.76, SD=0.19) and improving personal status (M=2.65, SD=0.19). Disagreed was attributed to the use dimension on aesthetic experiences (M=2.40, SD=0.20). The overall mean and standard deviation for Internet uses stood at 3.32 and 0.19 respectively. Therefore, this reveals that respondents were generally neutral or undecided on the Internet uses.

4.4.1 Internet uses by fields of study

Internet use among college students is influenced by their fields of study. In this study, there were 163 respondents pursuing Information Sciences and 131 studying Non-Information Sciences courses. Tables 9 and 10 summarize descriptive statistics and correlation analysis of Internet uses by fields of study respectively.

Table 9 indicates that under the communication dimension, both the Information Sciences (IS) and Non-Information Sciences (Non-IS) respondents strongly agreed with four use statements. These statements were; "to communicate with my friends", "to communicate with my parents/relatives", and "to communicate with my romantic partner(s)." Each group of respondents had a mean score of 5.00 (SD=0.00) for each of these three statements. For the statement; " to communicate with my classmates", the IS respondents had a mean of 5.00 (SD=0.00) while Non-IS respondents attained a mean score of 4.85 (SD= 0.45).

"To communicate with my lecturers" which was agreed upon by participants attained a mean score of 4.43 (SD=0.35) and 4.33 (SD=0.38) for IS and Non-IS

respondents respectively. Based on these findings it can be inferred that there were no significant differences in these use statements with respect to respondents in Information Sciences and Non-Information Sciences fields of study.

Differences in the mean scores of communication related Internet uses were observed in several use statements. IS respondents strongly agreed with the statement; "to exchange computer files" (M= 4.90, SD=0.41) as compared to Non-IS participants who agreed with it (M= 4.00, SD=0.34). "To communicate with members of the online study group(s) that I belong to" was agreed upon by both respondents (IS: M= 4.07, SD=0.31 and Non-IS: M= 3.38, SD=0.29).

Significant differences were noted in three communication use statements. "To receive and turn in assignments to lecturers", "to communicate with members of the newsgroup(s) I belong to" and "to receive feedback/information from my lecturers" was agreed to by IS respondents (M=4.41, SD=0.35; M= 4.37, SD=0.34 and M=3.96, SD=0.30 respectively). Non-IS respondents were undecided on two communication use statements, namely; "to receive and turn in assignments to lecturers" and "to communicate with members of the newsgroup(s) I belong to" and "to receive feedback/information from my lecturers" (M=2.66, SD=0.29 and M= 2.62, SD=0.29 respectively). Non-IS respondents disagreed with one use statement; "to receive feedback/information from my lecturer(s)" (M=2.45, SD=0.30).

Under the information seeking dimension, opinion was divided amongst the participants in regard to the use statements stated. Four statements were strongly agreed upon by both IS and Non-IS respondents. These statements were; "to access information from various sources allover the world ", "to find information that is not available in my library" and "to get up-to-date news and information." Each of these use statements had a mean score of 5.00 (SD=0.00) for each group of respondents. "To gather academic/educational materials for the course I am

currently pursuing", which was also strongly supported had a means score of 5.00 (SD=0.00) for the IS respondents and 4.81 (SD=0.45) for the Non-IS respondents.

Major differences were observed in three information seeking use statements. IS respondents (M=4.53, SD=0.36) strongly agreed with the statement; "to access online class materials such as class notes, assignments, study manuals and time-tables from my lecturer(s)/college" while the Non-IS participants were neutral on this statement (M=2.80, SD=0.28). IS participants agreed with the statement; "to find information on other colleges and universities" (M=4.35, SD=0.34) and "to find employment listings that fit me" (M=4.27, SD=0.33). Non-IS respondents remained undecided on these use statements as follows; "to find information on other colleges and universities" (M=2.65, SD=0.28) and "to find employment listings that fit me" (M=2.75, SD=0.28).

The information seeking use statement; "to find information on products and services I want to buy" was disagreed upon by the IS respondents (M=1.69, SD=0.34) while it was strongly disagreed upon by Non-IS participants (M=1.27, SD=0.44).

Table 9: Descriptive statistics of Internet uses by fields of study

No	Internet use dimensions and uses	Information Sciences N= 163		Non-Information Sciences N= 131	
		Mean	SD	Mean	SD
A	**Communication**	**4.61**	**0.38**	**3.93**	**0.33**
1	To communicate with my friends	5.00	0.00	5.00	0.00
2	To communicate with my parents/relatives	5.00	0.00	5.00	0.00
3	To communicate with my romantic partner(s) (i.e. boyfriend, girlfriend or spouse)	5.00	0.00	5.00	0.00
4	To communicate with my classmates	5.00	0.00	4.85	0.45
5	To communicate with my lecturers	4.43	0.35	4.33	0.38
6	T o exchange computer files	4.90	0.41	4.00	0.34

7	To communicate with members of the online study/class group(s) that I belong to	4.07	0.31	3.38	0.29
8	To receive and turn in assignments to lecturers	4.41	0.35	2.66	0.29
9	To communicate with members in the newsgroup(s) I belong to	4.37	0.34	2.62	0.29
10	To receive feedback/information from my lecturer(s)	3.96	0.30	2.45	0.30
B	**Information seeking**	**4.86**	**0.46**	**3.66**	**0.30**
11	To access information from various sources allover the world	5.00	0.00	5.00	0.00
12	To find information that is not available in my library	5.00	0.00	5.00	0.00
13	To gather academic/educational materials for the course I am currently pursuing	5.00	0.00	4.81	0.45
14	To find information on other colleges and universities	4.35	0.34	2.65	0.28
15	To access online class materials such as class notes, assignments, study manuals and time-tables from my lecturer(s)/college	4.53	0.36	2.80	0.28
16	To find employment listings that fit me	4.27	0.33	2.75	0.28
17	To get up-to-date news and information	5.00	0.00	5.00	0.00
18	To find information on products and services I want to buy	1.69	0.34	1.27	0.44
C	**Developing and maintaining online and social interactions**	**4.06**	**0.31**	**3.78**	**0.32**
19	To contact my friends	5.00	0.00	5.00	0.00
20	To talk with other people on what is going on	4.39	0.35	4.66	0.43
21	To make new friends	4.04	0.31	4.30	0.38
22	To develop romantic relationships	3.80	0.28	2.57	0.29
23	To get advice to support me from online friend(s)	3.05	0.25	1.66	0.38
D	**Entertainment**	**3.83**	**0.29**	**2.64**	**0.29**
24	To pass time	4.35	0.34	3.08	0.37
25	To play online computer games	4.35	0.34	3.08	0.37
26	To listen to and download audio music	3.50	0.26	1.65	0.38
27	To watch and download music and movie videos	3.10	0.25	1.59	0.39

E	**Coping with peer pressure**	**3.14**	**0.25**	**2.42**	**0.30**
28	To share information with my peers so as to be at par with them	4.73	0.39	1.10	0.46
29	To follow up what my peers are doing	1.55	0.35	3.74	0.31
F	**Escape from problems**	**2.43**	**0.27**	**1.91**	**0.35**
30	To forget about college or any other chores in life	2.18	0.29	2.62	0.29
31	To experience things I can't in the real world	3.04	0.25	2.55	0.29
32	To get away from my family and friends	2.84	0.25	1.45	0.41
33	To escape from real world problems	1.67	0.34	1.03	0.47
G	**Improving personal status**	**3.04**	**0.25**	**2.18**	**0.32**
34	To improve my future prospects in life	4.63	0.38	3.74	0.31
35	To improve my standing in the world	3.09	0.25	1.39	0.42
36	To find information that reflects my identity	1.40	0.60	1.40	0.42
H	**Aesthetic experiences**	**2.79**	**1.25**	**1.88**	**0.35**
37	To find interesting new Web pages and websites	3.76	0.28	1.12	0.46
38	To see attractive graphics	1.81	0.32	2.63	0.29
Overall mean and standard deviation		**3.59**	**0.26**	**2.80**	**0.28**

Source: Research Data

Table 9 also reveals that under the dimension for developing and maintaining online and social interactions various choices were made. Both the IS and Non-IS respondents strongly agreed with the use statement "to contact my friends" (IS: M=5.00, SD=0.00 and Non-IS: M=5.00, SD=0.00). Both categories of respondents agreed with two use statements namely: "to talk with other people on what is going on" (IS: M= 4.39, SD=0.35 and Non-IS: M= 4.66, SD=0.43) and "to make new friends" (IS: M= 4.04, SD=0.31 and Non-IS: M=4.30, SD=0.38). Slight differences were noted in the mean scores of the use statements "to develop romantic relationships" (IS: M= 3.80, SD= 0.28 and Non-IS: M= 2.57, SD=0.29) and "to get advice to support me from online friend(s)" (IS: M=3.05, SD=0.25 and Non-IS: M=1.66 SD=0.38).

With respect to the entertainment dimension, the mean scores for IS and Non-IS respondents reflected significant differences. IS respondents agreed with three use

statements namely; "to pass time" (M=4.35, SD=0.34), "to play online computer games" (M=4.35, SD=0.34) and "to listen to and download audio music"(M= 3.50, SD= 0.26). On the statements "to pass time" and "to play online computer games", the Non-IS participants were neutral (M=3.08, SD= 0.37and M= 3.08, SD=0.37 respectively). "To listen to and download audio music" was disagreed to by the Non-IS respondents (M=1.65, SD=0.38).IS respondents were undecided on the use statement "to watch and download music and movie videos" (M=3.10, SD= 0.25) while the Non-IS participants were in disagreement this use statement (M=1.59, SD=0.39).

Considerable differences were observed for the two use statements on coping with peer pressure. "To share information with my peers so as to be at par with them" was strongly agreed to by the IS respondents (M= 4.73, SD=0.39) but it was strongly disagreed to by the Non-IS participants (M= 1.10, SD=0.46). IS respondents disagreed with the use statement "to follow up what my peers are doing" (M=1.55, SD=0.35) while it was agreed upon by the Non-IS participants (M= 3.74, SD=0.31).

From Table 9 it can be observed that the dimension on escape from problems was rated variously. IS respondents were undecided on two use statements namely; "to experience things I can't in the real world" (M=3.04, SD=0.25) and "to get away from my family and friends" (M=2.84, SD=0.25). "To experience things I can't in the real world" received a neutral stand from the Non-IS respondents (M=2.55, SD=0.29) while disagreement was for the second use statement (M=1.45, SD=0.41). IS participants disagreed with the use statement "to forget about college or any other chores in life" (M=2.18, SD=0.29) while this same statement had the Non-IS respondents undecided (M =2.62, SD=0.29). For the IS respondents, disagreement was found for the use statement "to escape from real world problems" (M= 1.67, SD=0.34) which Non-IS participants strongly disagreed to (M=1.03, SD=0.47).

On the dimension of improving personal status, the statement "to improve my future prospects in life" was strongly agreed with by IS respondents (M=4.63, SD=0.38) while the Non-IS participants agreed with it (M=3.74, SD=0.31). IS respondents were undecided on the statement "to improve my standing in the world" (M=3.09, SD=0.25) while Non-IS participants strongly disagreed with it (M=1.39, SD=0.42). Both IS and Non-IS respondents strongly disagreed with the use statement "to find information that reflects my identity" (IS: M=1.40, SD=0.60) and Non-IS: M=1.40, SD=0.42).

Finally, Table 9 shows that under the dimension for aesthetic experiences, "to find interesting new Web pages and websites" received a neutral response among the IS respondents (M=3.76, SD=0.28) while Non-IS respondents strongly disagreed with it (M=1.12, SD=0.46)."To see attractive graphics" was disagreed to by the IS respondents (M=1.81, SD=0.32) compared to a neutral response among the Non-IS participants (M=2.63, SD=0.29).

The summary of the mean scores for the eight use dimensions shown in Table 10 indicates that IS respondents strongly agreed with two Internet use dimensions. These dimensions were information seeking (M=4.86, SD= 0.46) and communication (M=4.61, SD=0.38). For the Non-IS respondents, communication (M= 3.93, SD=0.33) and information seeking (M=3.66, SD=0.30) were agreed upon. Both IS and Non-IS respondents agreed with developing and maintaining online and social interactions (IS: M= 4.06, SD= 0.31and Non-IS: M=3.78, SD=0.32 respectively).

Entertainment was agreed to by the IS respondents (M =3.83, SD=0.29) as opposed to a neutral response for Non-IS participants (M=2.64, SD=0.29). Coping with peer pressure reported a neutral stand among both the IS and Non-IS respondents (IS: M=3.14, SD=0.25 and Non-IS: M=2.42, SD=0.30). Escape from problems attained a neutral response (M=2.43, SD=0.27) while the Non-IS participants disagreed with it (M=1.91, SD=0.35). Both categories of respondents

were undecided on the dimension of improving personal status (IS: M=3.04, SD=0.25 and Non-IS: M= 2.18, SD=0.32).IS participants were undecided on aesthetic experiences (M=2.79, SD=1.25) as compared to disagreement attributed to the Non-IS respondents (M=1.88, SD=0.35).

Table 10: Summary of mean scores and Spearman's rank correlation coefficient for Internet uses by fields of study

No	Internet use dimensions and uses	Information Sciences N= 163		Non-Information Sciences N= 131		Spearman's rank correlation coefficient
		M	SD	M	SD	
1	Communication	4.61	0.38	3.93	0.33	0.93
2	Information seeking	4.86	0.46	3.66	0.30	0.94
3	Developing and maintaining online and social interactions	4.06	0.31	3.78	0.32	0.90
4	Entertainment	3.83	0.29	2.64	0.29	0.95
5	Coping with peer pressure	3.14	0.25	2.42	0.30	-1.00
6	Escape from problems	2.43	0.27	1.91	0.35	0.40
7	Improving personal status	3.04	0.25	2.18	0.32	0.50
8	Aesthetic experiences	2.79	1.25	1.88	0.35	-1.00
Overall mean, standard deviation and Spearman's rank correlation coefficient		**3.59**	**0.26**	**2.80**	**0.28**	**0.88**

Source: Research Data

IS respondents attained an overall mean and standard deviation for Internet uses of 3.59 and 0.26 respectively. This implies that they were in agreement with the use dimensions. Non-IS participants scored a mean of 2.80 and a standard deviation of 0.28. This shows that the IS respondents were undecided on the eight Internet use dimensions. Based on these findings, it can be inferred that there were differences for Internet uses among both categories of respondents. Generally it can concluded that the IS respondents use the Internet more than the Non-IS respondents.

Several reasons exist to explain the significant differences on Internet uses among IS and Non-IS respondents. One, IS respondents have better Internet use skills

due to their training and are therefore bound to use the effectively Internet services/resources more than the Non-IS respondents. The second reason is that lecturers in IS are also more equipped in Internet use and are likely to encourage their students to use the Internet to communicate to them and search for educational information. Indeed students can't communicate to lecturers if they do not have their e-mail addresses and if they are not allowed to use them. The third reason is that Information Sciences is a fast growing discipline. In this case, the IS respondents who require up-to-date documents are likely to use the Internet than the Non-IS respondents to receive up-to-date e-resources.

On correlation analysis for the demographic variable discussed, Table 10 reveals that there exists a negative perfect relationship in the mean scores of Internet uses relating to two use dimensions among IS and Non-IS participants. These dimensions were: aesthetic experiences and coping with peer pressure (r_s = -1). There was a very high correlation in the mean scores on three Internet use dimensions among the two categories of respondents. These dimensions were entertainment (r_s. =0.95), information seeking (r_s = 0.94) and communication (r_s = 0.93). There exists a high correlation in the mean scores of Internet uses relating to developing and maintaining online and social interactions among the IS and Non-IS participants (r_s = 0.90). Moderate correlation was found for the dimension on improving personal status (r_s = 0.50) and low correlation was observed for escape from problems (r_s =0.40). Overall, it was noted that there exists a high correlation in the mean scores of Internet uses among IS and Non-IS respondents (r_s = 0.88).

4.4.2 Internet uses by levels of study

Levels of study affect how college students use the Internet. In this study, Diploma respondents were 194 while undergraduate participants were 100. Tables 11 and 12 summarize descriptive statistics and correlation analysis of Internet uses by levels of study respectively. Table 11 indicates that under the communication dimension, both the diploma and undergraduate respondents

strongly agreed with four use statements. These statements were; "to communicate with my friends", "to communicate with my parents/relatives", and "to communicate with my romantic partner(s)". For these statements, each group of respondents attained a mean score of 5.00 (SD=0.00). "To communicate with my classmates" which was also strongly supported by both categories of respondents had Diploma respondents attaining a mean score of 5.00 (SD=0.00) while undergraduates attained a mean score of 4.85 (SD= 0.45).

Diploma respondents agreed with two use statements. These statements were; "to communicate with my lecturers" (M=4.36, SD=0.31) and "to exchange computer files" (M=4.34, SD=0.31). The undergraduate respondents strongly agreed with these two use statements. The first statement attained a mean of 4.86 and a standard deviation of 0.52 while the second had a mean of 4.84 and standard deviation of 0.51.

Significant differences were noted for four communication use statements. Diploma respondents were neutral on the statements; "to receive and turn in assignments to lecturers" (M=3.21, SD=0.48), "to communicate with members of the online study group(s) that I belong to" (M=3.13, SD=0.47), "to communicate with members in the newsgroup(s) that I belong to" (M=3.02, SD=0.23) and "to receive feedback/information from my lecturer(s)" (M=2.73, SD=0.23). Strongly agree was credited to two use dimensions among the undergraduate respondents. These dimensions were; "to communicate with members of the online class group(s) that I belong to" (M=4.99, SD=0.55) and "to communicate with members in the newsgroup(s) I belong to" (M=4.70, SD=0.49). Among the undergraduates, "to receive and turn in assignments to lecturers" and "to receive feedback/information from my lecturer(s)" each had a mean of 4.44 and a standard deviation of 0.45.

Table 11: Descriptive statistics of Internet uses by levels of study

No.	Internet use dimensions and uses	Diploma N= 194		Undergraduate N= 100	
		Mean	SD	Mean	SD
A	**Communication**	**4.08**	**0.29**	**4.82**	**0.52**
1	To communicate with my friends	5.00	0.00	5.00	0.00
2	To communicate with my parents/relatives	5.00	0.00	5.00	0.00
3	To communicate with my romantic partner(s) (i.e. boyfriend, girlfriend or spouse)	5.00	0.00	5.00	0.00
4	To communicate with my classmates	5.00	0.00	5.00	0.00
5	To communicate with my lecturers	4.36	0.31	4.86	0.52
6	T o exchange computer files	4.34	0.31	4.84	0.51
7	To communicate with members of the online study/class group(s) that I belong to	3.13	0.47	4.99	0.55
8	To receive and turn in assignments to lecturers	3.21	0.48	4.44	0.45
9	To communicate with members in the newsgroup(s) I belong to	3.02	0.23	4.70	0.49
10	To receive feedback/information from my lecturer(s)	2.73	0.23	4.44	0.45
B	**Information seeking**	**4.08**	**0.29**	**4.32**	**0.43**
11	To access information from various sources allover the world	5.00	0.00	5.00	0.00
12	To find information that is not available in my library	5.00	0.00	5.00	0.00
13	To gather academic/educational materials for the course I am currently pursuing	4.87	0.36	5.00	0.00
14	To find information on other colleges and universities	4.52	0.33	4.50	0.46
15	To access online class materials such as class *Note*s, assignments, study manuals and time-tables from my lecturer(s)/college	3.46	0.24	4.34	0.44
16	To find employment listings that fit me	3.24	0.23	4.27	0.43
17	To get up-to-date news and information	5.00	0.00	5.00	0.47
18	To find information on products and services I want to buy	1.53	0.33	1.46	0.47
C	**Developing and maintaining online and social interactions**	**3.89**	**0.27**	**3.75**	**0.36**
19	To contact my friends	5.00	0.00	5.00	0.00

20	To talk with other people on what is going on	4.54	0.33	4.46	0.45
21	To make new friends	4.19	0.30	3.70	0.35
22	To develop romantic relationships	3.27	0.23	3.22	0.32
23	To get advice to support me from online friend(s)	2.46	0.24	2.36	0.35
D	**Entertainment**	**3.41**	**0.24**	**3.34**	**0.33**
24	To pass time	4.69	0.35	3.75	0.36
25	To play online computer games	3.80	0.26	4.61	0.48
26	To listen to and download audio music	2.70	0.23	2.64	0.33
27	To watch and download music and movie videos	2.46	0.24	2.36	0.35
E	**Coping with peer pressure**	**2.99**	**0.23**	**2.94**	**0.32**
28	To share information with my peers so as to be at par with them	1.35	0.35	4.53	0.47
29	To follow up what my peers are doing	4.63	0.35	1.34	0.49
F	**Escape from problems**	**2.64**	**0.23**	**2.45**	**0.34**
30	To forget about college or any other chores in life	4.23	0.30	4.11	0.40
31	To experience things I can't in the real world	2.70	0.23	2.14	0.37
32	To get away from my family and friends	2.24	0.26	2.18	0.37
33	To escape from real world problems	1.40	0.34	1.36	0.46
G	**Improving personal status**	**2.68**	**0.23**	**2.61**	**0.32**
34	To improve my future prospects in life	4.26	0.30	2.31	0.35
35	To improve my standing in the world	2.35	0.25	4.17	0.41
36	To find information that reflects my identity	1.43	0.34	1.36	0.48
H	**Aesthetic experiences**	**2.40**	**0.25**	**2.34**	**0.35**
37	To find interesting new Web pages and websites	1.53	0.33	3.22	0.32
38	To see attractive graphics	3.27	0.23	1.46	0.47
Overall mean and standard deviation		**2.90**	**0.23**	**3.32**	**0.52**

Source: Research Data

Under the information seeking dimension, opinion was divided amongst the participants in regard to the use statements provided. Five statements were strongly agreed upon by both the diploma and undergraduate participants. These statements were; "to access information from various sources allover the world", "to find information that is not available in my library" and "to get up-to-date news and information". Each of these statements had a mean score of 5.00

(SD=0.00) for each group of respondents. The other use statements strongly agreed to by the respondents were as follows; "to gather academic/educational materials for the course I am currently pursuing" (Diploma: M=4.87, SD=0.36 and Undergraduate: M=5.00, SD=0.00) and "to find information on other college and universities" (Diploma: M=4.52, SD=0.33 and Undergraduate: M=4.50, SD=0.46).

Important differences were observed in three information seeking use statements. Diploma respondents were undecided on the statement "to access online class materials such as class notes, assignments, study manuals and time-tables from my lecturer(s)/college" (M= 3.46, SD=0.24) and "to find employment listings that fit me" (M=3.24, SD=0.23) while undergraduate respondents agreed to these use statements (M=4.34, SD=0.44 and M=4.27, SD=0.43 respectively). "To find information on products and services I want to buy" was disagreed upon by diploma respondents (M=1.53, SD=0.33). This use statement was strongly disagreed upon by the undergraduate respondents (M=1.46, SD=0.47).

Table 11 also reveals that under the dimension for developing and maintaining online and social interactions various choices were made. "To contact my friends" was strongly agreed upon by both diploma and undergraduate respondents (Diploma: M= 5.00, SD=0.00 and Undergraduate: M= 5.00, SD=0.00). Diploma and undergraduate respondents both agreed with two use statements; "to talk with other people on what is going on" (Diploma: M=4.54, SD=0.33 and Undergraduate: M=4.46, SD=0.45) and "to make new friends" (Diploma: M=4.19, SD=0.30 and Undergraduate: M=3.70, SD=0.35). Both diploma and undergraduate respondents were undecided on the statement "to develop romantic relationships" (Diploma: M=3.27, SD=0.23 and Undergraduate: M=3.22, SD=0.32). Disagreement was noted for the statement "to get advice to support me from online friend(s)" (Diploma: M=2.46, SD=0.24 and Undergraduate: M=2.36, SD=0.35).

With respect to the entertainment dimension, the mean scores between diploma and undergraduate participants reflected significant differences. Diploma respondents strongly agreed with the statement "to pass time" (M=4.69, SD=0.35) as opposed to undergraduate respondents who agreed with the statement (M=3.75, SD=0.36). Diploma participants agreed with the use statement; "to play online computer games" (M=3.80, SD=0.26) while undergraduate respondents strongly agreed with this statement (M=4.61, SD=0.48). Both categories of respondents were neutral on use statement "to listen to and download audio music" (Diploma: M=2.70, SD=0.23 and Undergraduate: M=2.64, SD=0.33).Both diploma and undergraduate respondents disagreed with the statement "to watch and download music and movie videos" (Diploma: M=2.46, SD=0.24 and Undergraduate: M=2.36, SD=0.35).

Considerable differences were observed for the two use statements on coping with peer pressure. Diploma respondents strongly agreed with the use statement "to follow up what my peers are doing" (M=4.63, SD=0.35) while undergraduate respondents strongly disagreed with this statement (M=1.34, SD=0.49).Undergraduate participants strongly agreed with the use statement "to share information with my peers so as to be at par with them" (M=4.53, SD=0.47) as opposed to diploma respondents who strongly disagreed with this statement (M=1.35, SD=0.35).

Table 11 indicates that the dimension on escape from problems was rated variously. "To forget about college or any other chores in life" was agreed upon by both diploma and undergraduate respondents (Diploma: M=4.23, SD=0.30, and Undergraduate: M=4.11, SD=0.40). Diploma participants were undecided on the use statement "to experience things I can't in the real world" (M=2.70, SD=0.23) while the undergraduate respondents disagreed with it (M=2.14, SD=0.37). "To get away from my family and friends" was disagreed upon by both diploma and undergraduate respondents (Diploma: M=2.24, SD=0.26 and Undergraduate: M=2.18, SD=0.37). Both categories of respondents strongly

disagreed with the statement "to escape from real world problems" (Diploma: M=1.40, SD=0.34 and Undergraduate: M=1.36, SD=0.46).

On the dimension of improving personal status, the statement "to improve my future prospects in life" was agreed to by diploma respondents (M=4.26, SD=0.30) while undergraduate respondents disagreed with it (M=2.31, SD=0.35). Disagreement was reported by diploma respondents on the use statement "to improve my standing in the world" (M=2.35, SD=0.25) while this statement was agreed upon by undergraduate respondents (M=4.17, SD=0.41). "To find information that reflects my identity" was strongly disagreed to by both diploma and undergraduate participants (Diploma: M=1.43, SD=034 and Undergraduate: M=1.36, SD=0.48).

Finally, Table11 indicates that under the dimension for aesthetic experiences, "to see attractive graphics" received a neutral response amongst diploma respondents (M=3.27, SD=0.23) while this same statement was strongly disagreed by the undergraduates (M=1.46, SD=0.47).Among diploma respondents, disagreement was noted for the statement "to find interesting new Web pages and websites" (M=1.53, SD=0.33) as opposed to the neutral stand among undergraduate respondents (M=3.22, SD=0.32).

The summary of the mean scores for the eight use dimensions shown in Table12 shows that diploma participants agreed with three use dimensions. These dimensions were; communication and information seeking. Each of these dimensions attained a mean score of 4.08 (SD=0.29).Developing and maintaining online and social interactions had a mean of 3.89 (SD=0.27) among diploma respondents. This shows that these respondents agreed with the dimension. Undergraduate respondents strongly agreed with the communication dimension (M=4.82, SD=0.52).

Table 12: Summary of mean scores and Spearman's rank correlation coefficient for Internet uses by levels of study

No	Internet use dimensions and uses	Diploma N= 194		Undergraduate N= 100		Spearman's rank correlation coefficient
		M	SD	M	SD	
1	Communication	4.08	0.29	4.82	0.52	0.94
2	Information seeking	4.08	0.29	4.32	0.43	0.96
3	Developing and maintaining online and social interactions	3.89	0.27	3.75	0.36	0.75
4	Entertainment	3.41	0.24	3.34	0.33	0.60
5	Coping with peer pressure	2.99	0.23	2.94	0.32	-1.00
6	Escape from problems	2.64	0.23	2.45	0.34	0.80
7	Improving personal status	2.68	0.23	2.61	0.32	0.50
8	Aesthetic experiences	2.40	0.25	2.34	0.35	-1.00
Overall mean, standard deviation and Spearman's rank correlation coefficient		**2.90**	**0.23**	**3.32**	**0.32**	**0.99**

Source: Research Data

Table 12 reveals that among undergraduate participants, agreement was noted for entertainment (M=4.32, SD=0.43) and coping with peer pressure (M=3.75, SD=0.36). Both diploma and undergraduate respondents were undecided on four Internet use dimensions which were; entertainment (Diploma: M=3.41, SD=0.24 and Undergraduate: M=3.34, SD=0.33), coping with peer pressure (Diploma: M=2.99, SD=0.23 and Undergraduate: M=2.94, SD=0.32), escape from problems (Diploma: M=2.64, SD=0.23 and Undergraduate: M=2.45, SD=0.34) and improving personal status (Diploma: M=2.68, SD=0.23 and Undergraduate: M=2.61, SD=0.32). Both the diploma and undergraduate respondents disagreed with the use dimension of aesthetic experiences (Diploma: M=2.40, SD=0.25 and Undergraduate: M=2.34, SD=0.25).

Diploma respondents attained an overall mean and standard deviation for Internet uses of 2.90 and 0.23 respectively. This implies that they were undecided on the various use dimensions. Undergraduate participants scored a mean of 3.32 and a

standard deviation of 0.32. This shows that the diploma respondents were undecided on the eight Internet use dimensions. Based on these findings, it can be inferred that there were no significant differences for Internet uses among both categories of respondents.

The reason that accounts for significant differences in Internet uses between diploma and undergraduate respondents is that undergraduate courses may be more demanding than the diploma courses. Therefore, the undergraduates are likely to use the Internet more for academic and research information seeking and communication among their colleagues than the diploma respondents. Equally, undergraduates are likely to be more equipped with Internet use skills than the diploma students. From the FGD, a third reason was found. The undergraduates are allocated more time in the computer labs than the diploma respondents hence their increased use of the Internet.

Table 12 shows that there exists a negative perfect relationship in the mean scores of Internet uses relating to two use dimensions among diploma and undergraduate participants. These dimensions were; aesthetic experiences and coping with peer pressure (r_s= -1).There was a very high correlation in the mean scores on two Internet use dimensions among the two categories of respondents. These dimensions were; information seeking (r_s =0.96) and communication (r_s= 0.94). There exists a high correlation in the mean scores of Internet uses relating to escape from problems (r_s= 0.80) and developing and maintaining online and social interactions (r_s= 0.75) among the diploma and undergraduate participants. Moderate correlation was found for the dimension on entertainment (r_s = 0.60) and improving personal status (r_s= 0.50). Overall, it was noted that there exists a very high correlation in the mean scores of Internet uses among diploma and undergraduate (r_s= 0.99).

4.4.3 Internet uses by years of study

Participants in initial and final years' of study were 182 and 112 respectively. Tables 13 and 14 present Internet uses among college students by years of study. Under the communication dimension, respondents in both the initial and final years strongly agreed to six use statements. These use statements were; "to communicate with my friends" and "to communicate with my parents/relatives". Each of these two statements attained a mean of 5.00 (SD=0.00) among each class of respondents.

The other communication use statements were strongly supported as follows; "to communicate with my romantic partner(s)" (Initial years: M=4.95, SD=0.40 and Final years: M=5.00, SD=0.00), "to communicate with my classmates" (Initial years: M=4.95, SD=0.40) and Final years: M=4.91, SD=0.50), "to communicate with my lecturers" (Initial years: M= 4.69,SD=0.37 and Final years: M=4.67, SD=0.05) and "to exchange computer files"(Initial years: M=4.59, SD=0.35 and Final years: M=4.70, SD=0.47).

Respondents in their initial years of study agreed to four use statements, namely; "to communicate with members of the online study/class group(s) that I belong to" (M= 4.36, SD=0.32), "to receive and turn in assignments to lecturers" (M=4.19, SD=0.31), "to communicate with members in the newsgroup(s) I belong to" (M=3.81, SD=0.27) and "to receive feedback/information from my lecturer(s)" (M=3.85, SD=0.27). In contrast, participants in final years agreed with the use statements "to receive and turn in assignments to lecturers" (M=4.14, M=0.38) and "to receive feedback/information from my lecturer(s)" (M=3.72, SD=0.34). The respondents in their final years of study were undecided on two use statements. These two statements were; "to communicate with members of the online study/class group(s) that I belong to" (M=2.79, SD=0.30) and "to communicate with members in the newsgroup(s) I belong to" (M=3.24, SD=0.30).

Respondents in both initial and final years were strongly in agreement with all the use statements under the information seeking use dimension. The use statements were; "to access information from various sources allover the world" and "to find information that is not available in my library". Each class of respondents had a mean score of 5.00 (SD=0.00) for each of these two statements. The other statements were; "to get up-to-date news and information" (Initial years: M= 4.69, SD=0.37 and Final years: M=4.78, SD=0.48), "to gather academic/educational materials for the course I am currently pursuing" (Initial years: M=4.56, SD=0.35 and Final years: M=5.00, SD=0.00) and "to find information on other colleges and universities" (Initial years: M=4.66, SD=0.36 and Final years: M=4.27, SD=0.40).

Initial years' respondents were in agreement with the use statement "to access online class materials such as class notes, assignments, study manuals and time-tables from my lecturer(s)/college" (Initial years: M=3.85, SD=0.27) while final years participants strongly agreed with this use statement (M=4.71, SD=0.47).

Table 13: Descriptive statistics of Internet uses by years of study

No	Internet use dimensions and uses	Initial years N= 182		Final years N= 112	
		Mean	SD	Mean	SD
A	**Communication**	**4.54**	**0.35**	**4.30**	**0.40**
1	To communicate with my friends	5.00	0.00	5.00	0.00
2	To communicate with my parents/relatives	5.00	0.00	5.00	0.00
3	To communicate with my romantic partner(s) (i.e. boyfriend, girlfriend or spouse)	4.95	0.40	5.00	0.00
4	To communicate with my classmates	4.95	0.40	4.91	0.50
5	To communicate with my lecturers	4.69	0.37	4.67	0.05
6	T o exchange computer files	4.59	0.35	4.70	0.47
7	To communicate with members of the online study/class group(s) that I belong to	4.36	0.32	2.79	0.30
8	To receive and turn in assignments to lecturers	4.19	0.31	4.14	0.38

9	To communicate with members in the newsgroup(s) I belong to	3.81	0.27	3.24	0.30
10	To receive feedback/information from my lecturer(s)	3.85	0.27	3.72	0.34
B	**Information seeking**	**3.92**	**0.27**	**4.34**	**0.41**
11	To access information from various sources allover the world	5.00	0.00	5.00	0.00
12	To find information that is not available in my library	5.00	0.00	5.00	0.00
13	To gather academic/educational materials for the course I am currently pursuing	4.56	0.35	5.00	0.00
14	To find information on other colleges and universities	4.66	0.36	4.27	0.40
15	To access online class materials such as class notes, assignments, study manuals and time-tables from my lecturer(s)/college	3.85	0.27	4.71	0.47
16	To find employment listings that fit me	1.87	0.30	4.78	0.48
17	To get up-to-date news and information	4.69	0.37	4.78	0.48
18	Find information on products and services I want to buy	1.70	0.32	1.18	0.49
C	**Developing and maintaining online and social interactions**	**4.00**	**0.29**	**4.55**	**0.44**
19	To contact my friends	5.00	0.00	5.00	0.00
20	To talk with other people on what is going on	4.59	0.35	4.38	0.42
21	To make new friends	3.84	0.27	4.59	0.45
22	To develop romantic relationships	3.81	0.27	2.35	0.33
23	To get advice to support me from online friend(s)	2.76	0.24	1.89	0.38
D	**Entertainment**	**3.54**	**0.25**	**3.48**	**0.32**
24	To pass time	4.65	0.36	4.67	0.47
25	To play online computer games	3.79	0.29	3.67	0.33
26	To listen to and download audio music	3.16	0.24	1.88	0.38
27	To watch and download music and movie videos	2.54	0.25	3.72	0.34
E	**Coping with peer pressure**	**1.79**	**0.31**	**3.26**	**0.30**
28	To share information with my peers so as to be at par with them	1.70	0.32	3.72	0.34
29	To follow up what my peers are doing	1.87	0.30	2.79	0.20
F	**Escape from problems**	**2.49**	**0.25**	**2.64**	**0.31**
30	To forget about college or any other chores in life	4.01	0.29	2.35	0.33

31	To experience things I can't in the real world	2.54	0.25	4.01	0.46
32	To get away from my family and friends	1.87	0.30	2.79	**0.30**
33	To escape from real world problems	1.54	0.11	1.21	0.48
G	**Improving personal status**	**2.99**	**0.23**	**3.68**	**0.33**
34	To improve my future prospects in life	4.53	0.34	5.00	0.00
35	To improve my standing in the world	2.95	0.23	2.79	0.20
36	To find information that reflects my identity	1.50	0.34	3.24	0.30
H	**Aesthetic experiences**	**2.72**	**0.24**	**2.92**	**0.30**
37	To find interesting new Web pages and websites	3.81	0.27	2.35	0.33
38	To see attractive graphics	1.63	0.35	3.48	0.31
Overall mean and standard deviation		**2.76**	**0.23**	**3.65**	**0.37**

Source: Research Data

A significant difference was noted in the information seeking use statement "to find employment listings that fit me". Initial years respondents were in disagreement (M=1.87, SD=0.30) while final years participants strongly agreed with the statement (M=4.78, SD=0.48). Respondents in their initial years of study disagreed with the use statement; "to find information on products and services I want to buy" (M=1.70, SD=0.32) while final years participants strongly disagreed with it (M=1.18, SD=0.49).

Table 13 also reveals that under the dimension for developing and maintaining online and social interactions various choices were made." To contact my friends" was strongly supported by respondents in both initial and final years of study. Each group had a mean score of 5.00 (SD=0.00). Initial years respondents strongly agreed to the statement "to talk with other people on what is going on" (M=4.59, SD=0.35) as compared to final years respondents who agreed with the statement (M=4.38, SD=0.42).

"To make new friends" had a mean score of 3.84 (SD=0.27) and "to develop romantic relationships" attained a mean score of 3.81 (SD=0.27) among the respondents in the initial years of study. This shows that these respondents were undecided on these two statements. In contrast, the final years' respondents

strongly agreed with the statement "to make new friends" (M=4.59, SD=0.45) and disagreed with the second statement "to develop romantic relationships" (M=2.35, SD=0.33). Respondents in their initial years of study were neutral on the statement "to get advice to support me from online friend(s) (M=2.76, SD=0.24) as compared to the respondents who were in final years of study (M=1.89, SD=0.38). This implies that on this statement, the final years' participants disagreed with it.

With respect to the entertainment dimension, the mean scores for initial and final years' participants were varied. Both groups of respondents strongly agreed to the use statement "to pass time" (Initial years=4.65, SD=0.36 and Final years: M=4.67, SD=0.47). Respondents were undecided on the use statement "to play online computer games" (Initial years: M=3.79, SD=0.29 and Final years: M=3.67, SD=0.33). Significant differences were observed on two use statements, which were; "to listen to and download audio music" which respondents in their initial years of study were undecided about (M=3.16, SD=0.24) as opposed to the final years students who disagreed with it (M=1.88, SD=0.38). Participants in their initial years of study were undecided on the statement "to watch and download music and movie videos" (M=2.54, SD=0.25) as opposed to final years respondents who were in agreement with it (M=3.72, SD=0.34).

Some differences were observed for the two use statements on coping with peer pressure. "To share information with my peers so as to be at par with them" was disagreed to by the initial years respondents (M= 1.70, SD=0.32) but it was disagreed to by the participants in their final years (M=3.72, SD=0.34). "To follow up what my peers are doing" was disagreed to by initial years respondents (M=1.87, SD=0.30) while final years respondents were undecided about it (M=2.79, SD=0.20).

From Table 13, it can be seen that there were significant differences in the use statements on escape from problems. Initial years' respondents agreed with the

statement; "to forget about college or any other chores in life" (M=4.01, SD=0.29). This was in contrast to final years students who disagreed with it (M=2.35, SD=0.33). Respondents in their initial years of study were undecided on the statement "to experience things I can't in the real world" (M=2.54, SD=0.25) as opposed to the final years' participants who agreed with it (M=4.01, SD=0.46). Disagreement was noted among the initial years' participants for two use statements, which were; "to get away from my family and friends" (M=1.87, SD=0.30) and "to escape from real world problems" (M=1.54, SD=0.11). This was in disparity with final years respondents who disagreed and strongly disagreed with these two use statements as follows; "to get away from my family and friends" (M=2.79, SD=0.30). and "to escape from real world problems" (M=1.21, SD=0.48) respectively.

On the dimension of improving personal status, the statement "to improve my future prospects in life" was strongly agreed with by both categories of respondents (Initial years: M=4.53, SD=0.34 and final years respondents: M=5.00, SD=0.00). Respondents were undecided on the statement "to improve my standing in the world" (Initial years: M=2.95, SD=0.23 and final years M=2.79, SD=0.20). A significant difference was noticed for the statement "to find information that reflects my identity". Initial years' respondents disagreed with this statement (M=1.50, SD=0.34) as opposed to final years' participants who were undecided (M=3.24, SD=0.30).

Finally, Table 13 shows that under the dimension for aesthetic experiences, "to find interesting new Web pages and websites" was agreed upon by the initial years' respondents (M=3.81, SD=0.27) while disagreement was made to it by final years' respondents (M= 2.35, SD=0.33). "To see attractive graphics" was disagreed to by the initial years' respondents (M=1.63, SD=0.35) compared to a neutral response among the final years respondents (M=3.48, SD=0.31).

The summary of the mean scores for the eight use dimensions shown in Table 14 reflects varied scores. Communication was strongly agreed to by initial years respondents (M=4.54, SD=0.35) while agreement was attained for final years respondents (M=4.30, SD=0.40). Participants in their initial years agreed with the use dimension on developing and maintaining online and social interactions (M=4.00, SD=0.29) while final years' participants strongly agreed to it (M=4.55, SD=0.90). Initial years' respondents were in agreement with two use dimensions, namely; information seeking (M=3.92, SD=0.27) and entertainment (M=3.54, SD=0.25). Information seeking was agreed upon by final years respondents (M=4.34, SD=0.41). while the final years participants were undecided on the entertainment dimension (M=3.48, SD=0.32).

Table 14: Summary of mean scores and Spearman's rank correlation coefficient for Internet uses by years of study

No.	Internet use dimensions and uses	Initial years N= 182		Final years N= 131		Spearman's rank correlation coefficient
		M	SD	M	SD	
1	Communication	4.54	0.35	4.30	0.40	0.88
2	Information seeking	3.92	0.27	4.34	0.41	0.63
3	Developing and maintaining online and social interactions	4.00	0.29	4.55	0.44	0.90
4	Entertainment	3.54	0.25	3.48	0.32	0.40
5	Coping with peer pressure	1.79	0.31	3.26	0.30	-1.00
6	Escape from problems	2.49	0.25	2.64	0.31	0.40
7	Improving personal status	2.99	0.23	3.68	0.33	0.50
8	Aesthetic experiences	2.72	0.24	2.92	0.30	-1.00
Overall mean, standard deviation and Spearman's rank correlation coefficient		**2.76**	**0.23**	**3.65**	**0.37**	**0.83**

Source: Research Data

Respondents in initial years of study were undecided on improving personal status (M=2.99, SD=0.23) and aesthetic experiences (M=2.72, SD=0.24).Disagreement among the initial years of study participants was found for escape from problems (M=2.49, SD=0.25) and coping with peer pressure (M=1.79, SD=0.31). Final

years respondents agreed to improving personal status (M=3.68, SD=0.33). These respondents were neutral on dimensions on coping with peer pressure (M=3.26, SD=0.30), aesthetic experiences (M=2.92, SD=0.30) and escape from problems (M=2.64, SD=0.31).

Initial years' respondents attained an overall mean and standard deviation for Internet uses of 2.76 and 0.23 respectively. This implies that they were undecided on the Internet use dimensions. Final years respondents scored a mean of 3.65 and a standard deviation of 0.37. This shows that these respondents agreed on the eight Internet use dimensions. These results show that the respondents in their final years of study use the Internet more than those in initial years' respondents. Based on these findings, it can be inferred that there were some differences for Internet uses among both categories of respondents.

There are several reasons that account for the differences in Internet uses between respondents in initial and final years of study. It should be appreciated that as students advance in their studies, their academic work demands more, hence their increased use of the Internet. Secondly, Final years participants are likely to be more equipped with Internet use skills than the those in initial years of study. In addition, final year respondents seek for more information on employment listings as they are almost joining the job market. This underscores the point that differences in Internet use are likely to exist because of the different information needs of the respondents.

Table 14 reveals that there exists a negative perfect relationship in the mean scores of Internet uses relating to two use dimensions among initial and final years participants. These dimensions were; aesthetic experiences and coping with peer pressure (r_s= -1). A high correlation was noticed for the dimension on developing and maintaining online and social interactions (r_s= 0.90) and communication (r_s= 0.88). Moderate correlation was found for information seeking (r_s= 0.88) and improving personal status (r_s= 0.50).Only two use

years respondents agreed to improving personal status (M=3.68, SD=0.33). These respondents were neutral on dimensions on coping with peer pressure (M=3.26, SD=0.30), aesthetic experiences (M=2.92, SD=0.30) and escape from problems (M=2.64, SD=0.31).

Initial years' respondents attained an overall mean and standard deviation for Internet uses of 2.76 and 0.23 respectively. This implies that they were undecided on the Internet use dimensions. Final years respondents scored a mean of 3.65 and a standard deviation of 0.37. This shows that these respondents agreed on the eight Internet use dimensions. These results show that the respondents in their final years of study use the Internet more than those in initial years' respondents. Based on these findings, it can be inferred that there were some differences for Internet uses among both categories of respondents.

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dimensions namely escape from problems (r_s=0.40). and entertainment (r_s= 0.40) had low correlation. The overall Spearman's rank correlation coefficient was 0.83, which reflects a high correlation for Internet uses among respondents in the initial and final years of study.

4.4.4 Internet uses by gender

Gender is an important demographic variable influencing Internet uses among college students. Tables 15 and 16 sum up descriptive statistics and correlation analysis of Internet uses by gender respectively.

Table 15 indicates that under the communication dimension, both male and female respondents strongly agreed with six use statements. These statements were; "to communicate with my friends" and "to communicate with my parents/relatives". For these two statements both male and female respondents had a mean of 5.00 (SD=0.00). The other statements strongly supported by the respondents were; "to communicate with my classmates" (Male: M=5.00, SD=0.00 and Female: M=4.86, SD=0.44), "to communicate with my romantic partner(s)" (Male: M=4.56 , SD=0.38 and Female: M=5.00, SD=0.00), "to communicate with my lecturers" (Male: M=4.56, SD=0.38 and Female: M=4.50, SD=0.39) and "to exchange computer files" (Male: M=4.54, SD=0.37 and Female: M=4.83, SD=0.43).

Male respondents agreed with two use statements, namely; "to communicate with members of the online study/class group(s) that I belong to" (M=3.78, SD=0.29) and "to receive and turn in assignments to lecturers" (M=3.68, SD=0.28). Female participants agreed with the use statement "to communicate with members of the online study/class group(s) that I belong to" (M=3.50, SD=0.28)."To receive and turn in assignments to lecturers" attained a mean score of 3.34 and standard deviation of 0.27, which implies the female respondents were undecided.

No significant differences among the two genders were noted for the use statement "to receive feedback/information from my lecturer(s)." Both male and female respondents were neutral on this statement (Male: M=3.32, SD=0.26 and Female: M=3.26, SD=0.27). However, "to communicate with members in the newsgroup(s) I belong to" showed major differences, male participants were undecided (M=2.89, SD=0.26) while female respondents were in agreement with this statement (M=4.34, SD=0.37).

Under the information seeking dimension, both male and female respondents strongly agreed to five use statements. These statements were; "to access information from various sources allover the world" and "to find information that is not available in my library". Each of these statements had a mean score of 5.00 (SD=0.00) for each of the two groups of respondents. The other use statements which respondents strongly agreed to were; "to get up-to-date news and information" (Male: M= 5.00, SD=0.00 and Female: M=4.92, SD=0.45), "to gather academic/educational materials for the course I am currently pursuing" (Male: M=4.90, SD=0.43 and Female: M=4.86, SD=0.44 and "to find information on other colleges and universities"(Male: M=4.51, SD=0.00 and Female: M=4.86, SD=0.44).

"To access online class materials such as class notes, assignments, study manuals and time-tables from my lecturer(s)/college" was agreed upon by both male respondents (M=3.84, SD=0.30) and female participants (M=3.68, SD=0.29). Male respondents (M=3.43, SD=0.27) were undecided on the statement "to find employment listings that fit me. This was in contrast with female participants" (M=3.69, SD=0.30) who agreed with the statement. "To find information on products and services I want to buy" was disagreed to by male respondents (M=1.62, SD=0.36) while female participants (M=1.38, SD=0.40) strongly disagreed with it. The finding that males agree with this statement more than female respondents is in line with a previous study by Korgen, Odell and Schumacher (2001), which found out that males were more likely than females to

research purchases. In general, there were no major differences for Internet uses relating to information seeking among the male and female respondents.

Table 15 further reveals that under the dimension for developing and maintaining online and social interactions various choices were made. Both male and female respondents strongly agreed with the statement; "to contact my friends" as each gender attained a mean score of 5.00 and a standard deviation of 0.00.Among male and female respondents, agreement was noted for one use statement, which was "to talk with other people on what is going on" (Male: M=4.21, SD=0.34 and Female: M=4.39, SD=0.37). "To make new friends" was agreed to by both male and female respondents (Male: M=3.84, SD= 0.30 and Female: M=4.49, SD=0.39). Male participants were undecided on two use statements namely, "to develop romantic relationships" and "to get advice to support me from online friend(s)". Each of these two statements attained a mean score of 2.61 and a standard deviation of 0.27. Female respondents agreed with the statement; "to develop romantic relationships" (M=3.94, SD=0.32). However, they were neutral on the statement "to get advice to support me from online friend(s)" (M=2.75, SD=0.27).

With respect to the entertainment dimension, both male and female respondents agreed to the statement "to pass time" (Male: M=4.67, SD=0.40 and Female: M=4.65, SD=0.41). The mean scores for male and female respondents reflected significant differences among three statements. Male respondents strongly agreed with the statement "to play online computer games" (M=4.58, SD=0.38) while female participants (M=2.94, SD=0.27) were undecided on it. A study by Korgen, Odell and Schumacher (2001), concurs with this finding as it established that more males indicated playing computer games compared to females.

"To listen to and download audio music" was agreed upon by the male respondents (M=3.51, SD=0.27) as opposed to female respondents (M=1.66, SD=0.37) who disagreed with this statement. This finding agrees with the

research conducted by Korgen, Odell and Schumacher (2001) and established that that more males than females used the Internet for listening to and downloading audio music. Male respondents were undecided on the use statement "to watch and download music and movie videos (M=3.09, SD=0.26)," while female respondents (M=1.66, SD=0.37) disagreed with it.

Significant differences were observed for the two use statements on coping with peer pressure. "To share information with my peers so as to be at par" with them was strongly agreed to by the male respondents (M= 4.64, SD=0.39) but female respondents (M=3.26, SD=0.27) were undecided on the statement. Male respondents strongly disagreed with the use statement "to follow up what my peers are doing" (M=1.34, SD=0.40) while female participants were undecided on the statement.

Table 15: Descriptive statistics of Internet uses by gender

No	Internet use dimensions and uses	Male N= 152		Female N= 142	
		Mean	SD	Mean	SD
A	**Communication**	**4.23**	**0.33**	**4.37**	**0.37**
1	To communicate with my friends	5.00	0.00	5.00	0.00
2	To communicate with my parents/relatives	5.00	0.00	5.00	0.00
3	To communicate with my romantic partner(s) (i.e. boyfriend, girlfriend or spouse)	4.56	0.38	5.00	0.00
4	To communicate with my classmates	5.00	0.00	4.86	0.44
5	To communicate with my lecturers	4.56	0.38	4.50	0.39
6	T o exchange computer files	4.54	0.37	4.83	0.43
7	To communicate with members of the online study/class group(s) that I belong to	3.78	0.29	3.50	0.28
8	To receive and turn in assignments to lecturers	3.68	0.28	3.34	0.27
9	To communicate with members in the newsgroup(s) I belong to	2.89	0.26	4.34	0.37
10	To receive feedback/information from my lecturer(s)	3.32	0.26	3.26	0.27

B	**Information seeking**	**4.16**	**0.33**	**4.16**	**0.33**
11	To access information from various sources allover the world	5.00	0.00	5.00	0.00
12	To find information that is not available in my library	5.00	0.00	5.00	0.00
13	To gather academic/educational materials for the course I am currently pursuing	4.90	0.43	4.86	0.44
14	To find information on other colleges and universities	4.51	0.37	4.86	0.44
15	To access online class materials such as class notes, assignments, study manuals and time-tables from my lecturer(s)/college	3.84	0.30	3.68	0.29
16	To find employment listings that fit me	3.43	0.27	3.69	0.30
17	To get up-to-date news and information	5.00	0.00	4.92	0.45
18	Find information on products and services I want to buy	1.62	0.36	1.38	0.40
C	**Developing and maintaining online and social interactions**	**3.65**	**0.28**	**4.11**	**0.34**
19	To contact my friends	5.00	0.00	5.00	0.00
20	To talk with other people on what is going on	4.21	0.34	4.39	0.37
21	To make new friends	3.84	0.30	4.49	0.39
22	To develop romantic relationships	2.61	0.27	3.94	0.32
23	To get advice to support me from online friend(s)	2.61	0.27	2.75	0.27
D	**Entertainment**	**3.96**	**0.31**	**1.73**	**2.75**
24	To pass time	4.67	0.40	4.65	0.41
25	To play online computer games	4.58	0.38	2.94	0.27
26	To listen to and download audio music	3.51	0.27	1.66	0.37
27	To watch and download music and movie videos	3.09	0.26	1.66	0.37
E	**Coping with peer pressure**	**2.99**	**0.26**	**3.30**	**0.29**
28	To share information with my peers so as to be at par with them	4.64	0.39	3.26	0.27
29	To follow up what my peers are doing	1.34	0.40	3.34	0.27
F	**Escape from problems**	**2.44**	**0.28**	**2.78**	**0.27**
30	To forget about college or any other chores in life	4.04	0.32	4.35	0.37
31	To experience things I can't in the real world	2.19	0.30	1.27	0.42
32	To get away from my family and friends	2.04	0.31	2.25	0.30
33	To escape from real world problems	1.50	0.37	3.20	0.27

G	**Improving personal status**	**3.24**	**0.26**	**2.24**	**0.30**
34	To improve my future prospects in life	4.53	0.38	3.92	0.34
35	To improve my standing in the world	3.68	0.28	1.28	0.42
36	To find information that reflects my identity	1.52	0.37	1.53	0.38
H	**Aesthetic experiences**	**2.35**	**0.28**	**2.25**	**0.30**
37	To find interesting new Web pages and websites	3.36	0.26	2.25	0.30
38	To see attractive graphics	1.34	0.40	2.25	0.30
Overall mean and standard deviation		**3.38**	**0.27**	**3.12**	**0.22**

Source: Research Data

From Table 15 it can be observed that the dimension on escape from problems was rated variously. Both male and female respondents agreed with the statement "to forget about college or any other chores in life" (Male: M=4.04, SD=0.32 and Female: 4.35, SD=0.37) Male participants agreed with three use statements as follows; to experience things I can't in the real world" (M=2.19, SD=0.30), "to get away from my family and friends" (M=2.04, SD=0.31) and "to escape from real world problems" (M=1.50, SD=0.37). Female respondents disagreed with two use statements. These statements were; "to escape from real world problems" (M=3.20, SD=0.27) and "to get away from my family and friends" (M=2.25, SD=0.30). "To experience things I can't in the real world" was strongly disagreed by the female respondents (M=1.27, SD=0.42).

On the dimension of improving personal status, the statement "to improve my future prospects in life" was strongly agreed to by male respondents (M=4.53, SD=0.38) while the female participants agreed with it (M=3.92, SD=0.34). Male respondents agreed with the use statement "to improve my standing in the world" (M=3.68, SD=0.28) while female participants strongly disagreed with it (M=1.28, SD=0.42). Both male and female respondents disagreed with the statement "to find information that reflects my identity" (Male: M=1.52, SD=0.37 and Female: M=1.53, SD=0.38).

Finally, Table 15 shows that under the dimension for aesthetic experiences, "to find interesting new Web pages and websites" received a neutral response among

both male and female respondents (Male: M=3.36, SD=0.26 and Female: M=2.25, SD=0.30)."To see attractive graphics" was strongly disagreed to by the male respondents (M=1.34, SD=0.40) and female respondents (M=2.25, SD=0.30).

The review of the mean scores for the eight use dimensions presented in Table 16 indicates varied opinions among respondents. No significant differences among the two genders arose with respect to some use dimensions. The respondents agreed with three use dimensions which were; communication (Male: M=4.23, SD=0.33 and Female: M=4.37, SD=0.37), information seeking (Male: M=4.16, SD=0.28 and Female: M=4.16, SD=0.33), and developing and maintaining online and social interactions (Male: M=3.65, SD=0.28 and Female: M=4.11, SD=0.34).

Table 16: Summary of mean scores and Spearman's rank correlation coefficient for Internet uses by gender

No	Internet use dimensions and uses	Male N= 152		Female N= 142		Spearman's rank correlation coefficient
		M	SD	M	SD	
1	Communication	4.23	0.33	4.37	0.37	0.94
2	Information seeking	4.16	0.33	4.16	0.33	0.90
3	Developing and maintaining online and social interactions	3.65	0.28	4.11	0.34	0.83
4	Entertainment	3.96	0.31	1.73	2.75	0.80
5	Coping with peer pressure	2.99	0.26	3.30	0.29	-1.00
6	Escape from problems	2.44	0.28	2.78	0.27	0.20
7	Improving personal status	3.24	0.26	2.24	0.30	0.50
8	Aesthetic experiences	2.35	0.28	2.25	0.30	0.50
Overall mean, standard deviation and Spearman's rank correlation coefficient		**3.38**	**0.27**	**3.12**	**0.27**	**0.48**

Source: Research Data

A significant difference among male and female respondents was noted for the entertainment dimension. Male respondents agreed with this dimension (M=3.96, SD=0.31) while female participants disagreed with it (M=1.73, SD=2.75). This finding concurs with those of Weiser (2000) who noted that males use the

Internet mainly for purposes related to entertainment and leisure than women. He noted that women use the Internet primarily for interpersonal communication and educational assistance.

Male respondents were undecided on the use dimensions of improving personal status (M=3.24, SD=0.26) while female respondents disagreed with it (M=2.24, SD=0.30).Both male and female respondents were undecided on the use dimension of coping with peer pressure (Male: =2.99, SD=0.26 and Female: M=3.30, SD=0.29). Escape from problems (M=2.44, SD=0.28) and aesthetic experiences (M=2.35, SD=0.28) was disagreed to by male respondents. Escape from problems attained a mean score of 2.78 and standard deviation of 0.27 which implies that the respondents agreed with this use dimension. For aesthetic experiences, the mean score and standard deviation among female respondents were 2.25 and 0.30 respectively, which denoted they disagreed with this use dimension.

Male respondents attained an overall mean and standard deviation for Internet uses of 3.38 and 0.27 respectively. This implies that they were undecided with the use dimensions. Similarly, the female participants scored an overall mean of 3.12 and a standard deviation of 0.27, which implies they were neutral on the eight Internet use dimensions. Based on these findings, it can be inferred that there were no significant differences for Internet uses among both categories of respondents. This finding may be an indicator of the narrowing gap in Internet use between males and females, more especially in the educational establishments.

Table 16 reveals that there exists a negative perfect relationship among male and female respondents in the mean scores of Internet uses relating to coping with pressure (r_s= -1). A very high correlation was noted for the communication dimension (r_s =0.94). High correlation was reported for three Internet use dimensions, namely; information seeking (r_s =0.90), developing and maintaining online and social interactions (r_s =0.83), and entertainment (r_s =0.80). There was

moderate correlation on improving personal status and aesthetic experiences (r_s =0.50). There was a slight correlation on the dimension of escape from problems (r_s =0.20). The overall Spearman's rank correlation coefficient was 0.48, which depicts a moderate correlation for the eight use dimensions among the male and female respondents.

4.4.5 Internet uses by time spent online per week

Time spent online has an influence on Internet use among college students. For purposes of analyzing data in respect of this variable, those respondents who reported being online for below 5 hours per week were considered to be light users. Heavy users comprised of the respondents who were online for 5 hours and above per week.

Table 17 reveals that under the communication dimension, both light and heavy users strongly agreed with three use statements, namely; "to communicate with my friends", "to communicate with my parents/relatives" and "to communicate with my romantic partner(s)." Each use statement attained a mean score of 5.00 and standard deviation of 0.00. Outstanding differences were observed among the remaining communication use statements. Light users agreed with three use statements. These statements were; "to communicate with my classmates" (M=4.12, SD=0.29), "to exchange computer files" (M=4.12, SD=0.29) and "to communicate with my lecturers" (M=4.10, SD=0.28) This was in contrast to the heavy users who strongly agreed with these use statements as follows; "to communicate with my classmates" (M=5.00, SD=0.00), "to communicate with my lecturers" (M=5.00, SD=0.00) and "to exchange computer files" (M=4.89, SD=0.38).

Light users were undecided on four communication use statements, namely; "to communicate with members of the online study/class group(s) that I belong to" (M=3.02, SD=0.23), "to communicate with members in the newsgroup(s) I belong to" (M=2.74, SD=0.23) , "to receive and turn in assignments to lecturers"

moderate correlation on improving personal status and aesthetic experiences (r_s =0.50). There was a slight correlation on the dimension of escape from problems (r_s =0.20). The overall Spearman's rank correlation coefficient was 0.48, which depicts a moderate correlation for the eight use dimensions among the male and female respondents.

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Light users were undecided on four communication use statements, namely; "to communicate with members of the online study/class group(s) that I belong to" (M=3.02, SD=0.23), "to communicate with members in the newsgroup(s) I belong to" (M=2.74, SD=0.23) , "to receive and turn in assignments to lecturers"

(M=2.62, SD=0.24), and "to receive feedback/information from my lecturer(s)" (M=2.54, SD=0.24). This was in sharp contrast with heavy users. Heavy users strongly agreed with the use statement "to receive and turn in assignments to lecturers" (M=4.64, SD=0.41). They agreed with three use statements namely; "to communicate with members of the online study/class group(s) that I belong to" (M=4.16, SD=0.41), "to communicate with members in the newsgroup(s) I belong to" (M=4.16, SD=0.41) and "to receive feedback/information from my lecturer(s)" (M=4.04, SD=0.39).

Under the information seeking dimension, opinion was divided amongst the participants in regard to the use statements stated. Three use statements were strongly agreed upon by both light and heavy users. These three statements were; "to access information from various sources allover the world" and "to find information that is not available in my library". Each class of respondents had a mean score of 5.00 (SD=0.00). The other statement strongly supported by the respondents was "to gather academic/educational materials for the course I am currently pursuing" (Light users: M=4.92, SD=0.38 and Heavy users: M=5.00, SD=0.00).

Agreement was made for the use statement "to find information on other colleges and universities" (Light users: M=4.12, SD=0.29 and Heavy users: M=4.76, SD=0.50). Significant differences were noticed on two use statements. Among light users, a neutral stand was attributed to the statements "to access online class materials such as class notes, assignments, study manuals and time-tables from my lecturer(s)/college" (M=3.04, SD=0.23) and "to find employment listings that fit me" (M=2.78, SD=0.23). These two use statements were agreed to by the heavy users. "To find employment listings that fit me" attained a mean score of 4.18 and standard deviation of 0.41while "to access online class materials such as class notes, assignments, study manuals and time-tables from my lecturer(s)/college" attained a mean score of 4.16 and a standard deviation of 0.41.

On the use statement "to get up-to-date news and information", Light users' responses attained a mean score of 2.41 and standard deviation of 0.25, which implies that they disagreed with it as opposed to the heavy users who were undecided on it (M=2.95, SD=0.31). "To find information on products and services I want to buy" obtained a mean score of 1.26 and standard deviation of 0.36 among light users, which shows that they strongly disagreed with the statement. The heavy users disagreed with this statement (M=1.82, SD=0.41).

Table17: Descriptive statistics on Internet uses by time spent online per week

No	Internet use dimensions and uses	Light users N=193		Heavy users N= 101	
		Mean	SD	Mean	SD
A	**Communication**	**3.83**	**0.26**	**4.69**	**0.49**
1	To communicate with my friends	5.00	0.00	5.00	0.00
2	To communicate with my parents/relatives	5.00	0.00	5.00	0.00
3	To communicate with my romantic partner(s) (i.e. boyfriend, girlfriend or spouse)	5.00	0.00	5.00	0.00
4	To communicate with my classmates	4.12	0.29	5.00	0.00
5	To communicate with my lecturers	4.10	0.28	5.00	0.00
6	T o exchange computer files	4.12	0.29	4.89	0.38
7	To communicate with members of the online study/class group(s) that I belong to	3.02	0.23	4.16	0.41
8	To receive and turn in assignments to lecturers	2.62	0.24	4.64	0.48
9	To communicate with members in the newsgroup(s) I belong to	2.74	0.23	4.16	0.41
10	To receive feedback/information from my lecturer(s)	2.54	0.24	4.04	0.39
B	**Information seeking**	**3.57**	**0.25**	**4.11**	**0.40**
11	To access information from various sources allover the world	5.00	0.00	5.00	0.00
12	To find information that is not available in my library	5.00	0.00	5.00	0.00
13	To gather academic/educational materials for the course I am currently pursuing	4.92	0.38	5.00	0.00

14	To find information on other colleges and universities	4.12	0.29	4.76	0.50
15	To access online class materials such as class notes, assignments, study manuals and time-tables from my lecturer(s)/college	3.04	0.23	4.16	0.41
16	To find employment listings that fit me	2.78	0.23	4.18	0.41
17	To get up-to-date news and information	2.41	0.25	2.95	0.31
18	Find information on products and services I want to buy	1.26	0.36	1.82	0.41
C	**Developing and maintaining online and social interactions**	**3.29**	**0.23**	**4.33**	**0.43**
19	To contact my friends	5.00	0.00	5.00	0.00
20	To talk with other people on what is going on	4.20	0.30	4.60	0.48
21	To make new friends	3.20	0.23	5.00	0.00
22	To develop romantic relationships	2.40	0.25	3.92	0.48
23	To get advice to support me from online friend(s)	1.66	0.31	3.11	0.32
D	**Entertainment**	**2.46**	**0.35**	**4.14**	**0.40**
24	To pass time	4.01	0.28	5.00	0.00
25	To play online computer games	2.48	0.24	4.58	0.47
26	To listen to and download audio music	1.89	0.29	3.50	0.33
27	To watch and download music and movie videos	1.44	0.34	3.47	0.33
E	**Coping with peer pressure**	**3.99**	**0.27**	**3.10**	**0.32**
28	To share information with my peers so as to be at par with them	3.97	0.28	5.00	0.00
29	To follow up what my peers are doing	4.01	0.28	1.20	0.51
F	**Escape from problems**	**2.34**	**0.25**	**3.36**	**0.32**
30	To forget about college or any other chores in life	3.69	0.25	4.05	0.39
31	To experience things I can't in the real world	3.03	0.23	4.60	0.48
32	To get away from my family and friends	1.60	0.32	3.00	0.31
33	To escape from real world problems	1.02	0.39	1.78	0.42
G	**Improving personal status**	**2.87**	**0.23**	**2.91**	**0.32**
34	To improve my future prospects in life	3.69	0.25	3.63	0.34
35	To improve my standing in the world	3.88	0.26	3.21	0.32
36	To find information that reflects my identity	1.03	0.39	1.89	0.40

disagreement was noted for the use statements "to play online computer games" (M=2.48, SD=0.24) and "to listen to and download audio music" (M=1.89, SD=0.29).This sharply differed with the heavy users, who strongly agreed with the use statement "to play online computer games" (M=4.58, SD=0.47). The heavy users agreed with the statement "to watch and download audio music" (M=3.50, SD=0.33). "To watch and download music and movie videos" was strongly disagreed to by the light users (M=1.44, SD=0.34) as opposed to the heavy who were undecided (M=3.47, SD=0.33).

Major differences were observed for the two use statements on coping with peer pressure. "To share information with my peers so as to be at par" with them was agreed to by the light users (M= 3.97, SD=0.28). This statement was strongly agreed to by the heavy users (M= 5.00, SD=0.00).Light users agreed with the use statement "to follow up what my peers are doing" (M=4.01, SD=0.28) while it was strongly disagreed upon by the heavy users (M= 1.20, SD=0.51).

From Table 17 it can be observed that the dimension on escaping from problems was rated variously. "To forget about college or any other chores in life" attained a mean score of 3.69 and standard deviation of 0.25 among light users, implying that they agreed with the statement, just as the heavy users who attained a mean score of 4.05 and standard deviation of 0.39. Light users agreed with the statement "to experience things I can't in the real world" (M=3.03, SD=0.23), while heavy users strongly agreed with the statement (M=4.60, SD-0.48). "To get away from my family and friends" was reported disagreed to by the light users (M=1.60, SD=0.32), while heavy users were undecided on the statement (M=3.00, SD=0.31). Light users strongly disagreed with the statement "to escape from real world problems" (M=1.02, SD=0.39) while heavy users disagreed with this statement (M=1.78, SD=0.42).

On the dimension of improving personal status, the statement "to improve my standing in the real world" was agreed to by the light users (M=3.88, SD=0.26)

while heavy users were undecided on it (M=3.21, SD=0.32)."To improve my future prospects in life" was agreed to by both light and heavy users (Light users: M=3.69, SD=0.25 and Heavy users: M=3.63, SD=0.34). Light users strongly disagreed with the statement "to find information that reflects my identity" (M=1.03, SD=0.39) while heavy users disagreed with the statement (M=1.89, SD=0.40).

Finally, Table 17 shows that under the dimension for aesthetic experiences, there was a significant difference on one use statement. This statement was; "to find interesting new Web pages and websites" which was disagreed to by light users (M=2.46, SD=0.24).Heavy users agreed with the statement (M=4.42, SD=0.45). "To see attractive graphics" attained a neutral response among both light (M=2.50, SD=0.24) and heavy users (M=2.81, SD=0.32).

The summary of the mean scores for the eight use dimensions shown in Table 18 indicates various opinions among light and heavy users. Coping with peer pressure attained a mean score of 3.99 and standard deviation of 0.27 among light users while the heavy users obtained a mean score of 3.10 and standard deviation of 0.32.This indicates that light users agreed with this use dimension as compared to heavy users who were undecided.

Light users agreed with communication (M=3.83, SD=0.26) and information seeking (M=3.57, SD=0.25), this was in contrast with the heavy users who strongly agreed with this dimension (M= 4.69, SD=0.49). The heavy users agreed with the information seeking dimension (M=4.11, SD=0.40). Light users were undecided on the dimension of developing and maintaining online and social interactions (M=3.29, SD=0.23) while heavy users agreed with it (M=4.33, SD=0.43). Improving personal status attained a mean score of 2.87 and standard deviation of 0.23 for light users which implies they were undecided just as the heavy users were also undecided (M=2.91, SD=0.32).

Table 18: Summary of mean scores and Spearman's rank correlation coefficient for Internet uses by time spent online per week

No	Internet use dimensions and uses	Light users N= 193		Heavy users N=101		Spearman's rank correlation coefficient
		M	SD	M	SD	
1	Communication	3.83	0.26	4.69	0.49	0.85
2	Information seeking	3.57	0.25	4.11	0.40	0.96
3	Developing and maintaining online and social interactions	3.29	0.23	4.33	0.43	0.88
4	Entertainment	2.46	0.35	4.14	0.40	0.80
5	Coping with peer pressure	3.99	0.27	3.10	0.32	-1.00
6	Escape from problems	2.35	0.25	3.36	0.32	0.80
7	Improving personal status	2.87	0.23	2.91	0.32	0.50
8	Aesthetic experiences	2.49	0.24	2.81	0.30	-1.00
Overall mean, standard deviation and Spearman's rank correlation coefficient		**3.12**	**0.23**	**3.68**	**0.35**	**0.24**

Source: Research Data

Table 18 indicates that disagreement was noted for three use dimensions among the light users. These statements were; aesthetic experiences (M=2.49, SD=0.24), entertainment (M=2.46, SD=0.35) and escape from problems (M=2.35, SD=0.25).The entertainment dimension was agreed to by the heavy users (M=4.11, SD=0.40). The heavy users were undecided on two use dimensions namely; escape from problems (M=3.36, SD=0.32) and aesthetics experiences (M=2.81, SD=0.30).

Various reasons account for the significant differences in Internet uses between light users and heavy users. Some of these reasons are as follows. First, heavy users are inclined to use the Internet for many of the dimensions covered in this research because they have the time to do so. The more time one has to use the Internet, the more he/she will explore it for many different uses/purposes. Secondly, the more one is using a mass media, the more it becomes gratifying and hence the increased use of the Internet for a variety of reasons.

Table 18 reveals that there exists a negative perfect relationship in the mean scores of Internet uses relating to two use dimensions among the light and heavy users. These dimensions were: aesthetic experiences and coping with peer pressure (r_s= -1). There was a very high correlation in the mean scores on the Internet use dimension relating to information seeking (r_s= 0.96). High correlation was noted for four use dimensions. These were; developing and maintaining online and social interactions (r_s=0.88), communication (r_s=0.85), entertainment (r_s=0.80) and escape from problems (r_s= 0.80). Moderate correlation was noted for improving personal status (r_s= 0.50). The overall Spearman's rank correlation coefficient was 0.24, which demonstrates a slight correlation for the Internet uses among light and heavy users.

4.5 Motivations for using the Internet

Motives or motivations refer to the gratifications that the audiences seek from a particular mass medium. The respondents were presented with 25 motive statements relating to using the Internet. For purposes of analyzing the data, these statements were categorized into six dimensions, namely; communication, information seeking, entertainment and habit, interactive control, developing and maintaining online and social interaction, and improving personal status and coping with peer pressure.

Table 19 reveals that respondents strongly agreed to five statements under the communication dimension. These statements were; "it is cheap to contact someone via the Internet than talk or call or post a letter to someone", "(M=5.00, SD=0.00), it allows 24 hours communication" (M=4.80, SD=0.30). A mean score of 4.54 (SD=0.27) was registered on two statements namely; "it is an interactive medium that provides instant feedback" and "it is anonymous". "It is a multimedia communication tool" obtained a mean score of 3.69 and a standard deviation of 0.21, showing that respondents agreed to it.

Table 19: Descriptive statistics of motivations for using the Internet

No.	Internet use motivations dimensions and motivations	Mean	Standard Deviation
A	**Communication**	**4.58**	**0.28**
1	It allows 24 hours communication	4.80	0.30
2	It is an interactive medium that provides instant feedback	4.54	0.27
3	It is anonymous	4.54	0.27
4	It is cheap to contact someone via the Internet than talk or call or post a letter to someone	5.00	0.00
5	It is easy to contact someone via the Internet than talk or call or post a letter to someone	4.91	0.31
6	It is a multimedia communication tool	3.69	0.21
B	**Information seeking**	**4.63**	**0.28**
7	It is a medium that increases my access to information from different locations around the globe	5.00	0.00
8	It can disseminate multimedia information	3.80	0.21
9	It is easy to get information	3.90	0.22
10	It enables me save money when accessing information because it is freely available	5.00	0.00
11	It gives me up-to-date information	4.70	0.29
12	It gives instant me access to the information I need	4.80	0.30
13	It is accessible for 24 hours	4.80	0.30
14	It contains a lot of information on a wide range of issues or topics relevant to me	5.00	0.00
C	**Entertainment and habit**	**4.04**	**0.23**
15	It gives me something to occupy my time	4.24	0.25
16	It is enjoyable	5.00	0.00
17	It is exciting	4.80	0.30
18	It makes me feel restless if I do not use the Internet	2.10	0.22
D	**Interactive control**	**3.95**	**0.22**
19	It is an interactive medium that uses hyperlinks which makes me move from one web page or website to another	4.12	0.24
20	It is an interactive medium that is easy to use	4.12	0.24
21	It is an interactive medium that puts me in control as I can decide which web page(s) or websites to access and not access	3.61	0.20

E	**Developing and maintaining online and social interactions**	**2.91**	**0.18**
22	It makes me feel like I belong to a group	3.14	0.19
23	It removes my feeling of loneliness	2.61	0.19
F	**Improving personal status and coping with peer pressure**	**3.04**	**0.18**
24	It is also used by my family and friends	2.67	0.19
25	It makes me be at par with my peers	3.40	0.19
Overall mean and standard deviation		**4.08**	**0.23**

Source: Research Data

The information seeking dimension had respondents strongly agreeing to six motive statements. These statements were; "it is a medium that increases my access to information from different locations around the globe" and "it contains a lot of information on a wide range of issues or topics relevant to me". Each of these two statements had a mean score of 5.00 (SD=0.00). The other statements were strongly supported by respondents as follows; "it enables me save money when accessing information because it is freely available", (M=5.00, SD=0.00), "it gives me instant access to the information I need" (M=4.80, SD=0.30), "it is accessible for 24 hours", (M=4.80, SD=0.00) and "it gives me up-to-date information" (M=4.70, SD=0.29). Participants agreed with two statements, which were; "it is easy to get information" (M=3.90, SD=0.22) and "it can disseminate multimedia information" (M=3.80, SD=0.21).

Two statements under the entertainment and habit element were strongly agreed to by respondents. These statements were; "it is enjoyable to surf the Internet" (M=5.00, SD=0.00) and "it is exciting" (M=4.80, SD=0.30). "It gives me something to occupy my time" had a mean and standard deviation of 4.24 and 0.25 respectively; this indicates that it was generally agreed to by the respondents. Disagreement was noted for the statement "it makes me feel restless if I do not use the Internet" (M=2.10, SD=0.22).

Table 19 shows that all the use statements under the interactive control aspect were agreed to by the participants. These statements were; "it is an interactive medium that uses hyperlinks which makes me move from one Web page or

website to another" and "it is an interactive medium that is easy to use" (M=4.12, SD=0.24), and "it is an interactive medium that puts me in control as I can decide which Web page(s) or websites to access and not access" (M=3.61, SD=0.20).These findings concur with the remarks by Chou (2001). Chou notes that college students appreciate interactivity and ease of use.

Respondents were undecided on all the two statements relating to the cluster for developing and maintaining online and social interactions. "It makes me feel like I belong to a group" attained a mean score of 3.14 and a standard deviation of 0.19. A mean score of 2.61 and standard deviation of 0.19 was obtained for the statement "it removes my feeling of loneliness." This implies that the respondents were undecided on these statements.

Under the dimension of improving personal status and coping with peer pressure, there were two motive statements to which respondents were undecided about. "It makes me be at par with my peers" scored a mean of 3.40 and standard deviation of 0.19 and "it is also used by my family and friends" had a mean score of 2.67 and standard deviation of 0.19.

A review of responses to the six dimensions presented in Table 19 shows mixed results. Respondents strongly agreed with two motive dimensions as follows; information seeking (M=4.63, SD= 0.28) and communication (M=4.58, SD= 0.28). Two statements agreed to by the respondents were; entertainment and habit (M=4.04, SD= 0.23) and interactive control (M=3.95, SD= 0.22). Respondents were neutral on two dimensions as follows; developing and maintaining online and social interactions (M=2.91, SD= 0.18) and improving personal status and coping with peer pressure (M=3.04, SD= 0.18). The overall mean score for the six motive dimensions was 4.08 (SD= 0.23), which implies that the respondents agreed to the six motives driving them to use the Internet.

4.5.1 Motivations for using the Internet by fields of study

College students in different fields of study are likely to be motivated by diverse factors when using the Internet. Some of these differences can be noticed in Table 20 with regard to respondents pursuing Information Sciences (IS) and Non-Information Sciences (Non-IS) courses.

Table 20: Descriptive statistics of motivations for using the Internet by fields of study

No	Internet use motivation dimensions and motivations	Information Sciences N= 163		Non-Information Sciences N= 131	
		Mean	SD	Mean	SD
A	**Communication**	**4.49**	**0.36**	**4.19**	**0.36**
1	It allows 24 hours communication	4.57	0.37	4.44	0.39
2	It is an interactive medium that provides instant feedback	4.58	0.37	4.45	0.40
3	It is anonymous	4.16	0.54	4.10	0.35
4	It is cheap to contact someone via the Internet than talk or call or post a letter to someone	5.00	0.00	5.00	0.00
5	It is easy to contact someone via the Internet than talk or call or post a letter to someone	4.90	0.41	4.45	0.40
6	It is a multimedia communication tool	3.72	0.28	2.68	0.28
B	**Information seeking**	**4.70**	**0.39**	**4.32**	**0.38**
7	It is a medium that increases my access to information from different locations around the globe	5.00	0.00	5.00	0.00
8	It can disseminate multimedia information	3.81	0.29	2.70	0.28
9	It is easy to get information	4.18	0.32	3.38	0.30
10	It enables me save money when accessing information because it is freely available	5.00	0.00	5.00	0.00
11	It gives me up-to-date information	5.00	0.00	4.44	0.39
12	It gives me instant access to the information I need	5.00	0.00	4.80	0.45
13	It is accessible for 24 hours	4.58	0.37	4.40	0.39
14	It contains a lot of information on a wide range of issues or topics relevant to me	5.00	0.00	4.80	0.45

C	**Entertainment and habit**	**4.18**	**0.32**	**3.73**	**0.31**
15	It gives me something to occupy my time	4.35	0.34	4.24	0.34
16	It is enjoyable	5.00	0.00	4.85	0.45
17	It is exciting	5.00	0.00	4.80	0.45
18	It makes me feel restless if I do not use the Internet	2.35	0.27	1.03	0.47
D	**Interactive control**	**4.44**	**0.35**	**3.24**	**0.28**
19	It is an interactive medium that uses hyperlinks which makes me move from one web page or website to another	4.56	0.37	3.68	0.31
20	It is an interactive medium that is easy to use	4.20	0.32	3.38	0.29
21	It is an interactive medium that puts me in control as I can decide which web page(s) or websites to access and not access	4.56	0.37	2.66	0.28
E	**Developing and maintaining online and social interactions**	**4.02**	**0.31**	**2.12**	**0.33**
22	It makes me feel like I belong to a group	4.08	0.31	2.57	0.29
23	It removes my feeling of loneliness	3.96	0.30	1.66	0.38
F	**Improving personal status and coping with peer pressure**	**3.05**	**0.25**	**2.97**	**0.28**
24	It is also used by my family and friends	1.55	0.35	3.74	0.31
25	It makes me be at par with my peers	4.55	0.38	2.19	0.32
Overall standard mean and standard deviation		**4.15**	**0.32**	**3.43**	**0.29**

Source: Research Data

From Table 20 it can be seen that the motive statements under the communication aspect of Internet use attained various ratings. Both IS and Non-IS respondents strongly agreed to the statement "it is cheap to contact someone via the Internet than talk or call or post a letter to someone" (M=5.00, SD=0.00). IS respondents strongly agreed to other three statements, namely, "it is easy to contact someone via the Internet than talk or call or post a letter to someone" (M=4.90, SD=0.41), "it is an interactive medium that provides instant feedback" (M=4.58, SD=0.37) and "it allows 24 hours communication" (M=4.57, SD=0.37). The Non-IS participants agreed with these three statements as follows; "it is easy to contact

someone via the Internet than talk or call or post a letter to someone" (M=4.45, SD=0.40), "it is an interactive medium that provides instant feedback" (M=4.45, SD=0.40) and "it allows 24 hours communication" (M=4.44, SD=0.39).

Both categories of respondents agreed to the motive statement "it is anonymous" (IS: M=4.16, SD=0.54 and Non-IS: M=4.10, SD=0.35). A slight difference was noted for the statement "it is a multimedia communication tool." The IS respondents agreed with it (M=3.72, SD=0.28) while the Non-IS participants were undecided on the statement (M=2.68, SD=0.28).

The information seeking dimension had eight motive statements under it. As Table 20 demonstrates, there were no significant disparities between IS and Non – IS respondents with regard to these statements. Both groups of respondents agreed with five statements. These statements were; "it is a medium that increases my access to information from different locations around the globe" and "it enables me save money when accessing information because it is freely available". The mean score for these statements for each class of respondents was 5.00 (SD=0.00). The other statements were strongly agreed to by respondents as follows; "it gives me instant access to the information I need" (IS: M=5.00, SD=0.00 and Non-IS: M=4.80, SD=0.45) and "it contains a lot of information on a wide range of issues or topics relevant to me" (IS: M=5.00, SD=0.00 and Non-IS: M=4.80, SD=0.45). "It is accessible for 24 hours" was also strongly agreed to by the respondents (IS: M=5.00, SD=0.00 and Non-IS: M=4.80, SD=0.45).

"It is easy to get information" attained a mean score of 4.18 and standard deviation of 0.32 among the IS respondents. The statement obtained a mean score of 3.38 and standard deviation of 0.29. This implies that both categories of respondents were in agreement with the statement. IS participants strongly agreed with the statement "it gives me up-to-date information me" (M=5.00, SD=0.00) while the Non-IS respondents agreed to it (M=4.44, SD=0.39). "It can disseminate multimedia information" obtained a mean score of 3.81 and standard

deviation of 0.29 while the Non-IS respondents attained a mean of 2.70 and standard deviation of 0.28. This shows that IS respondents agreed with the statement while Non-IS respondents were undecided.

Both IS and Non-IS respondents strongly supported two use statements stated under the entertainment and habit dimension. These statements were; "it is enjoyable to surf the Internet" (IS: M=5.00, SD=0.00 and Non-IS: M=4.85, SD=0.45) and "it is exciting" (IS: M=5.00, SD=0.00 and Non-IS: M=4.80, SD=0.45). Respondents agreed with the statement "it gives me something to occupy my time" (IS: M=4.35, SD=0.34 and Non-IS: M=4.24, SD=0.34). The statement; "it makes me feel restless if I don't use the Internet" was disagreed to by the IS respondents (M=2.35, SD=0.27) as opposed to Non-IS respondents who strongly disagreed with the statement (M=1.03, SD=0.47).

For the interactive control aspect, the statement that "it is an interactive medium that uses hyperlinks which makes me move from one Web page or website to another" was strongly agreed to by the IS respondents (M=4.56, SD=0.37) while Non-IS participants agreed to the statement (M=3.68, SD=0.31). Significant differences were noted for two motive statements. The first statement was "it is an interactive medium that puts me in control as I can decide which Web page(s) or websites to access and not access", which IS respondents strongly agreed to (M=4.56, SD=0.37). Non-IS participants remained undecided on the statement as they obtained a mean score of 2.66 and standard deviation of 0.28. The second statement was "it is an interactive medium that is easy to use" which was agreed to by the IS respondents (M=4.20, SD=0.32) as opposed to the Non-IS participants who were undecided (M=3.38, SD=0.30).

Notable differences were observed for the motivation statements for developing and maintaining online and social interactions. "It makes me feel like I belong to a group" was agreed to by IS respondents (M=4.08, SD=0.31, while the Non-IS participants were undecided (M=2.57, SD=0.29). IS respondents agreed with the

statement "it removes my feeling of loneliness (M=3.96, SD=0.30). However, the Non-IS respondents disagreed with it (M=1.66, SD=0.38).

Significant differences were noted for the two motivation statements for improving personal status and coping with peer pressure. Strongly agree was credited to the IS respondents for the statement "it makes me be at par with my peers" (M=4.55, SD=0.38), but it was disagreed to by the Non-IS participants (M=2.19, SD=0.32). A mean score of 1.55 and standard deviation of 0.38 was obtained among the IS respondents for the statement "it is also used by my family and friends", showing that they disagreed with it. This same statement had a mean score of 3.74 and standard deviation of 0.31 among the Non-IS respondents, which shows that they agreed with it.

A summary of the mean scores of the six dimensions on gratifications sought (motives) presented in Table 21 reveals mixed results. IS respondents strongly agreed with information seeking (M=4.70, SD=0.39) while Non-IS participants agreed with it (M=4.32, SD=0.38). Communication was agreed upon by both respondents as a mean score of 4.49 and standard deviation of 0.36 was attained among IS respondents. The Non-IS respondents obtained a mean score of 4.19 and standard deviation of SD=0.36.

A slight difference was noticed for the interactive control dimension. IS respondents agreed with it (M=4.44, SD=0.35) while Non-IS respondents were undecided (M=3.24, SD=0.28). For the entertainment and habit dimension, both IS and Non-IS respondents agreed with it (IS: M=4.18, SD=0.32 and Non-IS: M=3.73, SD=0.31). A significant difference was noted on the dimension of developing and maintaining online and social interactions. IS respondents agreed with it (M=4.02, SD=0.31) while Non-IS participants disagreed with the dimension (M=2.12, SD=0.33). Respondents remained undecided on the dimension of improving personal status and coping with peer pressure (IS: M=3.05, SD=0.25 and Non-IS: M=2.97, SD=0.28).

Table 21: Summary of mean scores and spearman's rank correlation coefficient for motivations for using the Internet by fields of study

No	Motivation dimensions	Information Sciences N= 163		Non-Information Sciences N= 131		Spearman's rank correlation coefficient
		M	SD	M	SD	
1	Communication	4.49	0.36	4.19	0.36	0.99
2	Information seeking	4.70	0.39	4.32	0.38	0.89
3	Entertainment and habit	4.18	0.32	3.73	0.31	0.95
4	Interactive control	4.44	0.35	3.24	0.28	-0.63
5	Developing and maintaining online and social interactions	4.02	0.31	2.12	0.33	-1.00
6	Improving personal status and coping with peer pressure	3.05	0.25	2.97	0.28	-1.00
Overall mean, standard deviation and Spearman's rank correlation coefficient		**4.15**	**0.32**	**3.43**	**0.29**	**0.89**

Source: Research Data

Table 21 shows that the overall mean scores for IS respondents and Non-IS respondents were 4.15 (SD=0.32) and 3.43 (SD=0.29) respectively. This points out that IS respondents agreed with the six motive dimensions while the Non-IS respondents were undecided on these dimensions. It also shows that the IS respondents were motivated to use the Internet more than the Non-IS respondents.

The IS respondents higher motivation for using the Internet compared to the Non-IS respondents could be attributed to several reasons. IS respondents have better Internet use skills and more time allocated to them to use the Internet compared to the Non-IS respondents. The IS respondents find the documents on the Internet to be current as compared to the printed books. This is because their subjects belong to a fast growing discipline/area of study. As earlier indicated in this study the IS respondents mean score for Internet uses was 3.59 (SD=0.26) as compared to the Non-IS respondents (M=2.80, SD=0.28). With the IS respondents using the Internet more than the Non-IS respondents, it is clear that they should be motivated to use the Internet more than the Non-IS respondents.

A correlation analysis of motive dimensions for using the Internet was made in respect of IS and Non-IS participants. A negative perfect relationship was found for two motive dimensions, namely; developing and maintaining online and social interactions and improving personal status and coping with peer pressure (r_s= -1). Very high correlation was noted for the communication (r_s. = 0.99) and entertainment and habit aspect (r_s= 0.95). High correlation was reported for the information seeking aspect (r_s= 0.89), while interactive control (r_s= 0.63) showed moderate correlation. The overall Spearman's rank correlation coefficient was 0.89. This implies high correlation for the six motive dimensions among the IS and Non-IS respondents.

4.5.2 Motivations for using the Internet by levels of study

Under communication, Table 22 reveals that both diploma and undergraduate respondents strongly agreed with four motive statements. These statements were; "it is cheap to contact someone via the Internet than talk or call or post a letter to someone" (Diploma: M=5.00, SD=0.00 and Undergraduate: M=5.00, SD=0.00), "it is easy to contact someone via the Internet than talk or call or post a letter to someone" (Diploma: M=4.91, SD=0.38 and Undergraduate: M=4.87, SD=0.52), "it is an interactive medium that provides instant feedback" (Diploma: M=4.52, SD=0.33 and Undergraduate: M=4.90, SD=0.53) and "it is anonymous" (Diploma: M=4.52, SD=0.33 and Undergraduate: M=4.87, SD=0.52). "It allows 24 hours communication" was agreed upon by diploma respondents (M=4.46, SD=0.33) while undergraduate participants strongly agreed with it (M=5.00, SD=0.00). Diploma respondents were undecided on the statement" it is a multimedia communication tool" (M=3.75, SD=0.36) while the undergraduate participants agreed with it (M=3.24, SD=0.23).

No significant differences were noted under most of the statements on information seeking. Five statements were strongly agreed to by the respondents in the two levels of study. These statements were; "it is a medium that increases my access to information from different locations around the globe", "it contains

a lot of information on a wide range of issues or topics relevant to me" and "it enables me save money when accessing information because it is freely available." Each of these statements attained a mean score of 5.00 and standard deviation of 0.00 among the diploma and undergraduate respondents. The other two statements strongly agreed to were; "it gives me instant access to the information I need" (Diploma: M=4.82, SD=0.37 and Undergraduate: M=4.90, SD=0.53) and "it is accessible for 24 hours" (Diploma: M=4.60, SD=0.34 and Undergraduate: M=4.80, SD=0.51).

Diploma respondents agreed with the statement "it gives me up-to-date information" (M=4.34, SD=0.31) while undergraduate participants strongly agreed to it (M=4.91, SD=0.53).Respondents pursuing diploma courses were undecided on the two statements " it can disseminate multimedia information" (M=3.28, SD=0.23) and "it is easy to get information" (M=3.28, SD=0.23).In contrast, the undergraduate respondents agreed with the first statement (M=3.80, SD=0.36) and they strongly agreed with the second motive statement (M=4.50, SD=0.46).

Table 22 indicates that under the entertainment and habit dimension, the two statements strongly agreed to by both the diploma and undergraduate respondents were; "it is enjoyable to surf the Internet" (M=5.00, SD=0.00) and "it is exciting" obtained a mean of 4.89 and standard deviation of 0.38 among the diploma respondents while the mean score and standard deviation for the undergraduate respondents were 4.55 and 0.47 respectively. "It gives me something to occupy my time" was agreed to by the diploma students (M=4.20, SD=0.30) while for the undergraduate students they strongly agreed with the statement (M=4.50, SD=0.46). A significant distinction was noted for the statement "it makes me feel restless if I do not use the Internet." The diploma respondents disagreed with this statement (M=3.345, SD=0.33) as opposed to the undergraduate students who were undecided (M=1.68, SD=0.31).

Table 22: Descriptive statistics of motivations for using the Internet by levels of study

No	Internet use motivation dimensions and motivations	Diploma N=194		Undergraduate N=100	
		Mean	SD	Mean	SD
A	**Communication**	**4.44**	**0.32**	**4.73**	**0.50**
1	It allows 24 hours communication	4.46	0.33	5.00	0.00
2	It is an interactive medium that provides instant feedback	4.52	0.33	4.90	0.53
3	It is anonymous	4.52	0.33	4.87	0.52
4	It is cheap to contact someone via the Internet than talk or call or post a letter to someone	5.00	0.00	5.00	0.00
5	It is easy to contact someone via the Internet than talk or call or post a letter to someone	4.91	0.38	4.87	0.52
6	It is a multimedia communication tool	3.24	0.23	3.75	0.36
B	**Information seeking**	**4.42**	**0.32**	**4.74**	**0.50**
7	It is a medium that increases my access to information from different locations around the globe	5.00	0.00	5.00	0.00
8	It can disseminate multimedia information	3.28	0.23	3.80	0.36
9	It is easy to get information	3.28	0.23	4.50	0.46
10	It enables me save money when accessing information because it is freely available	5.00	0.00	5.00	0.00
11	It gives me up-to-date information	4.34	0.31	4.91	0.53
12	It gives instant me instant access to the information I need	4.82	0.37	4.90	0.53
13	It is accessible for 24 hours	4.60	0.34	4.80	0.51
14	It contains a lot of information on a wide range of issues or topics relevant to me	5.00	0.00	5.00	0.00
C	**Entertainment and habit**	**3.94**	**0.27**	**4.36**	**0.44**
15	It gives me something to occupy my time	4.20	0.30	4.50	0.46
16	It is enjoyable to surf the Internet	5.00	0.00	5.00	0.00
17	It is exciting	4.89	0.38	4.55	0.47
18	It makes me feel restless if I do not use the Internet	1.68	0.31	3.45	0.33

D	**Interactive control**	**3.88**	**0.25**	**4.60**	**0.48**
19	It is an interactive medium that uses hyperlinks which makes me move from one web page or website to another	4.39	0.32	4.70	0.49
20	It is an interactive medium that is easy to use	4.00	0.28	4.90	0.53
21	It is an interactive medium that puts me in control as I can decide which web page(s) or websites to access and not access	3.24	0.23	2.80	0.32
E	**Developing and maintaining online and social interactions**	**2.67**	**0.23**	**2.80**	**0.32**
22	It makes me feel like I belong to a group	2.64	0.23	3.01	0.32
23	It removes my feeling of loneliness	2.69	0.23	2.60	0.33
F	**Improving personal status and coping with peer pressure**	**3.19**	**0.23**	**3.32**	**0.32**
24	It is also used by my family and friends	2.48	0.24	3.61	0.34
25	It makes me be at par with my peers	3.90	0.27	3.02	0.32
Overall standard mean and standard deviation		**3.76**	**0.26**	**4.13**	**0.40**

Source: Research Data

The interactive control dimension statements were rated variously. Agreement was noted among the diploma respondents on two statements which were; "it is an interactive medium that uses hyperlinks which makes me move from one web page or website to another" (M=4.39, SD=0.32) and "it is an interactive medium that is easy to use" (M=4.00, SD=0.28). Among the undergraduates, the two statements were strongly supported. The first statement attained a mean score of 4.70 and standard deviation of 0.49 while the second statement obtained a mean score of 4.90 and standard deviation of 0.53.Both categories of respondents were undecided on the statement "it is an interactive medium that puts me in control as I can decide which Web page(s) or websites to access and not access" (Diploma: M=3.24, SD=0.23 and Undergraduate: M=2.80, SD=0.32).

From Table 22, it can be seen that respondents were undecided on all the two statements under developing and maintaining online and social interactions. These

statements were; "it makes me feel like I belong to a group" (Diploma: M=2.64, SD=0.23 and Undergraduate: M=3.01, SD=0.32) and "it removes my feeling of loneliness" (Diploma: M=2.69, SD=0.23 and Undergraduate: M=2.60, SD=0.33).

Table 23: Summary of mean scores and Spearman's rank correlation coefficient for motivations for using the Internet by levels of study

No	Motivation dimensions	Diploma N=194		Undergraduate N=100		Spearman's rank correlation coefficient
		M	SD	M	SD	
1	Communication	4.44	0.32	4.73	0.50	0.43
2	Information seeking	4.42	0.32	4.74	0.50	0.92
3	Entertainment and habit	3.94	0.27	4.36	0.44	0.95
4	Interactive control	3.88	0.25	4.60	0.48	0.50
5	Developing and maintaining online and social interactions	2.67	0.23	2.80	0.32	-1.00
6	Improving personal status and coping with peer pressure	3.19	0.23	3.32	0.32	-1.00
Overall mean, standard deviation and Spearman's rank correlation coefficient		**3.76**	**0.26**	**4.13**	**0.40**	**0.89**

Source: Research Data

Table 23 demonstrates that there were no significant differences among diploma and undergraduate respondents in regard to the six motive dimensions. Communication and information seeking were agreed to by the diploma respondents as opposed to the undergraduate participants who strongly agreed with these motive dimensions. Communication attained a mean score of 4.44 and standard deviation of 0.32 and information seeking had a mean score of 4.42 and standard deviation of 0.32 among diploma respondents. Among the undergraduate participants, communication and information seeking attained a mean score of 4.73 and 4.74 respectively, with each having a standard deviation of 0.50.

Diploma respondents also agreed further with two dimensions, namely; entertainment and habit (M=3.94, SD=0.27) and interactive control (M=3.88, SD=0.25). The undergraduate respondents agreed with the first dimension

(M=4.36, SD=0.44) but strongly agreed with the second dimension (M=4.60, SD=0.48). Both the diploma and undergraduate participants were undecided on two aspects, namely; developing and maintaining online and social interactions (Diploma: M=2.67, SD=0.23 and Undergraduate: M=2.80, SD=0.32) and improving personal status and coping with peer pressure (Diploma: M=3.19, SD=0.23 and Undergraduate: M=3.32, SD=0.32).

The overall mean score and standard deviation of 3.78 and 0. 26 was attained for the six motive dimensions among the diploma respondents. The undergraduates obtained an overall mean score of 4.13 and standard deviation of 0.40. These overall means imply that the two categories of respondents were in agreement with the six motive dimensions for using the Internet. It also implies that diploma students were less motivated to use the Internet compared to the undergraduate students.

The significant differences noted for motivations for using the Internet between the diploma and undergraduate students could be attributed to several reasons. Undergraduate courses are more demanding than the diploma courses. Therefore, the undergraduates are likely to be motivated to use the Internet more than the diploma students. The undergraduates are allocated more time in the computer labs than the diploma respondents hence their increased use of the Internet and consequently higher motivation to use the Internet. The higher motivation for the undergraduates compared to the diploma respondents correspond to the earlier finding where the undergraduates had a mean score of 3.32 (SD=0.52) and diploma respondents had a mean of 2.90 (SD=0.23). This shows that the undergraduates reported using the Internet more than the diploma respondents. This also explains the higher motivational drive for undergraduates to use the Internet more than the diploma participants.

Table 23 shows that a negative perfect relationship was found for two motive dimensions for the Internet, namely; developing and maintaining online and social

interactions and improving personal status and coping with peer pressure (r_s= -1). Very high correlation was noted for entertainment and habit (r_s= 0.95). Moderate correlation was reported for the interactive control aspect (r_s= 0.50) and communication (r_s= 0.43).The overall Spearman's rank correlation coefficient was 0.89. This implies high correlation for the six motive dimensions for using the Internet among the diploma and undergraduate respondents.

4.5.3 Motivations for using the Internet by years of study

In this study, there were 182 respondents in their initial years of study and 112 participants in their final years of study. Diploma and undergraduate students in their first year and second year undergraduates were regarded to be in their initial years of study. The diploma students in their second year and undergraduates in third year were taken to be in their final years of study. The results pertaining to motivations for using the Internet by years of study are presented in Table 24.

Table 24 reveals that both initial and final years respondents strongly agreed with five statements under the communication aspect. These five statements were; "it is cheap to contact someone via the Internet than talk or call or post a letter to someone" (M=5.00, SD=0.00), "it is easy to contact someone via the Internet than talk or call or post a letter to someone"(Initial years: M=4.90, SD= 0.39 and Final years: M=4.76, SD=0.48), "it is anonymous "(Initial years: M=4.60, SD=0.35 and Final years: M=4.90, SD=0.50) and "it allows 24 hours communication" (Initial years: M=4.52, SD=0.34 and Final years: M=4.74, SD=0.47). "It is a multimedia communication tool" attained a mean score of 3.35 and standard deviation of 0.24 among the respondents in initial years of study while those in their final years of study had a mean of 3.88 and standard deviation of 0.35. This implies that the first category of respondents were undecided on the statement as opposed to the final year respondents who agreed with the statement.

Five motive dimensions under information seeking were strongly supported by both categories of respondents. The first two statements were; "it is a medium that increases my access to information from different locations around the globe" and "it enables me save money when accessing information because it is freely available". Each of these statements attained a mean score of 5.00 and standard deviation of 0.00. The other three statements were; "it contains a lot of information on a wide range of issues or topics relevant to me" (Initial years: M=4.96, SD=0.44 and Final years: M=5.00, SD=0.00), "it gives me instant access to the information I need" (Initial years: M=4.82, SD=0.42 and Final years: M=4.90, SD=0.44), and "it is accessible for 24 hours"(Initial years: M=4.60, SD=0.39 and Final years: M=4.80, SD=0.43).

The statement "it gives me up-to-date information" attained a mean of 4.34 and standard deviation of 0.35 among the initial years' respondents while final years' respondents had a mean of 4.92 and standard deviation of 0.45. This shows that the initial years' respondents agreed with the statement as opposed to the final years' respondents who strongly agreed with the statement. Two statements, namely; "it can disseminate multimedia information" and "it is easy to get information" received a neutral response among the initial years' respondents. The first statement and second statement among initial years' respondents obtained a mean of 3.38 and 3.48 respectively with a similar standard deviation of 0.27. Among the final years' respondents, the first statement attained a mean of 3.92 (SD=0.32) and mean of 4.69 (SD= 0.41) for the second statement. This shows that the first statement was agreed to by the final years' respondents while they strongly agreed to the second statement.

From Table 24, it can be seen that the entertainment and habit received mixed responses. The initial years' participants strongly agreed with the statements; "it is enjoyable to surf the Internet" (M=5.00, SD=0.00) and "it is exciting" (M=4.90, SD=0.43). "It is enjoyable to surf the Internet" had a mean of 3.64 and standard deviation of 0.29 while "it is exciting" had a mean of 4.89 and standard deviation

of 0.44 among the final years' respondents. This demonstrates that these respondents agreed with the first statement while the second statement "it is exciting" was strongly agreed to by the final years' respondents.

Initial years' respondents agreed with the statement; "it gives me something to occupy my time" (M=4.20, SD=0.34) while final years' participants strongly agreed with the statement (M=4.89, SD=0.44). "It makes me feel restless if I do not use the Internet" attained a mean score of 1.69 and standard deviation of 0.35 among initial years respondents while a mean score and standard deviation of 3.64 and 0.29 respectively among final years participants. Therefore, initial years' respondents disagreed with the statement in contrast with final years' respondents who agreed with the statement.

Table 14 demonstrated that the interactive control dimension was rated variously. "It is an interactive medium that uses hyperlinks which makes me move from one Web page or website to another" was agreed upon by initial years respondents (M=4.48, SD=0.37) as opposed to final years' respondents who strongly supported the statement (M=4.82, SD=0.43). Among the initial years' participants, the statement "it is an interactive medium that is easy to use" was agreed to (M=4.00, SD=0.28) in contrast with final years' respondents who strongly agreed with it (M=4.90, SD=0.44).The statement; "it is an interactive medium that puts me in control as I can decide which Web page(s) or websites to access and not access" scored a mean of 3.36 and standard deviation of 0.26 among initial years' respondents. This shows that they were undecided on the statement as opposed to the final years' respondents who agreed with it after a mean score of 4.33 and standard deviation of 0.36 was attained.

Both the initial and final years' respondents were undecided on the two statements under developing and maintaining online and social interactions. These statements were; "it makes me feel like I belong to a group" (Initial years: M=2.64, SD=0.26

and Final years: M=3.04, SD=0.27) and "it removes my feeling of loneliness" (Initial years: M=2.78, SD= 0.26 and Final years: M=2.91, SD=0.27).

Table 24: Descriptive statistics of motivations for using the Internet by years of study

No	Internet use motivation dimensions and motivations	Initial years N= 182		Final years N= 112	
		Mean	SD	Mean	SD
A	**Communication**	**4.50**	**0.34**	**4.74**	**0.47**
1	It allows 24 hours communication	4.52	0.34	4.74	0.47
2	It is an interactive medium that provides instant feedback	4.60	0.35	5.00	0.00
3	It is anonymous	4.60	0.35	4.90	0.50
4	It is cheap to contact someone via the Internet than talk or call or post a letter to someone	5.00	0.00	5.00	0.00
5	It is easy to contact someone via the Internet than talk or call or post a letter to someone	4.90	0.39	4.76	0.48
6	It is a multimedia communication tool	3.35	0.24	3.88	0.35
B	**Information seeking**	**4.45**	**0.34**	**4.78**	**0.48**
7	It is a medium that increases my access to information from different locations around the globe	5.00	0.00	5.00	0.00
8	It can disseminate multimedia information	3.38	0.27	3.92	0.32
9	It is easy to get information	3.48	0.27	4.69	0.41
10	It enables me save money when accessing information because it is freely available	5.00	0.00	5.00	0.00
11	It gives me up-to-date information	4.34	0.35	4.92	0.45
12	It gives instant me instant access to the information I need	4.82	0.42	4.90	0.44
13	It is accessible for 24 hours	4.60	0.39	4.80	0.43
14	It contains a lot of information on a wide range of issues or topics relevant to me	4.96	0.44	5.00	0.00

C	**Entertainment and habit**	**3.95**	**0.29**	**4.61**	**0.45**
15	It gives me something to occupy my time	4.20	0.34	4.89	0.44
16	It is enjoyable to surf the Internet	5.00	0.00	3.64	0.29
17	It is exciting	4.90	0.43	4.89	0.44
18	It makes me feel restless if I do not use the Internet	1.69	0.35	3.64	0.29
D	**Interactive control**	**3.95**	**0.29**	**4.68**	**0.46**
19	It is an interactive medium that uses hyperlinks which makes me move from one web page or website to another	4.48	0.37	4.82	0.43
20	It is an interactive medium that is easy to use	4.00	0.28	4.90	0.44
21	It is an interactive medium that puts me in control as I can decide which web page(s) or websites to access and not access	3.36	0.26	4.33	0.36
E	**Developing and maintaining online and social interactions**	**2.71**	**0.24**	**2.98**	**0.30**
22	It makes me feel like I belong to a group	2.64	0.26	3.04	0.27
23	It removes my feeling of loneliness	2.78	0.26	2.91	0.27
F	**Improving personal status and coping with peer pressure**	**3.20**	**0.24**	**3.43**	**0.31**
24	It is also used by my family and friends	2.49	0.27	3.70	0.30
25	It makes me be at par with my peers	3.90	0.30	3.16	0.27
Overall standard mean and standard deviation		**3.79**	**0.27**	**4.20**	**0.39**

Source: Research Data

Under the dimension of improving personal status and coping with peer pressure, the statement "it is also used by my family and friends" saw initial years' respondents undecided (M=2.49, SD=0.27) as opposed to the final years' participants who agreed with the statement (M=3.70, SD=0.30). "It makes me be at par with my peers" attained a mean of 3.90 and standard deviation of 0.30

among initial years' respondents while this same statement had a mean of 3.16 and standard deviation of 0.27. Therefore, on this statement initial years' respondents agreed with it as opposed to final years' respondents who were undecided.

On the sixth dimension of improving personal status and coping with peer pressure, Table 24 indicates that there were mixed responses. The statement "it makes me be at par with my peers" was agreed to by the initial years' respondents (M=3.90, SD=0.30) as compared to the final years' participants(M=3.16, SD=0.270).The initial years' respondents disagreed with the statement "it is also used by my family and friends" (M=2.49, SD=0.27) as compared to the final years' respondents who agreed with it (M=3.70, SD=0.30).

From table 25, it can be seen that respondents strongly agreed with the communication dimension as the initial years' respondents and final years' respondents obtained a mean score of 4.50 (SD=0.34) and 4.74 (SD=0.47) respectively. Initial years' respondents agreed with three motive dimensions as follows; information seeking (M=4.45, SD= 0.34), entertainment and habit (M=3.95, SD=0.29) and interactive control (M=3.95, SD=0.29). This differed with the final years' respondents who strongly agreed with these three motive dimensions as follows; information seeking (M=4.78, SD= 0.48), entertainment and habit (M=4.61, SD=0.45) and interactive control (M=4.68, SD=0.46).

Initial years' respondents were neutral on the dimensions on improving personal status and coping with peer pressure (M=3.20, SD=0.24), and developing and maintaining online and social interactions (M=2.71, SD=0.24). On these two dimensions, the final years' respondents were also neutral. Among these respondents, the first statement had a mean score of 3.43 (SD=0.31) and the second statement attained a mean of 2.98 (SD=0.30). The overall mean score and standard deviation for initial years' respondents was 3.79 and 0.27 respectively. The overall mean score was 4.20 (SD=0.39) among final years' respondents. This

indicates that both categories of respondents agreed to the motive dimensions for using the Internet. These results further show that the final years' respondents were more motivated to use the Internet than the initial years' respondents.

The reason that accounts for differences in Internet uses between respondents in initial and final years of study is that as students advance in their studies, their academic work demands more efforts as well personal and social needs change, hence their increased motivation to use Internet. Secondly, initial and final years' participants are likely to be more equipped with Internet use skills than the those in initial years of study.

Table 25: Summary of mean scores and Spearman's rank correlation coefficient for motivations for using the Internet by years of study

No	Motivation dimensions	Initial years N= 182		Final years N= 112		Spearman's rank correlation coefficient
		M	SD	M	SD	
1	Communication	4.50	0.34	4.74	0.47	0.37
2	Information seeking	4.45	0.34	4.78	0.48	0.91
3	Entertainment and habit	3.95	0.29	4.61	0.45	0.95
4	Interactive control	3.95	0.29	4.68	0.46	0.50
5	Developing and maintaining online and social interactions	2.71	0.24	2.98	0.30	-1.00
6	Improving personal status and coping with peer pressure	3.20	0.24	3.43	0.31	-1.00
Overall mean, standard deviation and Spearman's rank correlation coefficient		**3.79**	**0.27**	**4.20**	**0.39**	**0.93**

Source: Research Data

Table 24 reveals that a negative perfect relationship was found for two motive dimensions, namely; developing and maintaining online and social interactions and improving personal status and coping with peer pressure (r_s= -1). Very high correlation was noted for the entertainment and habit aspect (r_s = 0.95) and information seeking (r_s = 0.91). Moderate correlation was noted for the dimension on interactive control (r_s = 0.50).Low correlation was reported for the

communication dimension (r_s = 0.37). The overall Spearman's rank correlation coefficient was 0.93. This implies very high correlation for the six motive dimensions among the initial and final years' respondents.

4.5.4 Motivations for using the Internet by gender

Internet use among college students is influenced by gender. In this study, there were 152 male and 142 female respondents. Table 26 reveals that four use statements under the communication dimension were strongly agreed to by both the male and female respondents. The statements were; "it is cheap to contact someone via the Internet than talk or call or post a letter to someone" and " it is easy to contact someone via the Internet than talk or call or post a letter to someone". Each of these statements attained a mean score of 5.00 and standard deviation of 0.00 among each of the two genders.

Male respondents attained a mean of 5.00 (SD= 0.00) for two statements under communication. The first statement was "it is an interactive medium that provides instant feedback" and the second one was; "it allows 24 hours communication". Among female respondents, these two statements obtained a mean score of 4.80 (SD=0.43) and 4.69 (SD= 0.41) respectively. On the statement; "it is anonymous", male respondents scored a mean of 4.32 and standard deviation of 0.35 while female participants attained a mean of 4.86 and standard deviation of 0.44. This shows that male respondents agreed with the statement as opposed to the female respondents who strongly agreed with it. Both genders of respondents agreed with the last communication statement "it is a multimedia communication tool" (Male: M=3.79, SD=0.29 and Female: M=3.60, SD=0.29).

Table 26 indicates that there were no significant disparities noted among male and female respondents in relation to the use statements on information seeking. These two classes of respondents all strongly supported/agreed with six statements. The statements "it is a medium that increases my access to information from different locations around the globe", "it enables me save

money when accessing information because it is freely available" and "it contains a lot of information on a wide range of issues or topics relevant to me", each had a mean score of 5.00 (SD=0.00) among the two classes of respondents.

A mean score of 4.90 and standard deviation of 0.43 was registered for the statement "it gives me instant access to the information I need" among the male respondents. A mean score and standard deviation of 4.60 and 0.40 respectively was reached among the female participants. "It is accessible for 24 hours" obtained a mean of 4.81 and standard deviation of 0.42 among male respondents while the female respondents attained a mean of 5.00 and standard deviation of 0.00. The last statement strongly supported by respondents was "it gives me up-to-date information" whose mean and standard deviation was 4.80 and 0.42 respectively among the male respondents. Female respondents had a mean of 5.00 and standard deviation of 0.00 on this statement. Male respondents agreed with the statement "it is easy to get information" (M=4.34, SD=0.35) while female participants strongly agreed with it (M=4.62, SD=0.40). Both the male and female research participants agreed with the statement; "it can disseminate multimedia information (Male: M=3.61, SD=0.28 and Female: 3.71, SD=0.30).

Table 26 further reveals that under entertainment and habit aspect, the mean scores differed slightly. The statement "it is enjoyable to surf the Internet" was strongly supported by the male and female respondents. The male respondents had a mean score of 5.00 (SD=0.00) while female respondents had a mean of 4.98 (SD=0.46). Male respondents strongly agreed with the statement "it is exciting" (M=4.81, SD=0.42) as opposed to female participants who agreed with the statement (M=4.37, SD=0.37). "It gives me something to occupy my time" had a mean score of 4.12 (SD=0.33) and 4.37 (SD=0.37) among the male and female respondents respectively. This indicates that both categories of respondents agreed with the statement. With regard to the statement "it makes me feel restless if I do not use the Internet" male respondents had a mean of 1.69 (SD=0.35) and

female respondents had a mean of 2.44 (SD=0.28). This points out that both the male and female respondents disagreed with this statement.

Table 26: Descriptive statistics of motivations for using the Internet by gender

No	Internet use motivation dimensions and motivations	Male N=152		Female N=142	
		Mean	SD	Mean	SD
A	**Communication**	**4.60**	**0.39**	**4.69**	**0.41**
1	It allows 24 hours communication	5.00	0.00	4.69	0.41
2	It is an interactive medium that provides instant feedback	5.00	0.00	4.80	0.43
3	It is anonymous	4.32	0.35	4.86	0.44
4	It is cheap to contact someone via the Internet than talk or call or post a letter to someone	5.00	0.00	5.00	0.00
5	It is easy to contact someone via the Internet than talk or call or post a letter to someone	5.00	0.00	5.00	0.00
6	It is a multimedia communication tool	3.79	0.29	3.60	0.29
B	**Information seeking**	**4.68**	**0.42**	**4.80**	**0.43**
7	It is a medium that increases my access to information from different locations around the globe	5.00	0.00	5.00	0.00
8	It can disseminate multimedia information	3.61	0.28	3.72	0.30
9	It is easy to get information	4.34	0.35	4.62	0.40
10	It enables me save money when accessing information because it is freely available	5.00	0.00	5.00	0.00
11	It gives me up-to-date information	4.80	0.42	5.00	0.00
12	It gives instant access to the information I need	4.90	0.43	4.60	0.40
13	It is accessible for 24 hours	4.81	0.42	4.80	0.43
14	It contains a lot of information on a wide range of issues or topics relevant to me	5.00	0.00	5.00	0.00
C	**Entertainment and habit**	**3.91**	**0.31**	**4.04**	**0.33**
15	It gives me something to occupy my time	4.12	0.33	4.37	0.37
16	It is enjoyable to surf the Internet	5.00	0.00	4.98	0.46
17	It is exciting	4.81	0.42	4.37	0.37

18	It makes me feel restless if I do not use the Internet	1.69	0.35	2.44	0.28
D	**Interactive control**	**4.48**	**0.37**	**3.75**	**0.30**
19	It is an interactive medium that uses hyperlinks which makes me move from one web page or website to another	4.72	0.36	3.91	0.37
20	It is an interactive medium that is easy to use	4.50	0.43	3.91	0.37
21	It is an interactive medium that puts me in control as I can decide which web page(s) or websites to access and not access	4.22	0.30	3.44	0.33
E	**Developing and maintaining online and social interactions**	**2.68**	**0.26**	**3.73**	**0.30**
22	It makes me feel like I belong to a group	3.66	0.25	3.14	0.32
23	It removes my feeling of loneliness	1.69	0.31	4.31	0.43
F	**Improving personal status and coping with peer pressure**	**3.20**	**0.26**	**3.53**	**0.28**
24	It is also used by my family and friends	2.49	0.24	3.70	0.35
25	It makes me be at par with my peers	3.91	0.27	3.36	0.32
Overall standard mean and standard deviation		**3.93**	**0.31**	**4.17**	**0.34**

Source: Research Data

From Table 26, it can be seen that the interactive control dimension had various motive responses among male and female respondents. Some slight differences in opinions were observed. Male respondents strongly agreed with two statements, which were; "it is an interactive medium that uses hyperlinks which makes me move from one Web page or website to another" (M=4.72, SD=0.36) and "it is an interactive medium that is easy to use (M=4.50, SD=0.43). On these two statements, the female respondents agreed with them after obtaining a mean of 3.91 and standard deviation of 0.37 for each of these statements. "It is an interactive medium that puts me in control as I can decide which Web page(s) or website(s) to access and not access" was agreed to by male respondents (M=4.22, SD=0.30) in contrast with the female respondents who were undecided (M=3.44, SD=0.33).

The dimension of developing and maintaining online and social interactions had two statements. The statement "it makes me feel like I belong to a group" was agreed upon by the male respondents (M=3.66, SD=0.25) as opposed to the female respondents who were undecided on it (M=4.34, SD=-0.32). A noteworthy disparity was noted on the statement "it removes my feeling of loneliness." The male respondents disagreed with this statement (M=1.69, SD=0.31) while female respondents agreed with the statement (M=4.31, SD=0.43).

Table 26 shows that under the aspect of improving personal status and coping with peer pressure, male respondents agreed with the statement "it makes me be at par with my peers" (M=3.91, SD=0.27) while the female respondents were undecided on it (M=3.36, SD=0.32). The statement "it is also used by my family and friends" had a mean of 2.49 (SD=0.24) and 3.70 (SD=0.35) among the male and female participants respectively. This shows that the male respondents disagreed with the statement while the female respondents agreed with it.

Table 27: Summary of mean scores and Spearman's rank correlation coefficient for motivations for using the Internet by gender

No	Motivation dimensions	Male N=152		Female N=142		Spearman's rank correlation coefficient
		M	SD	M	SD	
1	Communication	4.60	0.39	4.69	0.41	0.83
2	Information seeking	4.68	0.40	4.72	0.42	0.82
3	Entertainment and habit	3.91	0.31	4.04	0.33	0.95
4	Interactive control	4.48	0.37	3.75	0.30	0.88
5	Developing and maintaining online and social interactions	2.68	0.26	3.73	0.30	-1.00
6	Improving personal status and coping with peer pressure	3.20	0.26	3.53	0.28	-1.00
Overall mean, standard deviation and Spearman's rank correlation coefficient		**3.93**	**0.31**	**4.17**	**0.34**	**0.60**

Source: Research Data

Table 27 shows that both the male and female respondents strongly agreed with two motive dimensions. These dimensions were; information seeking (Male: M=4.68, SD=0.40 and Female: M=4.72, SD=0.42) and communication (Male: M=4.60, SD=0.39 and Female: M=4.69, SD=0.41). The entertainment and habit aspect was agreed to by both groups of respondents (Male: M=3.91, SD=0.31 and Female: M=4.04, SD=0.33).Likewise, the interactive control was agreed to by both classes of respondents (Male: M=4.48, SD=0.37 and Female: M=3.75, SD=0.30).

As presented in Table 27, a mean of 3.20 (SD=0.26) was attained among the male respondents on the facet of improving personal status and coping with peer pressure while among the female participants, a mean score of 3.53 and standard deviation of 0.28 was registered. This confirms that the male respondents were undecided on this issue as opposed to the female respondents who agreed with it. Developing and maintaining online and social interactions saw male respondents undecided on it (M=2.68, SD=0.26) while the female respondents agreed with the aspect (M=3.73, SD=-0.30).

Male and female respondents had an overall mean score of 3.93 (SD=0.31) and 4.17 (SD=0.34) respectively. This implies that both categories of respondents agreed on the six motive dimensions for using the Internet. The results also show that male students are motivated to use the Internet more than the female students. This shows that in colleges there is a narrowing gap in Internet use between males and females.

A correlation analysis of motive dimensions was made in respect of male and female participants. A negative perfect relationship was found for two motive statements, namely; developing and maintaining online and social interactions and improving personal status and coping with peer pressure (r_s=-1). Very high correlation was noted for the entertainment and habit dimension (r_s = 0.95). High correlation was reported for interactive control (r_s = 0.88), communication (r_s =

Table 27 shows that both the male and female respondents strongly agreed with two motive dimensions. These dimensions were; information seeking (Male: M=4.68, SD=0.40 and Female: M=4.72, SD=0.42) and communication (Male: M=4.60, SD=0.39 and Female: M=4.69, SD=0.41). The entertainment and habit aspect was agreed to by both groups of respondents (Male: M=3.91, SD=0.31 and Female: M=4.04, SD=0.33).Likewise, the interactive control was agreed to by both classes of respondents (Male: M=4.48, SD=0.37 and Female: M=3.75, SD=0.30).

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Male and female respondents had an overall mean score of 3.93 (SD=0.31) and 4.17 (SD=0.34) respectively. This implies that both categories of respondents agreed on the six motive dimensions for using the Internet. The results also show that male students are motivated to use the Internet more than the female students. This shows that in colleges there is a narrowing gap in Internet use between males and females.

A correlation analysis of motive dimensions was made in respect of male and female participants. A negative perfect relationship was found for two motive statements, namely; developing and maintaining online and social interactions and improving personal status and coping with peer pressure (r_s=-1). Very high correlation was noted for the entertainment and habit dimension (r_s = 0.95). High correlation was reported for interactive control (r_s = 0.88), communication (r_s =

0.83) and information seeking (r_s = 0.82). The overall Spearman's rank correlation coefficient was 0.60. This implies moderate correlation for the six motive dimensions among the male and female respondents.

4.5.5 Motivations for using the Internet by time spent online per week

In this research those respondents who reported being online for below 5 hours per week were considered to be light users and heavy users comprised of the respondents who were online for 5 hours and above per week. Table 28 presents a summary of descriptive statistics for the light and heavy users.

Under the communication facet, the statement "it is cheap to contact someone via the Internet than talk or call or post a letter to someone" was strongly agreed to by both the light and heavy users as a mean score of 5.00 (SD=0.00) was obtained for each cluster of respondents. Light Internet users agreed with four motive statements as follows; "it is an interactive medium that provides instant feedback" (M=4.42, SD=0.32), "it is easy to contact someone via the Internet than talk or call or post a letter to someone" (M=4.25, SD=0.30), "it allows 24 hours communication" (M=4.21, SD=0.30) and "it is anonymous" (M=3.84, SD=0.26).

On the above four communication use statements, heavy users rated them variously. "It is an interactive medium that provides instant feedback" had a mean of 5.00 (SD=0.00), "it is easy to contact someone via the Internet than talk or call or post a letter to someone" attained a mean score of 4.92 (SD=0.53), and "it allows 24 hours communication" obtained a mean of 4.62 (SD=0.48). This implies that the heavy users strongly agreed with these three motive statements for using the Internet. The heavy users agreed with the two statements; "it is anonymous" (M=4.16, SD=0.41) and "it is a multimedia communication tool" (M=3.82, SD=0.36). However, for the statement "it is multimedia communication tool", the light users remained neutral (M=3.40, SD=0.25).

Table 28: Descriptive statistics on motivations for using the Internet by time spent online per week

No	Internet use motivation dimensions and motivations	Light users N=193		Heavy users N=101	
		Mean	SD	Mean	SD
A	**Communication**	**4.21**	**0.30**	**4.62**	**0.48**
1	It allows 24 hours communication	4.21	0.30	4.62	0.48
2	It is an interactive medium that provides instant feedback	4.42	0.32	5.00	0.00
3	It is anonymous	3.84	0.26	4.16	0.41
4	It is cheap to contact someone via the Internet than talk or call or post a letter to someone	5.00	0.00	5.00	0.00
5	It is easy to contact someone via the Internet than talk or call or post a letter to someone	4.25	0.30	4.92	0.53
6	It is a multimedia communication tool	3.40	0.25	3.82	0.36
B	**Information seeking**	**4.24**	**0.30**	**4.80**	**0.51**
7	It is a medium that increases my access to information from different locations around the globe	5.00	0.00	5.00	0.00
8	It can disseminate multimedia information	2.69	0.23	4.69	0.47
9	It is easy to get information	2.14	0.27	4.33	0.43
10	It enables me save money when accessing information because it is freely available	5.00	0.00	5.00	0.00
11	It gives me up-to-date information	4.70	0.36	4.89	0.53
12	It gives me instant access to the information I need	4.60	0.34	5.00	0.00
13	It is accessible for 24 hours	4.82	0.37	4.90	0.53
14	It contains a lot of information on a wide range of issues or topics relevant to me	5.00	0.00	5.00	0.00
C	**Entertainment and habit**	**3.47**	**0.24**	**4.68**	**0.49**
15	It gives me something to occupy my time	3.84	0.26	4.98	0.54
16	It is enjoyable to surf the Internet	5.00	0.00	5.00	0.00
17	It is exciting	4.02	0.28	4.83	0.51
18	It makes me feel restless if I do not use the Internet	1.01	0.39	3.92	0.38

D	**Interactive control**	**3.39**	**0.24**	**4.91**	**0.53**
19	It is an interactive medium that uses hyperlinks which makes me move from one web page or website to another	4.03	0.28	4.88	0.53
20	It is an interactive medium that is easy to use	4.03	0.28	4.96	0.54
21	It is an interactive medium that puts me in control as I can decide which web page(s) or websites to access and not access	2.12	0.27	4.90	0.53
E	**Developing and maintaining online and social interactions**	**2.42**	**0.25**	**4.31**	**0.43**
22	It makes me feel like I belong to a group	3.15	0.23	4.02	0.39
23	It removes my feeling of loneliness	1.69	0.31	4.60	0.48
F	**Improving personal status and coping with peer pressure**	**2.69**	**0.25**	**4.18**	**0.41**
24	It is also used by my family and friends	2.15	0.27	4.49	0.46
25	It makes me be at par with my peers	3.22	0.23	3.86	0.37
Overall standard mean and standard deviation		**3.40**	**0.24**	**4.58**	**0.47**

Source: Research Data

Table 28 shows that under information seeking, six statements were strongly agreed to by both the light and heavy users. The statements which had each a mean score of 5.00 (SD=0.00) were; "it is a medium that increases my access to information from different locations around the globe", "it enables me save money when accessing information because it is freely available", and "it contains a lot of information on a wide range of issues or topics relevant to me." The other statements strongly agreed to were; "it is accessible for 24 hours" (Light users: M=4.82, SD=0.37 and M=4.90, SD=0.53), "it gives me up-to-date information" (Light users=4.70, SD=0.36 and M=4.89, SD=0.53) and "it gives me instant access to the information I need" (Light users: M=4.60, SD=0.34 and M=5.00, SD=0.00).

Significant differences were noted for two motive statements for using the Internet. Light users were neutral on the statement "it can disseminate multimedia

information" (M=2.69, SD=0.23) while the heavy users strongly agreed with the statement (M=4.69, SD=0.47). Light users disagreed with the statement "it is easy to get information" (M=2.14, SD=0.27). This was in sharp contrast with the heavy users who agreed with the statement (M=4.33, SD=0.43).

The entertainment and habit dimension was rated variously. "It is enjoyable to surf the Internet" was strongly agreed to by both light and heavy users after each category of respondents attained a mean score of 5.00 (SD=0.00). Differences were noted in three statements. "It is exciting" was agreed to by light users (M=4.02, SD=0.28) as opposed to heavy users who strongly agreed with the statement after attaining a mean score of 4.83 (SD=0.51)."It gives me something to occupy my time" was agreed to by light users (M=3.84, SD=0.26) while heavy users strongly agreed with it (M=4.98, SD=0.38). A notable difference was on the statement "it makes me feel restless if I do not use the Internet". The light users strongly disagreed with the statement (M=1.01, SD=0.39) while heavy users agreed with the statement (M=3.92, SD=0.38).

Under the interactive control dimension of the Internet, Table 28 reveals that light users agreed with the statements "it is an interactive medium that uses hyperlinks which makes me move from one Web page or website to another" and "it is an interactive medium that is easy to use". Each of these statements obtained a mean score of 4.03 and standard deviation of 0.28. These two statements were strongly supported by the heavy users. The first statement had a mean of 4.88 (SD=0.53) while the second statement had a mean score 4.96 (SD=0.53). A significant difference was noted for the statement "it is an interactive medium that puts me in control as I can decide which Web page(s) or websites to access and not access". Light users disagreed with it (M=2.12, SD=0.27) as opposed to heavy users who strongly agreed with the statement (M=4.90, SD=0.53).

The dimension on developing and maintaining online and social interactions had two motive statements. On the first statement "it makes me feel like I belong to a

group", the light users were undecided on it (M=3.15, SD=0.23) while heavy users agreed with the statement after obtaining a mean score of 4.02 (SD=0.39). A significant difference was noted for the statement "it removes my feeling of loneliness". Light users disagreed with the statement (M=1.69, SD=0.31) as opposed to heavy users who strongly agreed with the statement (M=4.60, SD=0.48).

Two statements were provided under the aspect of improving personal status and coping with peer pressure. Light users were neutral on the statement that "it makes me be at par with my peers" (M=3.22, SD=0.23) while heavy users agreed with the statement (M=3.86, SD=0.37). A noteworthy disparity was reported on the second statement "it is also used by my family and friends". Light users disagreed with it (M=2.15, SD=0.27) while heavy users agreed with the statement after attaining a mean score of 4.49 and standard deviation of 0.46.

Table 29: Summary of mean scores and Spearman's rank correlation coefficient for motivations for using the Internet by time spent online per week

No	Motivation dimensions	Light users N=193		Heavy users N=101		Spearman's rank correlation coefficient
		M	SD	M	SD	
1	Communication	4.21	0.30	4.62	0.48	0.93
2	Information seeking	4.24	0.30	4.80	0.51	0.80
3	Entertainment and habit	3.47	0.24	4.68	0.49	0.80
4	Interactive control	3.39	0.24	4.91	0.53	0.13
5	Developing and maintaining online and social interactions	2.42	0.25	4.31	0.43	-1.00
6	Improving personal status and coping with peer pressure	2.69	0.23	4.18	0.41	-1.00
Overall mean, standard deviation and Spearman's rank correlation coefficient		**3.40**	**0.24**	**4.58**	**0.47**	**0.54**

Source: Research Data

Table 29 shows that there were differences between light and heavy users as regards the six motive dimensions. Light users agreed with two dimensions, namely; information seeking (M=4.24, SD=0.30) and communication (M=4.21, SD=0.30). In contrast, among heavy users, information seeking and communication had mean of 4.80 (SD=0.51) and 4.62 (SD=0.48) respectively. This shows that these users strongly agreed with these two dimensions of using the Internet. On entertainment and habit, light users and heavy users attained a mean of 3.47 (SD=0.24) and 4.68 (SD=0.49) respectively. This implies that the light users were undecided on this aspect as opposed to heavy users who strongly supported it.

Interactive control, and improving personal status and coping with peer pressure had a mean of 3.39 (SD=0.24) and 2.69 (SD=0.23) respectively among the light users. This contrasted sharply with the heavy users who strongly agreed with these two dimensions. Heavy users attained a mean of 4.91 (SD=0.53) for interactive control and a mean of 4.68 (SD=0.49) for the dimension of improving personal status and coping with peer pressure. Another significant difference was registered for developing and maintaining online and social interactions. Light users disagreed with this dimension (M=2.42, SD=0.25) while heavy users strongly supported it (M=4.18, SD=0.41).

The overall mean for the light users for the six motive dimensions was 3.40 (SD=0.24) as opposed to the heavy users who had a mean score of 4.58 and standard deviation of 0.47. This implies that light users were undecided while the heavy users strongly agreed with the six motive dimensions driving them to use the Internet. It also shows that heavy users were motivated to use the Internet more than the light users.

Various reasons account for the differences in Internet use motivations between light users and heavy users. Heavy users are inclined to be motivated to use the Internet for many of the dimensions covered because they have the time to do so.

The more time one has to use the Internet, the more he/she will be motivated to use it for many different uses/purposes. The heavy users reported using the Internet more than the light users, hence the more reason for them to be motivated to use the Internet than the light users.

A correlation analysis of motive dimensions was made in respect of light and heavy users. As shown in Table 29, a negative perfect relationship was found for two motive dimensions, namely; developing and maintaining online and social interactions, and improving personal status and coping with peer pressure (r_s = -1). Very high correlation was noted for the communication dimension (r_s =0.93). High correlation was noted for the dimensions on information seeking and entertainment and habit (r_s = 0.80). A slight relationship was observed for the dimension on interactive control (r_s = 0.53). The overall Spearman's rank correlation coefficient was 0.54. This implies moderate correlation for the six motive dimensions among light and heavy users of the Internet.

4.6 Content analysis of websites visited

A total of 8,462 occurrences of Uniform Resource Locators (URLs) were collected from 50 computers over the two weeks' period. These URLs represented 314 websites.

Table 30: Occurrences of URLs visited by respondents by domain type

No.	Domain category		Number of URLs found	Percentage
1	.com	commercial	6,243	73.8
2	.net	network	823	9.7
3	.ke	Kenya	698	8.2
4	.org	organization	538	6.4
5	.edu	education	84	1.0
6	Others		76	0.9
Total			**8,462**	**100**

Source: Research Data

From Table 30, it can be seen that out of the 8,462 URLs collected, 73.8 % (N=6,243) were from the .com domain, 9.7 % (N=823) were from the .net

domain, 8.2 % (N=698), were from .ke domain, 6.4 % (N=538) were from .org domain, 1% (N=84) were from .edu domain and 0.9 % (N=76) were from other domains.

The next step of analysis was the examination of the URLs occurrences for 160 randomly selected websites from the 314 websites to establish the Internet use dimensions they represented. Websites for search engines were excluded from this analysis as a respondent may have just used them to access other websites which represent other use dimensions. However, it is important to note that most respondents in the Focus Group Discussions said that their preferred and commonly used search engine was *Google.* A total of 5, 890 URLs were found to be representing the 160 sampled websites. For purposes of this analysis, the eight use dimensions were reduced to four, namely; communication, information seeking, entertainment and aesthetic experiences.

Table 31: URLs occurrences for websites visited by the respondents on the basis of various use dimensions

No	Use/motive dimension	Number of URLs	Percentage
1	Communication	2,728	39
2	Information seeking	2,378	34
3	Entertainment	1,119	16
4	Aesthetic experiences	772	11
Total		**6, 997**	**100**

Source: Research Data

Note: *Some websites were meeting more than one motive dimension, hence their URLs have been placed in more than one use dimension. This explains why the total number of URLs exceeds 5,890 actually collected .*

Table 31 indicates that 39% (N=2,728) of the URLs were representing the communication use dimension. It was established from the Focus Group Discussions, that most respondents were using e-mail for communication through *Yahoo.* 34% (N=2,378) of the URLs were for the information seeking facet, 16 % (N=1,119) represented the entertainment facet and only 11 % (N=772) were indicative of aesthetic experiences. These findings concur with the earlier findings

discussed in this study which ranked these four dimensions as follows; (1) communication, (2) information seeking, (3) entertainment, and (4) aesthetic experiences.

4.7 Challenges faced by students when using the Internet

The last objective of this study was to identify the challenges students faced when using the Internet. Table 32 presents a summary of responses to the question on these challenges.

Table 32: Challenges faced by students when using the Internet

No.	Challenges	Frequency	%
1	Insufficient awareness on the educational e-resources available to KSPS library users	286	97.3
2	Lack of motivation from some lecturers who don't encourage students' use references of Internet resources consulted	278	94.6
3	Difficulties in finding relevant information from the Internet	213	74.2
4	Lack of adequate Internet use skills	189	64.3
5	Slow Internet connection	122	41.5
6	It takes long too view/download web pages	104	35.4

Source: Research Data

Table 32 shows that out of 294 respondents, 97.3 % (N=286) said that their greatest challenge was insufficient awareness on the educational e-resources available to KSPS library users. 94.6 % (N=278) cited the challenge of lack of motivation from some lecturers who don't encourage students' using references of Internet resources consulted. 213 (74.2 %) respondents stated that they had difficulties in finding relevant information from the Internet. These difficulties in finding information on the Internet were further compounded by the lack of adequate Internet use skills, which was selected by 189 (64.3 %) respondents. Slow Internet connection was chosen by 122 respondents (41.5 %). This relates closely with the problem of taking too long to view/download Web pages (selected by 104 respondents (35.4%).This is because the slow Internet connection is the one that results into this problem. Majority of these problems

match those found in previous studies by Kumar and Kaur (2005) and Luambano and Nawe (2004).

4.8 Testing of the hypotheses of the study

The decision to reject and/or accept the hypotheses was based on testing the significance of Spearman's correlation coefficient at a significance level of 0.05 using the t-test. The first hypothesis of this study was that there is a positive relationship between exposure to Internet services/resources and uses among KSPS students.

Table 33: Spearman's rank correlation coefficient calculation for the first hypothesis

Internet use dimensions	**Hours spent online per week**		**Hours spent online per week**			
	Below 5 hours N= 193		**5 hours and above N= 101**			
	Mean	**Rank**	**Mean**	**Rank**	**d**	**d^2**
Communication	3.83	2	4.69	1	1	1
Information seeking	3.57	3	4.11	4	1	1
Entertainment	2.46	7	4.14	3	4	16
Developing and maintaining online and social interactions	3.29	4	4.33	2	2	4
Escape from problems	2.35	8	3.36	5	3	9
Improving personal status	2.87	5	2.91	7	2	4
Coping with peer pressure	3.99	1	3.10	6	5	25
Aesthetic experiences	2.49	6	2.81	8	2	4
Total	**3.12**		**3.68**			**64**

Source: Research Data

$$r_s = 1 - \frac{6\sum d^2}{n^3 - n}$$

where *d* is the difference in the ranks in each of the values and *n* is the number of pairs.

$$r_s = 1 - \frac{6 * 64}{8^3 - 8}$$

$$= 1 - \frac{384}{(512 - 8)}$$

$$= 1 - \frac{384}{504}$$

$$= 1 - 0.76$$

$$= \mathbf{0.24}$$

Testing the significance of the correlation coefficient:

$$t\text{-}_{calculated} = r\sqrt{\frac{n-2}{1-r^2}}$$

$df = n-2$

$$= 0.24\sqrt{\frac{8-2}{1-0.24^2}}$$

$$= 0.24\sqrt{\frac{6}{1-0.06}}$$

$$= 0.24\sqrt{\frac{6}{0.94}}$$

$$= 0.24 * 2.53$$

$$= \mathbf{0.61}$$

$df = 8-2 = 6$

t-critical at *df* 6 is **2.45.**

The calculated value of t (0.61) is less than the critical value of t (2.45) at significance level of 0.05, hence the researcher accepted the hypothesis that there is a positive relationship between exposure to Internet services/resources and uses among KSPS students.

The second hypothesis of this study was that there is a positive relationship between exposure to Internet services/resources and gratifications sought by KSPS students. Table 34 shows the data used for testing this hypothesis.

$$r_s = 1 - \frac{6\sum d^2}{n^3 - n}$$

where *d* is the difference in the ranks in each of the values and *n* is the number of pairs.

$$r_s = 1 - \frac{6 * 16}{6^3 - 6}$$

$$= 1 - \frac{96}{(216-6)}$$

$$= 1 - \frac{96}{210}$$

$$= 1 - 0.46$$

$$= \mathbf{0.54}$$

Table 34: Spearman's rank correlation coefficient calculation for the second hypothesis

Internet use dimensions	**Hours spent online per week**		**Hours spent online per week**			
	Below 5 hours N= 193		**5 hours and above N= 101**			
	Mean	**Rank**	**Mean**	**Rank**	**d**	**d^2**
Communication	4.21	2	4.62	4	-2	4
Information seeking	4.24	1	4.80	2	-1	1
Entertainment and habit	3.47	3	4.68	3	0	0
Developing and maintaining online and social interactions	2.42	6	4.31	5	1	1
Improving personal status Coping with peer pressure	2.69	5	4.18	6	-1	1
Interactive control	3.39	4	4.91	1	3	9
Total	**3.40**		**4.58**			**16**

Source: Research Data

Testing the significance of the correlation coefficient:

$$t\text{-}_{calculated} = r\sqrt{\frac{n-2}{1-r^2}}$$

$df = n-2$

$$= 0.54\sqrt{\frac{6-2}{1-0.54^2}}$$

$$= 0.54\sqrt{\frac{4}{1-0.29}}$$

$$= 0.54\sqrt{\frac{4}{0.71}}$$

$$= 0.54 * 5.63$$

$$= \mathbf{1.28}$$

$df = 6-2 = 4$

t-critical at df 4 is **2.78.**

The calculated value of t (1.28) is less than the critical value of t (2.78) at significance level of 0.05.Hence the researcher accepted the hypothesis that there is a positive relationship between exposure to Internet services/resources and gratifications sought by KSPS students.

4.9 Conclusion

KSPS provides a wide range of Internet services and resources which are used by students in different ways. The results of this study show that the most highly used Internet services were e-mail, WWW, IM and FTP. A clear pattern of frequency of use of various Internet services was noted from findings. Those Internet services/resources which were identified as significantly used had a high frequency of use. A very small number of respondents indicated using the KSPS library e-resources, and even those using them showed low frequency of use of these resources. This supports the notion that most students do not use the Internet for educational purposes.

The respondents used the Internet for communication, information seeking, developing and maintaining online and social interactions, entertainment, coping with peer pressure, escape from problems and improving personal status. From these use dimensions, it was found out that communication, information seeking, developing and maintaining online and social interactions, and entertainment accounted for the greater use of the Internet by the respondents. These findings were closely related to the motivations for using the Internet. The researcher found out that respondents strongly agreed with motive dimensions of information seeking, communication, entertainment and habit, and interactive control.

It was also noted that Internet uses and motivations for using the Internet were influenced by the demographics of field, level and year of study as well as gender and time spent online per week. The significant differences noted in respect to these demographics could be attributed to the variety of social, academic and personal needs/interests for each category of respondents under these demographics.

Many challenges faced the respondents in using the Internet. The major challenges noted were; insufficient awareness on the educational e-resources available to KSPS library users, lack of motivation from some lecturers who don't encourage students' using references of Internet resources, and slow Internet connection. Other problems cited by the respondents included difficulties in finding relevant information from the Internet and lack of adequate Internet use skills.

It is worthy noting that there was agreement in the findings for this study with respect to three data collection methods used (that's questionnaires, Focus Group Discussions and content analysis). In a nutshell, it can be noted that the KSPS students use the Internet for a variety of purposes. However, the educational use of the Internet as expected in a college was low due to a myriad of problems.

From a uses and gratifications perspective, it can be generally acknowledged that the Internet is used more by audiences when the existing motives to use it leads to more satisfaction.

The two hypotheses tested in this study were supported by the findings. Therefore, it can be said that there is a positive relationship between exposure to Internet services/resources and gratifications sought by KSPS students. It can also be concluded that there is a positive relationship between exposure to Internet services/resources and gratifications sought by KSPS students.

CHAPTER FIVE
DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

From the analysis of the data collected, the following discussions, conclusions and recommendations were made.

5.2 Discussion

The researcher focused on five areas of study. These areas were on the main e-resources/services provided at KSPS and their frequency of use by respondents, the uses of the Internet among the students and gratifications sought by students using the Internet. The study also examined demographic characteristics of the students using the Internet and the influence of these demographics on uses and gratifications of the Internet. The last area of focus was on challenges faced by students when using the Internet.

5.2.1 E-services and resources provided at KSPS and their frequency of use

The first objective of the study was to examine the main e-services and resources provided in the institution and determine their frequency of use among students. The results of this study revealed that KSPS provides the most commonly used Internet services. It also has a wide range of e-resources. From the results, it was established that the most commonly used Internet services were; email, WWW, IM and FTP. The least used Internet services were; mailing lists and newsgroups. Very few respondents reported using the KSPS library e-resources.

The findings revealed that those Internet services/resources which were identified as significantly used had a high frequency of use. This is a clear indicator that the highly used Internet service/resource gratify the users more, hence the students frequent rate of their utilization. The use of various Internet services and resources by students could be attributed to the wide range of social, academic

and personal needs of the students. With these variety of needs, Internet users are compelled to use different services and resources to meet these different needs.

5.2.2 Uses of the Internet among college students

The second objective of this study was to identify the uses of the Internet among college students. In general, it was noted that the respondents used the Internet more for communication, information seeking, and developing and maintaining online and social interactions than for entertainment, coping with peer pressure, escape from problems, improving personal status and aesthetic experiences.

5.2.3 Motives/gratifications sought by students using the Internet

The third objective of the study was to determine the motives/gratifications sought by students using Internet resources and services. It was established that students are motivated by different reasons to use the Internet. The key motivating dimensions for Internet user were related to information seeking, communication, entertainment and habit, and interactive control. From the study findings, it can be concluded that the respondents agreed to the motive dimensions driving them to use the Internet.

5.2.4 Demographic characteristics of respondents and their influence on Internet uses and motivations

The fourth objective of this research was to establish the demographic characteristics of the college students and determine how these demographics affect their uses and gratifications of the Internet resources and services. With respect to fields of study, it was established that IS respondents indicated using the Internet more than Non-IS respondents. Overall, it was noted that there exists a high correlation in the mean scores of Internet uses among IS and Non-IS respondents.

Undergraduate participants reported using the Internet more than the diploma respondents. It was noted that there existed a very high correlation in the mean

scores of Internet uses among diploma and undergraduate respondents. It was also established that the respondents in their final years of study used the Internet more than those in their initial years of study. The findings of this research reflected a high correlation for Internet uses among respondents in the initial and final years of study.

Both the male and female respondents were undecided on the Internet use dimensions. The researcher found out that there was a moderate correlation for the eight use dimensions among the male and female respondents. A significant difference among male and female respondents was noted for the entertainment dimension. Male respondents agreed with this use dimension compared to female participants who disagreed with it. Heavy users reported using the Internet more than the light users. The results demonstrated the existence of a slight correlation for the Internet uses among light and heavy users.

The findings of this study noted that that IS respondents agreed with motive dimensions for using the Internet while the Non-IS respondents were undecided on these dimensions. It also shows that the IS respondents were motivated to use the Internet more than the Non-IS respondents. The study established that there exists a high correlation for motive dimensions for using the Internet among the IS and Non-IS respondents. A significant difference was noted on the dimension of developing and maintaining online and social interactions. IS respondents agreed with it while Non-IS participants disagreed with it.

Both the diploma and undergraduate respondents agreed with motivation dimensions for using the Internet. However, it was noted that diploma students were less motivated to use the Internet compared to the undergraduate students. A high correlation for the motive dimensions for using the Internet among the diploma and undergraduate respondents was established from this research findings.

The respondents in their initial and final years of study agreed with the motive dimensions for using the Internet. These results further show that the final years' respondents were more motivated to use the Internet than the initial years' respondents. A very high correlation for the motive dimensions among the initial and final years' respondents was established.

The researcher established that both the male and female respondents agreed on the motive dimensions for using the Internet. The results also show that male students were motivated to use the Internet more than the female students. The results also demonstrated the existence of a moderate correlation for the motive dimensions among the male and female respondents.

Light users were undecided while the heavy users strongly agreed with motive dimensions for using the Internet. Heavy users were motivated to use the Internet more than the light users. The findings of this research also found a moderate correlation for the motive dimensions among light and heavy users of the Internet. Some significant differences were noted. Light users were undecided on the dimensions of interactive control and improving personal status and coping with peer pressure. This contrasted sharply with the heavy users who strongly agreed with these two dimensions. Another important difference was registered for developing and maintaining online and social interactions. Light users disagreed with this dimension while heavy users strongly supported it.

5.2.5 Challenges faced by students when using the Internet

The fifth objective of this research was to identify the challenges faced by students when using the Internet. The major challenges noted were; insufficient awareness on the educational e-resources available to KSPS library users and lack of motivation from some lecturers who don't encourage students' using references of Internet resources consulted. Other problems stated by the respondents were; lack of adequate Internet use skills, difficulties in finding relevant information

from the Internet, slow Internet connection and the problem of taking too long to view/download Web pages.

5.3 Conclusions

College students utilize the Internet for many different uses. They are also motivated to use the Internet for different reasons. The main uses and motivations driving the students to use the Internet were; communication, information seeking, and developing and maintaining online and social interactions than for entertainment, interactive control, coping with peer pressure, escape from problems, improving personal status and aesthetic experiences. It is important to note that the findings of this study support those of previous studies which concluded that students use the Internet for many purposes, least of which is educational use.

In summary, the uses and gratifications sought by students are influenced by various demographic antecedents. One of these demographics which was used to develop the study hypotheses was time spent online. This was used to measure the exposure of students to the Internet services/resources. The results of the study supported these two hypotheses. Therefore, it can be concluded that: (1) There is a positive relationship between exposure to Internet services/resources and uses among KSPS students, and (2) There is a positive relationship between exposure to Internet services/resources and gratifications sought by KSPS students.

5.4 Recommendations

The Internet has become a very powerful mass media, more especially among the college students' population. Many academic institutions continue to provide free Internet services to their students. Equally, many commercial and non-commercial website designers are involved in the design of e-learning resources. Several findings in this study have implications for academic institutions and website designers. This is because while students use the Internet, their use of

the Internet suggests other motivations besides educational use which should be pronounced in the academic institutions.

Based on the findings of the study, the following suggestions are recommended to improve the use of the Internet among the college students:

(i) Students should be provided with Internet use accounts, so as to limit any excessive use of the Internet, a large part of which is for non-educational uses. Such accounts would operate in such a way that once a student exhausts his/her account (time allocated to use the Internet in a semester) then he/she cannot use the Internet services at KSPS. This will be a measure geared to controlling Internet use for students at KSPS, as the college has no control on Internet use by students beyond its boundaries.

(ii) The library should aggressively market the e-resources so that there is increased awareness among the students.

(iii) There should be increased training for students and academic staff on how to use the Internet and the wide range of Internet services/resources available to enhance learning, teaching and research.

(iv) Website designers must take the initiative of establishing comprehensively what attracts/distracts students from using the Internet for educational purposes. This will be useful in designing websites and providing Internet services and resources that can be used for e-learning.

(v) Websites providing only entertainment should be locked so that students should not unnecessarily sit on computers.

In general, all strategies should be taken to educate the academic staff on the educational resources/services available. This is critical, because this staff have a lot of influence on the students and hence they encourage students to use the Internet.

Limitations of the study

One limitation of this study is that students' use of the Internet in a college setting is motivated by personal interests as well those prescribed by the college administration. Therefore, it was difficult to differentiate students' Internet use that was self-motivated versus use that was encouraged or even mandated by lecturers/college authority. Another limitation is that the content analysis of websites visited by students did not consider sites that were visited accidentally or for only a short period of time.

The study relied on self-reported Internet uses and motives for using the Internet services/resources. Self-reports are based on personal memory which can be problematic and thus respondents may inaccurately recall how they behave in Internet use.

Suggestions for further research

There is still room to undertake further research on uses and gratifications of the Internet among college students and other Internet audiences. A similar study can be conducted but with focus on one Internet service, such as e-mail or related services such as e-mail, instant messaging and Online chatrooms. A similar study may also be carried but with emphasis on how both demographics and psychographics influence Internet use. A study of uses and gratifications among students comparing Internet and other traditional media such as TV, radio, newspapers or new media such cellular phones is also worthy pursuing. Alternatively all these studies proposed above can be carried but on different Internet audiences such as academic staff in colleges and universities.

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APPENDIX I:

RESEARCH QUESTIONNAIRE

I am a final year M.A. in Communication Studies student at the School of Journalism and Mass Communication, University of Nairobi conducting a research project entitled: *"Uses and gratifications of the Internet among college students in Kenya: A case study of Kenya School of Professional Studies."*

Kindly assist me by completing this questionnaire. Any information provided will be used purely for academic purpose and will be treated with utmost confidentiality.

Please tick the appropriate box [ ] or [1] [2] [3] [4] [5] that represents your response or Fill in the blank spaces with appropriate information.

PART 1: BIO-DATA

1. **Faculty**

   Commerce [ ]

   Information Science and Information Technology [ ]

   Law [ ]

2. **Field/Area of study currently pursued at KSPS**

   Business Studies and Management [ ] Information Studies [ ]

   Information Technology [ ] Law [ ]

3. **Level of Study**

   Diploma [ ] Undergraduate [ ]

4. **Year/Stage of study**

   1 [ ] 2 [ ] 3 [ ]

5. **Gender**

   Male [ ] Female [ ]

6. **Age Group (Years)**

   17-20 [ ] 21-24 [ ] 25-28 [ ] 29-32 [ ] 33 and above [ ]

7. On average, how many hours per week (*in a semester*) do you spent using the Internet?

Less than 2 hours [ ] 2-4 hours [ ]

5-7 hours [ ] 8-10 hours [ ]

More than 10 hours [ ]

PART 2: USE AND FREQUENCY OF USE OF INTERNET RESOURCES/SERVICES

8. (a). Which of the following Internet services do you use?

(Tick all options that apply to you).

Electronic mail (E-mail) [ ] World Wide Web (WWW) [ ]

Instant messaging (IM) [ ] Mailing lists/Listserves [ ]

File Transfer Protocol (FTP) [ ] Newsgroups [ ]

(b). How frequently do you use the Internet services you have selected in *Question 8 (a) above?*

Frequency of use	**Internet services**					
	E-mail	**WWW**	**IM**	**Mailing lists**	**News group**	**FTP**
Less frequently	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Once a day	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
More than once a day	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Once a week	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
More than once a week	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Once a month	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
More than once a month	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]

9. Do you use the KSPS electronic learning resources (e-resources)?

Yes [ ] ⟶ *Go to Questions 10 and 11 and then proceed on to Part 3.*

No [ ] ⟶ *Skip Questions 10 and 11 and proceed to Part 3.*

10. Which of the following KSPS library e-resources/databases do you use?

(Tick all options that apply to you).

African Digital Library (ADL)	[ ]	Blackwell Publishing	[ ]
EBSCO	[ ]	Springer	[ ]
Emerald Publishing Group	[ ]	Gale	[ ]
Wiley Interscience	[ ]	Oxford Journals	[ ]

11. How frequently do you use the e-resources you have selected in *Question 10 above*

Frequency of use/E-resources	**A**	**B**	**C**	**D**	**E**	**F**	**G**
ADL	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Blackwell Publishing							
EBSCO	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Emerald Publishing Group	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Gale	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Oxford Journals	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Springer	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Wiley InterScience	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]

Key

A Less frequently

B Once a day

C More than once a day

D Once a week

E More than once a week

F Once a month

G More than once a month

PART 3: USES AND MOTIVATIONS FOR USING THE INTERNET

12. For each of the statements stated 1-38, tick the box that best represents your own uses of the Internet.

Indicate your response based on the following scale:

1- Strongly disagree; 2- Disagree; 3- Neutral; 4 – Agree; 5- Strongly agree

No.	I use the Internet:	Response				
		[1]	[2]	[3]	[4]	[5]
1	To communicate with my friends	[1]	[2]	[3]	[4]	[5]
2	To communicate with my parents/relatives	[1]	[2]	[3]	[4]	[5]
3	To communicate with my romantic partner(s) (i.e. boyfriend, girlfriend or spouse)	[1]	[2]	[3]	[4]	[5]
4	To communicate with my classmates	[1]	[2]	[3]	[4]	[5]
5	To communicate with my lecturers	[1]	[2]	[3]	[4]	[5]
6	T o exchange computer files	[1]	[2]	[3]	[4]	[5]
7	To communicate with members of the online study/class group(s) that I belong to	[1]	[2]	[3]	[4]	[5]
8	To receive and turn in assignments to lecturers	[1]	[2]	[3]	[4]	[5]
9	To communicate with members in the newsgroup(s) I belong to	[1]	[2]	[3]	[4]	[5]
10	To receive feedback/information from my lecturer(s)	[1]	[2]	[3]	[4]	[5]
11	To access information from various sources allover the world	[1]	[2]	[3]	[4]	[5]
12	To find information that is not available in my library	[1]	[2]	[3]	[4]	[5]
13	To gather academic/educational materials for the course I am currently pursuing	[1]	[2]	[3]	[4]	[5]
14	To find information on other colleges and universities	[1]	[2]	[3]	[4]	[5]
15	To access online class materials such as class notes, assignments, study manuals and time-tables from my lecturer(s)/college	[1]	[2]	[3]	[4]	[5]
16	To find employment listings that fit me	[1]	[2]	[3]	[4]	[5]
17	To get up-to-date news and information	[1]	[2]	[3]	[4]	[5]

18	To find information on products and services I want to buy	[1]	[2]	[3]	[4]	[5]
19	To contact my friends	[1]	[2]	[3]	[4]	[5]
20	To talk with other people on what is going on	[1]	[2]	[3]	[4]	[5]
21	To make new friends	[1]	[2]	[3]	[4]	[5]
22	To develop romantic relationships	[1]	[2]	[3]	[4]	[5]
23	To get advice to support me from online friend(s)	[1]	[2]	[3]	[4]	[5]
24	To pass time	[1]	[2]	[3]	[4]	[5]
25	To play online computer games	[1]	[2]	[3]	[4]	[5]
26	To listen to and download audio music	[1]	[2]	[3]	[4]	[5]
27	To watch and download music and movie videos	[1]	[2]	[3]	[4]	[5]
28	To share information with my peers so as to be at par with them	[1]	[2]	[3]	[4]	[5]
29	To follow up what my peers are doing	[1]	[2]	[3]	[4]	[5]
30	To forget about college or any other chores in life	[1]	[2]	[3]	[4]	[5]
31	To experience things I can't in the real world	[1]	[2]	[3]	[4]	[5]
32	To get away from my family and friends	[1]	[2]	[3]	[4]	[5]
33	To escape from real world problems	[1]	[2]	[3]	[4]	[5]
34	To improve my future prospects in life	[1]	[2]	[3]	[4]	[5]
35	To improve my standing in the world	[1]	[2]	[3]	[4]	[5]
36	To find information that reflects my identity	[1]	[2]	[3]	[4]	[5]
37	To find interesting new Web pages and websites	[1]	[2]	[3]	[4]	[5]
38	To see attractive graphics	[1]	[2]	[3]	[4]	[5]

13. For each of the statements stated 1-25, tick the box that best represents the reasons that motivate you to use the Internet. *Indicate your response based on the following scale: 1-Strongly disagree; 2- Disagree; 3- Neutral; 4 – Agree; 5- Strongly agree*

No.	I use the Internet because:	Response				
		[1]	[2]	[3]	[4]	[5]
1	It allows 24 hours communication	[1]	[2]	[3]	[4]	[5]
2	It is an interactive medium that provides instant feedback	[1]	[2]	[3]	[4]	[5]
3	It is anonymous	[1]	[2]	[3]	[4]	[5]
4	It is cheap to contact someone via the Internet than talk or call or post a letter to someone	[1]	[2]	[3]	[4]	[5]
5	It is easy to contact someone via the Internet than talk or call or post a letter to someone	[1]	[2]	[3]	[4]	[5]
6	It is a multimedia communication tool	[1]	[2]	[3]	[4]	[5]
7	It is a medium that increases my access to information from different locations around the globe	[1]	[2]	[3]	[4]	[5]
8	It can disseminate multimedia information	[1]	[2]	[3]	[4]	[5]
9	It is easy to get information	[1]	[2]	[3]	[4]	[5]
10	It enables me save money when accessing information because it is freely available	[1]	[2]	[3]	[4]	[5]
11	It gives me up-to-date information	[1]	[2]	[3]	[4]	[5]
12	It gives instant me access to the information I need	[1]	[2]	[3]	[4]	[5]
13	It is accessible for 24 hours	[1]	[2]	[3]	[4]	[5]
14	It contains a lot of information on a wide range of issues or topics relevant to me					
15	It gives me something to occupy my time	[1]	[2]	[3]	[4]	[5]
16	It is enjoyable	[1]	[2]	[3]	[4]	[5]
17	It is exciting	[1]	[2]	[3]	[4]	[5]

18	It makes me feel restless if I do not use the Internet	[1]	[2]	[3]	[4]	[5]
19	It is an interactive medium that uses hyperlinks which makes me move from one web page or website to another	[1]	[2]	[3]	[4]	[5]
20	It is an interactive medium that is easy to use	[1]	[2]	[3]	[4]	[5]
21	It is an interactive medium that puts me in control as I can decide which web page(s) or websites to access and not access	[1]	[2]	[3]	[4]	[5]
22	It makes me feel like I belong to a group	[1]	[2]	[3]	[4]	[5]
23	It removes my feeling of loneliness	[1]	[2]	[3]	[4]	[5]
24	It is also used by my family and friends	[1]	[2]	[3]	[4]	[5]
25	It makes me be at par with my peers	[1]	[2]	[3]	[4]	[5]

PART 4: PROBLEMS FACING STUDENTS IN USING THE INTERNET

14. Of the following, what problems do you face when using the Internet at KSPS?

Slow Internet connection [ ]

Insufficient awareness on the educational electronic resources available to KSPS library users [ ]

Lack of adequate Internet use skills [ ]

Difficulties in finding relevant information from the Internet [ ]

Overload of information on the Internet [ ]

Inadequate computers with Internet access [ ]

Lack of motivation from some lecturers who don't encourage students' using Internet resources' references [ ]

Any other (*Please specify*) _____

THANK YOU VERY MUCH FOR YOUR PARTICIPATION IN THIS STUDY.

APPENDIX II:

FOCUS GROUP DISCUSION INTERVIEWGUIDE

Topic 1: Use of Internet services

1. (a). Which of Internet services do you mainly use?

   (b). What reasons explain why you do not use certain services?

   (c). What reasons explain your frequency of use of these Internet services?

Topic 2: Use of e-learning resources

2.(a) Do you use the KSPS electronic learning resources (e-resources)?

   (b) Which of KSPS library e-resources/databases do you use most?

   (c) Why do you use certain e-resources and not others?

   (d). What reasons explain your frequency of use of these Internet services?

Topic 3: Uses of the Internet and motivations for Internet use

3. (a) What would you say you are the main uses for your own use of the Internet ?

   (b) What motivates you to use the Internet?

Topic 4: Challenges faced by students when using the Internet

4. What problems do you face when using the Internet at KSPS?

APPENDIX III:

E-LEARNING RESOURCES PROVIDED THROUGH THE KSPS LIBRARY

E-resources/Websites	Brief description
Emerald Publishing Group http://www.emeraldinsight.com/	Provides access to 160 full text journals and reviews from 300 top management journals. Covers a wide range of disciplines such as; Human Resources Management, Information Sciences, Marketing, etc.
Blackwell Publishing http://www.blackwell-synergy.com	Has over 1 million articles from over 850 journals. Some core areas covered include: Business, Economics and Finance; Computing and Technology; Humanities; Law and Criminology; Mathematics and Statistics; Social and Behavioural Sciences.
Oxford Journals http://www.oxfordjournals.org	Journals are covered in the areas of Humanities, Law, Life Sciences, Mathematics and Physical Sciences, Medicine and Social Sciences.
African Digital Library (ADL) http://www.aficandl.org.za	A collection of e-books that can be accessed and used free of charge by any person living on the African continent. Covers a wide range of subjects ranging from Arts & Craft, Astronomy, to Mathematics, Technology and Engineering, Medicine, Health & Education.
EBSCO http://search.ebscohost.com/login.com	Contains over 10 e-resource databases providing many full-text information sources
Wiley Interscience http://www3.interscience.wiley.com	Provides access to full text journals, reference works, books, and databases from around the globe in areas such as Business, Computer Science, Law, Mathematics and Statistics, Psychology and Social Sciences

Gale http://infotrac.galegroup.com/itweb/kspls	Covers databases from Arts and the Humanities to Social Sciences, Science and Technology. The database meets the research needs across all academic disciplines. Many journals, news magazines and newspapers can be accessed via these databases
Springer http://springerlink.com	Covers over 2 Million e-documents in various disciplines such as Business, Economics and Finance; Computing and Technology; Humanities; Law and Criminology; Mathematics and Statistics; Social and Behavioural Sciences.

Source: Websites of the various e- resources