INFLUENCE OF INTERNET-ADDICTION ON ACADEMIC PROCRASTINATION AMONG STUDENTS OF AHMADU BELLO UNIVERSITY ZARIA KADUNA STATE-NIGERIA

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A DISSERTATION SUBMITTED TO THE SCHOOL OF POSTGRADUATE STUDIES, AHMADU BELLO UNIVERSITY ZARIA, IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF MASTER DEGREE IN EDUCATIONAL PSYCHOLOGY

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MARCH, 2017

DECLARATION

I hereby declare that this Dissertation titled 'Influence of Internet-Addiction on Academic Procrastination Among Students of Ahmadu Bello University Zaria, Kaduna-State Nigeria' has been conducted by me in the Department of Educational Psychology and Counsellingunder the supervision of Dr. Aisha I. Mohammed and Dr.HadizaTukur. The information derived from the literature has been duly acknowledged in the text and a list of references provided. No part of this dissertation was previously presented in another Institution.

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ABDULGAFAR, ABDULWASIU **DATE**

CERTIFICATION

This Dissertation titled 'INFLUENCE OF INTERNET-ADDICTION ON ACADEMIC PROCRASTINATION AMONG STUDENTS OF AHMADU BELLO UNIVERSITY ZARIA, KADUNA-STATE NIGERIA' by myself meets the regulations governing the award of a Master's Degree in Educational Psychology and Counselling of Ahmadu Bello University, Zaria, is approved for its contribution to knowledge and literary presentation.

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DEDICATION

This research work is dedicated to my father AlhajiAbdulgafar Yusuf and my mother Hajiya Zahra Abdulgafar for their immense support and prayers. May Allah bless both of you till eternity.Ameen.

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My foremost appreciation goes to Almighty Allah who spared my life in good health and permitted me to embark on this study, indeed it is a favour that cannot be quantified. I also, wish to express my deepest appreciation to my first and second Supervisors in persons of Dr. A.I. Mohammed and Dr. H. Tukur for their unparalleled patience in guiding and correcting me towards the completion of this work.

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OPERATIONAL DEFINITION OF TERMS

For the purpose of this study, the following terms are exclusively defined by the researcher in relation to this work as:

INTERNET-ADDICTION:-This is the indiscriminate use of internet social media platforms such as Facebook, Twitter and WhatsApp for entertainment, socialization and non-academic purposes which has the potentiality of interfering negatively on a student's personaland or academic life.

ACADEMIC PROCRASTINATION: - This is the deliberate delay of compulsory Academic work such as completion of assignments, writing of projects and reading for exams till the deadline before embarking on them.

ABBREVIATIONS

SNSs	=	Social Networking Sites
WWW	=	World Wide Web
GSM	=	Global System for Mobile Communications
E-mail	=	Electronic mail
IRC	=	Internet Relay Chat
FTP	=	File Transfer Protocol
ISP	=	Internet Service Provider
ICT	=	Information and Communications Technology
HTTP	=	Hyper Text Transfer Protocol
ADSL	=	Asymmetric Digital Subscriber Line
BBSs	=	Bulletin Board Systems
AOL	=	Americans On-Line
LAN	=	Local Area Network
WAN	=	Wide Area Network
PC	=	Personal Computer
NSFNET	=	National Science Foundation NET

IM = Instant Messaging

WTO = World Trade Organization

NNTP = Network News Transport Protocol

GPA = Grade Point Average

PIU = Problematic Internet Use

DSL = Digital Subscriber Line

SFTP = Secure File Transfer Protocol

UNESCO = United Nations Educational Scientific and Cultural Organization.

ABSTRACT

This study examined the influence of Internet-Addiction on Academic Procrastination among Students of Ahmadu Bello University Zaria, Kaduna-State Nigeria. The study stated three objectives, three research questions and three hypotheses. Research design used for the conduct of the study was the Expost Facto design. The population for the study was 33,470, a sample of 380 proportionate male and female students were used for this study. The Bio data form, adopted Internet Addiction Test IAT (Young, 1998) and adopted Procrastination Assessment Scale for Students PASS (Solomon &Rothblum, 1984) were instruments used for collecting data for the study. Both instruments of IAT and PASS have reliabilities of 0.90 and 0.79 respectively. The data collected were analyzed using mean, standard deviation; t-test and ANOVA to answer the research questions and hypotheses. The findings of the study revealed that significant difference exists between male and female students in their level of internet-addiction and academic procrastination (t= 3.427, p= 0.004). Furthermore, significant differences exists among students of different levels of study in their level of internet-addiction and academic procrastination (f=12.56, p=0.000), also, a significant difference exists among students of different faculties of study in their level of internet-addiction and academic procrastination (f=5.173, p=0.000). Finally, the study recommend that the University management, Psychologists, as well as lecturers, parents and or guardians of students regularly sensitize their wards on the negative influence of internet social media platforms on their personal and or academic life with emphasis on the males and Arts and Social Sciences students' altogether.

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CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Internet revolution has indeed redirected the course of human endeavors in all ramifications of our lives, it has made an unprecedented impact on all human activities since it was developed in the third-quarter of the 20th century, including education, business, banking, entertainment, governance, communication, intra-cultural and inter-cultural relations and advancements between tribes, states, nation-states and or continents in the most astonishing manner ever witnessed before in the entire earth. Thus, the amazing reshaping and transformation of education and the future of learning to a new fashion and unusual platform all over the globe via internet cannot be over-emphasized.

It is not improper to say that internet technology has re-structured our entire universe in general, as has triggered a new world order on how human beings interact and communicate; thus, the growth of digital technologies and the growth of internet technology have enabled quick reproduction of information and its global distribution, and have also led to the proliferation of information resources available through different formats and modes of representation and easy access to it has been adjudged to be unprecedented in human history. Indeed internet technology has dramatically changed educational landscapes and contributed to the resurgence of resource-based learning in the modern world (Hill &Hannafin, 2011)

Furthermore, the invaluable impact of internet to teaching and learning environment is worth mentioning, since via internet, students can easily get access to all the learning materials needed for their studies and as well get information through several internet-domains, apparently,

the continuous growth of online universities that foster distance learning all over the universe are vivid examples of the inestimable values and benefits that internet has bequeathed to education and learning in recent times.

However, as with all technologies, in addition to facilitating student's educational lives to a laudable extent, internet has been recently fingered to be the major source of students' numerous academic and moral problems as well as other internet users. To note, indiscriminate use of internet creates a vast mixture of positive and negative influences on internet-users that cannot be detached from the overall successes or failures that students will eventually attain in their educational pursuit and in their lifetime in general (Nwabueze&Aduba, 2014)

To wit, internet provides all people, irrespective of their age, gender, geographical locations, cultural backgrounds and or religious inclinations with potentially entertaining distracters such as the social media platforms that facilitates dual or group chatting like Facebook, Watsapp, Twitter, Instagram, as well as access to online games and other forms of music and movies entertainment which all have grave consequences on the active participants, most especially students of tertiary institutions.

Students of tertiary institutions are noted for their high reliance on internet for the facilitation of their constant communication with friends, family members and other distant relatives, thus, one of the most common reasons for the high use of internet by students of tertiary institutions is to communicate and relate with friends. It is pertinent to note that internet-addiction has been fingered to be the major cause of delay in completing mandatory academic work by students in order to spend more time online, feeling that life without internet is boring, feeling upset and irritated when internet cannot be used at predetermined times as well as feeling lonelier when compared with those peers who do not excessively use internet (Nalwa&Annand,

2003).What is then the influence of internet-addiction on academic procrastination among students in Ahmadu Bello University Zaria? And how can we help to curb or reduce internet-addiction among students? These and other issues constitute the thrust of this study.

1.2 Statement of the Problem

Internet-addiction is the indiscriminate and excessive use of internet, it is popularly adjudged to be a common Psychological disorder of the 21st Century which is very prominent among male and female young adults between the age range of 15-30 years and this anomaly has become more apparent and obvious among students of tertiary institutions as shown by data in recent times (Ahmed &Qazi, 2011). Students of tertiary institutions and Ahmadu Bello University Zaria in particular have been noted for their high reliance on internet in order to seek solace or escape from anxiety, stress, loneliness, and or depression as well as to gain emotional support. Some other students have also become addicted to internet due to reasons such as continued unhappiness, being overly shy of others and their inability to relate with their peers among other numerous reasons, whereby in trying to escape from the aforementioned they end up becoming Academic Procrastinators.

Most academic procrastinations are sustained by students due to excessive use of internet or internet-addiction which is widely acknowledged to be the third most addictive behavior in our present age after alcohol and drugs. It was reported in a review research article by Chou, Condron and Belland (2005) on internet-addictionthat most internet-addicts had suffered from poor time management skills while using internet among other frequent problems. It is noteworthy that this negative trend is on the increase currently and students of tertiary institutions, particularly those of Ahmadu Bello University Zaria are not left out of this. It is disturbing to note that it may be almost impossible to relieve them of such addiction if not

quickly detected. The internet-addiction may manifest via several ways which covers varied degrees and or modes of internet-usage such as cyber-sex addiction, cyber-relationship addiction, information overload, and or compulsions etc (Young, 1999).

Cyber-sex addiction is the continuous surfing of internet pornographic sites for attainment of sexual pleasure by internet-addicts, cyber-relationship addiction is also the excessive use of social networking sites to create relationships with other people on the internet rather than spending such crucial time in accomplishing academic obligations such as assignments, projects, research, this may even destroy relationships with people in real-life. Information overload simply implies too much online surfing by people which ultimately leads to decreased productivity at school and also alienates one from his immediate family members and or friends in school. Compulsions also means the excessive time spent on internet games, trading, gambling and or auction activities which leads to over-spending and other numerous financial problems at school or the home.

Furthermore, internet-addicted students have been noted to highly exhibit varied negative emotional symptoms which range from feeling of guilt while in the midst of others, isolation of themselves from others due to such guilt, dishonesty about what they do online, euphoric feelings when online using smartphones or computer, inability to keep to fixed timings and schedules with people or the authority such as class or timings for tutorials, avoidance of compulsory duties such as assignments and projects, anxiety, depressions to mention but a few. In comparison, the physical symptomatic characteristics of internet-addicts are backaches due to very long sessions of sittings, headaches, weight gain or loss, insomnia which implies the inability of a person to sleep, as well as blurred or strained vision.

Obviously, the short-term effects of internet-addiction include non-accomplishment or postponement of mandatory school tasks otherwise known as academic procrastination, forgotten responsibilities, as well as weight gain and in some others weight loss. The long term effects are seen more in physical symptoms such as backache, neck pain and vision problems caused by strains and pains due to very long-time spent in staring at the screen of mobile phones or computer. To note, another long-term effect of internet-addiction can be bankruptcy especially when such time spent online is on shopping, gaming or gambling.

Oberlin College of Computer Science in Marlene (2016), opined that irrespective from being dependent on the internet for most of their life activities or achievement, addicts of internet may even develop 'technostress' wherein they internalize how a computer works, such as accelerated time and perfect results. It can also cause social withdrawal; making the individual to feel better at ease while interacting with people online rather than in their physical persons. What then is the influence of internet-addiction on Academic Procrastination and how can internet-addicted students be aided to achieve academic successes?

Based on the aforementioned issues outlined regarding internet-addiction, the study therefore deems it necessary to investigate on the influence of internet-addiction on academic procrastination among students of Ahmadu Bello University Zaria, Kaduna-state Nigeria.

1.3 Objectives of the Study

The objectives of the study are to:-

1. Examine the difference between male and female internet-addicted students in their level of academic procrastination in Ahmadu Bello University Zaria.

2. Investigate the differences among internet-addicted students of different levels of study in their level of academic procrastination in Ahmadu Bello University Zaria.
3. Determine the differences among internet-addicted students of different faculties of study in their level of academic procrastination in Ahmadu Bello University Zaria.

1.4 Research Questions

1. What is the difference between male and female internet-addicted students in their level of academic procrastination in Ahmadu Bello University?
2. What are the differences among internet-addicted students of different levels of study in their level of academic procrastination in Ahmadu Bello University Zaria?
3. What are the differences among internet-addicted students of different faculties of study in their level of academic procrastination in Ahmadu Bello University Zaria?

1.5 Research Hypotheses

1. There is no significant difference between male and female internet-addicted students in their level of academic procrastination in Ahmadu Bello University Zaria.
2. There is no significant difference among internet-addicted students of different levels of study in their level of academic procrastination in Ahmadu Bello University Zaria.
3. There is no significant difference among internet-addicted students of different faculties of study in their level of academic procrastination in Ahmadu Bello University Zaria.

1.6 Basic Assumptions

For the purpose of this study, the following assumptions are:-

1. It is assumed that gender has influence on Internet-addiction and academic procrastination level of students in Ahmadu Bello University Zaria.

2. It is assumed that students' level of study has influence on their internet-addiction levels.

3. It is assumed that faculty of study has influence on the internet-addiction level of students in Ahmadu Bello University Zaria.

1.7 Significance of the Study

Internet-addiction among students is currently a major cause of concern for researchers parents, and guardians, as such finding the possible ways of addressing this negative trend that has grave impact on the academic procrastination of students in tertiary institutions such as those in Ahmadu Bello University Zaria is inevitable for the betterment of education, therefore, the findings in this study are aimed at modifying students' behavior, particularly those of AhmaduBello University Zaria; to be conscious of the ample advantages and negative effects of excessive internet-use, thus, imploring them to take advantage of the internet for their academic and general successes in life.

The research findings is also aimed at assisting Lecturers in Ahmadu Bello University Zaria with substantive evidence and information in order that they may understand the salient reasons why students do not meet with their daily or weekly academic obligations such as completion of assignments and group works due to internet-addiction. The outcome of this study is also hoped that parents or guardians of wards will be prompted on the reality that internet is among the most common sources of distraction on the commitment of their wards to learning.

Furthermore, the study is projected to provide psychologists and or counselors with useful clues and solutions that may be employed in helping internet-addicted students among their clients as well as prompting their minds towards the prevalence of students' internet-addiction as an emerging threat to academic successes of students. The study is also intended to serve as an awareness to tertiary institutions, such as the management of Ahmadu Bello University Zaria in particular, for enactment of necessary laws or regulations that may be used to regulate addiction of students to internet and restrict them from immoral behavior, particularly in University campuses.

The research findings would also be of ample importance to policy makers and the general society as well as clinicians and or Psychologists for helping internet-addicted students, for the organization of seminars and or workshops that may sensitize the general public on the ills of internet-addiction. Furthermore, publishing this research and the recommendations inherent in Journals of Educational Psychology would serve as a reference material for Psychologists, Counselors, Governmental and Non –Governmental Organizations and other related groups or Agencies of Education. Finally, the study is intended to be an eye-opener to all intellectuals, and or lecturers, most important to note, it is meant to serve as a meaningful contribution to the already existing body of knowledge on internet-addiction and academic procrastination.

1.8 Scope and Delimitation of the Study

The scope of this study isAhmadu Bello University Zaria, Kaduna-State Nigeria, which has a total number of twelve faculties. Specifically, the study is limited to the undergraduate students of six major faculties of the university only; they are Administration and Arts, Medicine and Science, as well as Education and Social sciences. This is because the number of students

enrolled in these faculties is higher if compared with those of other faculties, as well as the fact that they were chosen based on their absolute distinctiveness of disciplines in the spheres of learning; two (2) pure Arts, two (2) pure Sciences and two (2) Humanities faculties only out of the entire 12 faculties of the University. The key variables of this study are internet-addiction and academic procrastination. The study will also involve the male and female students as well as all the different levels of students commensurately from the aforementioned selected faculties in Ahmadu Bello University Zaria.This is hoped to pave way for better comparison and effective generalization of results of the studies regarding students gender, level and their faculty of study.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

This chapter presents the review of the literature based on the conceptual frame work of internet, internet-addiction and academic procrastination. It also delved on theories of procrastination; Social Learning Theory, Temporal Motivation Theory, as well as Uses and Gratification Theory;

The related literature will be reviewed under the following headings: Conceptual framework, Concept of Internet, Concept of Internet-Addiction Disorder, Concept of Academic Procrastination, Domains of Internet, World Wide Web, Electronic Mail, Telnet, Internet Relay Chat, File Transfer Protocol, Internet Service Provider, Social Gaming, Internet News Group, Theoretical framework, Social Learning Theory, Temporal Motivation theory, Uses and Gratification theory, Review of Related Studies and Summary.

2.2 Conceptual Framework

2.2.1 Concept of Internet

The internet is a system of architecture that has revolutionized communications and methods of commerce by allowing various computer networks around the world to interconnect. It is sometimes referred to as "network of networks". Encyclopedia Britannica (2012) suggests that since the emergence of internet in the United States by the year 1970, its presence was rarely visible to the general public until the early part of 1990s, by the beginning of the 21st century,

approximately 360 million people or roughly 6 percent of the world's population was estimated to have access to the internet and by 2010, it was believed that more than half of the world's population was having access to the internet wireless networks. Presently, this number is rapidly increasing. The internet is composed of many interconnected computer networks, each network may link tens, hundreds or even thousands of computers, enabling them to share information and processing power. The internet has made it possible for people all over the world to communicate with one another effectively and inexpensively. The internet has made it possible for people all over the world to communicate with so much ease that has transcended the traditional mode of broadcasting media such as radio and television. Thus, to note, the internet does not have a centralized distribution system, instead, an individual who has internet access can communicate directly with anyone else on the internet, post information for general consumption, retrieve information, use distant applications and services or buy and sell products (Encarta premiums, 2009).

In the sphere of education and learning, the internet has been clearly adjudged to be an invaluable and inalienable content of the Information and Communications Technology (ICT), which is due to its varied ways of improving learning because through internet, course materials can be offered to students, which is independent of time, distance or place, as well as flexibility of learning which is only possible due to internet modularization. Also, an ever-increasing number of students are gaining access to internet whether at home or on campus and more information is being made available through internet web search engines that assure the accessibility of the materials. To note, GroupWare also allows synchronous communication between teachers and students worldwide (Adamu, 2013).

Bailey and Karen (2006) observed that internet-technologies-usage have fundamentally altered the technological and economic landscape of the world and so, it is now possible unlike before, to make quantum leaps in the use of technology for scholarly activities, communications, online learning and resources, also, institutional repositions are recently being developed on university campuses as part of the institutional libraries across the world, all due to the goodwill of the internet.

Fundamentally, internet-usage in learning spheres and life in general has virtually swallowed all the other mass media such that it is now possible for one to talk about mediated mass media. For instance a cellular telephone is now an integrated medium that gives you a telephone, a keyboard for typing, a TV-screen and an internet- connected computer altogether in one devise, and that is why the devices are referred to as "Smartphones". To wit, internet has replaced all other media over the last decade as the biggest ever network channel and source of human information (UNESCO, 2005).

2.2.2 Concept of Internet-Addiction Disorder (IAD)

Internet-addiction is a disorder which means the excessive and indiscriminate use of internet that may constitute threats to the well-being of an individual and dissociate him or her from the societal members as well as interfere negatively to ones daily life. It is also called Problematic Internet Use (PIU), Internet overuse or Compulsive Internet Use (CIU). Internet Addiction Disorder is usually sub-divided into many sub-types due to their activities; this is because the activity becomes disorder only when they have the power of interfering with an individual's normal life. The subtypes of internet activities may either be gaming, online social networking, emailing, blogging, inappropriate internet pornographic use or shopping addiction etc.Psychologists have opined that internet-addiction is only a subset of the general technological

addiction of our present times in addition to the fact that prevalence of addiction varies considerably among countries as it is inversely related to the quality of life of the general populace (Cecilia, Li Angel& Yee-Lam, 2014).

According to a study in Korea on internet addiction disorder, it was observed that pathological use of the internet leads to negative life consequences such as loss of jobs, financial challenges and marriage breakdowns, also it was observed that 70% of Korean internet users reported playing online games whereby 18%of them were already addicted to the games. After completion of the study, the authors conducted another study using Kimberley Young's questionnaire and they found out that majority of the already addicted respondents suffered series of interpersonal difficulties and stress and those already addicted to online games wished they are able to live in the virtual world (Whang,Lee,Chang, Geunyoung, 2003).

2.2.3 Concept of Academic Procrastination

Procrastination is derived from the Latin *pro*, meaning 'forward, forth, or in favor of', and '*crastinus',* meaning 'of tomorrow'. However, not everyone believes it means the same thing by going beyond the notion of delay; it is defined to mean the act of or habit of procrastinating or putting off to a future time; delay. It also means the deliberate delay of something that must be done, often because it is unpleasant or boring. Sabini, Silver Beswick& Mann in Islak (2011) psychologically defined procrastination as the illogical delay of behavior or the act of delay in beginning or completing an intended course or action.

The aforementioned definitions are adjudged to be useful due to the number of elements used in defining procrastination, thus, procrastination is usually seen as an exclusive negative phenomenon, requiring the inclusion of some characteristics such as psychological pain or

irrationality. Procrastination is also envisaged to only deal with intended tasks as there may be thousands of things one can be doing right now and it becomes cumbersome to think that we are putting them all off.

Academic procrastination is defined as the avoidance of performing academic tasks that are meant to be compulsorily accomplished within a particular fixed time till the last hour before the learner embarks on them. Students sometimes procrastinate until the 'last minute' before a deadline by engaging in more pleasurable (less important) things in place of less pleasurable (more important) ones, or carrying out less urgent tasks instead of more urgent ones, thereby delaying more important tasks to a later time or date unduly. Students are known for academic procrastination through delay of academic work such as assignments, projects or research work, or others which may lead to feelings of guilt, inadequacy, depression, anxiety, and self-doubt regarding the personality of the individual (Sirois, 2007).

Jowker and Delavarpur (2006) defined academic procrastination as a pervasive and permanent desire on the part of the learner to postpone academic activities, which almost is accompanied by anxiety. Obviously, deferring study to the night before exams while accompanied by anxiety and haste can be regarded as the most precise and obvious instance of academic procrastination. Chu & Choi (2005) viewed procrastination to be any lack or absence of self-regulated performance and the tendency of behavior to postpone what are necessary to reach a desired goal. Also, Solomon &Rothblum (as cited in Howell & Watson, 2007) described Procrastination as the tendency to delay the beginning or completion of important tasks to the point of discomfort. Other researchers defined Procrastination to be the inability of an individual to gain from past experience or events, thus making the Procrastinator to continue undermining the importance or difficulty of the task ahead (Lay, 1986).

2.3 Domains of Internet

2.3.1 World Wide Web (WWW)

The World Wide Web is a computer- based network of information resources that combines text and multimedia. Information on the World Wide Web can be accessed and searched through internet which is a global network. The World Wide Web is often simply referred to as a web.

The Web uses multimedia which means that information can be displayed in a variety of formats. A user can move seamlessly from any document or web page that is stored on the computer to a document or web page stored in another computer. Users can also read texts, view pictures, watch information, listen to sounds and even explore interactive virtual environment on the web (Encarta premiums, 2009). The development of the World Wide Web began in 1980by Tim-Banners-Lee, an independent contractor at the European Organization for Nuclear Research (CERN), and his colleagues at an international scientific organization based in Geneva-Switzerland. They created a protocol, hypertext transfer protocol (HTTP), which standardized communications between servers and clients. Their text- based web- browser was made available for general release in January 1998. The World Wide Web gained rapid acceptance with the creation of a web browser termed Mosaic, which was developed in the United States by Mark Andreessen and others at the National Centre for Super Computing Applications at the University of Illinois and was released in September 1993. This allowed people to use the web as a sought of “point and Click” graphical manipulation that had been available in personal computers for some years. By April 1994, Andreessen cofounded Netscape communications and it became the dominant web browser soon after its release in December 1994. To note, by the

middle of the 1990's, the World Wide Web already had millions of active users (Encyclopedia Britannica, 2012).

That is to say, the web offers a place where companies, universities and other institutions and individuals can display information about their products, services, facilities or research or even their private life. Only a small percentage of information on the web is restricted to subscribers or other authorized users. The majority of the web pages are available to anyone who can access Smartphones or computers that connects to the internet (Douglas, 2009).

The web notably became the market place for many companies selling their products or other services and also as a forum for people to exchange opinions and information. It is an undisputable reality that most government agencies around the world, museums, libraries, universities, and other institutions posts information on the web for the general public.

HOW THE WEB WORKS

To access the web, a user must have a computer connected to the internet and appropriate software. The connection between the user's computer and the internet can consist of a permanent dedicated connection or a temporary dial-up connection. A dial-up connection uses a modem to send data over the telephone system to another modem. This offers the lowest costs but requires the user to wait for the connection to be established each time the modem is to be used. A permanent connection uses a technology such as Asymmetric Digital Subscriber Line (ADSL or DSL), which is a cable modem or a dedicated leased circuit. It is obvious that it is always static in the place and ready for use. Permanent internet connection costs a lot more and covers a higher capacity, thereby sending more data at a faster speed.

2.3.2 Electronic Mail (e-mail)

Electronic mails are the messages transmitted and received by digital computers through a network. An e-mail system allows computer users on a network to send texts, graphics and sometimes audio sounds and animated images to other users.On most networks, data can be simultaneously sent to a universe of users or to a selected group or individual. Network users typically have an electronic mail box that stores and manage received correspondence. Recipients can select to view, print, save, answer, forward or otherwise react to communications. Many e-mail systems have advanced features that alerts users of incoming messages and permit them to employ special privacy features. Large cooperatives and institutions use e-mail systems as an important link between employees and other people allowed on their network. E-mail is also available on major public online and bulletin board systems, many of which maintains a free or low cost global communication networks.

Obviously, the electronic mail is the most popular reason people use the internet in order to create, send and receive messages, and one needs an e-mail program and an account on an internet mail server with a domain name such as yahoo, Google or Hotmail etc.To use an electronic mail, a user must have an e-mail that is created by adding a username to the e-mail server's domain name as in "hafizpresident@yahoo.com".

Rusins and Ambrose (2001), viewed that the electronic mail is a very popular service on the internet, it is an electronic message that is sent from one computer or Smartphone to another, anyone with an email account can send individual or group e-mail messages to anyone else or group that also have an e-mail account. In addition to sending messages, one can also include attachments, such as pictures, audios, videos or any other document. E-mails may also be forwarded to others that have any e-mail accounts.

A survey from the United States Annenberg center for the digital future reveals that in the year 2004, a decade after the birth of the graphical web, the internet was used by about three-quarters of Americans and online technology is a constant presence in two- thirds of American homes (www.digitalcenters.org as cited in McDermott 2008). E-mail is still the single most important reason people go online according to the survey, it is indeed determined that 70.2% of Americans actively use emails by the year 2008.

To understand the importance of email, one has to look back to the history of the internet when the ARPANET was established by the U.S military, by the late part of the 20th century, in order to send important files in distributed fashion between super computers. On these top-secret files rests the secret of the nation and along with the files comes messages such as: Sgt. Rumbolt, run this program at zero-eight-hundred hours…. (McDermott, 2008).

2.3.3 Telnet

Telnet is the networking protocol used by computer users to remotely access a computer system. It was first made available as a result of work on ARPANET the precursor to the internet in the late 1960s. Since computer users needed a way to remotely connect different types of computers, a committee of researchers from industries and the academia was instituted in response to develop the first proposal for the Telnet protocol in 1971 and they were successful to produce the first version of Telnet in the year 1983 and subsequently, Telnet has been revised severally which oversaw the tremendous growth of its users. Telnet was developed, extended and standardized as Internet Engineering Task Force (IETF) as the first of Internet Standards which also denotes the name for 'teletype network' (Andrew, 2011, Christoph& Herald, 2013)

Telnet technology relies on a network virtual terminal, an environment where different computers use the same rules to communicate. This helps to overcome communication differences between different computers and this feature allowed telnet to grow beyond simple remote access over the years.Among the numerous uses of the Telnet are Bulletin Board Systems (BBSs), library card catalogs and text based games which are just a few, many of these uses are now carried-out by Web-based systems which are currently in use extensively.It has been observed that Telnet does have its short comings because many scientists consider it as a security risk. Telnet sends all data as plain texts which means that everyone can read what is sent. It also implies that any intruder can exploit the potential bugs in the Telnet programming to access restricted systems.

Subsequently, many experts recommended the disabling of Telnet and switching to secure shell (SSH), which is a remote access protocol that encrypts all traffic, because of this, SSH could conceivably be the replacement to Telnet as a remote access tool in the nearest future. This combined with the reduction of other uses for Telnet makes the future of the protocol uncertain (Encyclopedia Britannica, 2012).

2.3.4 Internet Relay Chat (IRC)

This is a text-based chat was developed by JarkkoOikarinen in 1988 as the first of online chat forums in the world (Rusins&Ambrose, 2001).It is an application layer protocol that facilitates the transfer of messages in the form of texts. The chat process is enabled by a client-server networking model. The clients are usually computer programs that a user can install on his system. Through chat servers, clients transfer messages to other clients.

IRC is mainly designed for the enhancement of group communications in forums of discussion called channels, also, one–on-one communication via private messages as well as chat and data transfer, including file-sharing are among the numerous advantages this application brought to internet users (Wang, Wallace, 2004).

It has also been observed by current researchers that over the past decade IRC usage had been declining to an all-time low because since the year 2003, about 60% of its users and almost half of its channels have been lost. Even though it is still one of the most widely used chat forums on the internet today, many other options are available for chatting purposes (Rusins& Ambrose, 2001). McDermott,(2008), further observed that there are other few chatting platforms and instant messaging services which are completely Java-based; requiring no extra software, since there is already an existing model browser inherent the device.

Other categories for internet chat include the following as stated by McDermott (2008) are:-

1) WEB CHAT: - Several Web Chat variations of the internet abound and many of them incorporate graphics, audios and videos. A good number of web chat outlets are hosted by search engine sites such as Yahoo, Snap, and Excite. Search engines are the tools that enhance people to locate information on the internet.
2) PROPRIETY CHAT: - This requires the intending chat user to download and install software from a company in order to use the company's server or IRC. Examples of such are Microsoft Chat, AOL and Prodigy etc.
3) BUDDY LISTS: - This is another new communication option in replacement of IRC. The program helps the user to specify his list of friends; furthermore, it also indicates their online presence to the client when active. "I seek you" (ICQ) and America Online Inc. (AOL) are considered the most popular among the buddy lists.

4) VIRTUAL WORLDS: - In a virtual world, one can chat, explore, and communicate with other people of the virtual world. A user of the virtual world is represented by an Avatar, which is considered a virtual character. The character could be animated, made in the form of an object or humanoid depending on the type of virtual world. It has become customary in some virtual worlds that the user can create his character that may move, talk or as well manipulate tools. “The Palace” is a typical example of the virtual world that is considered as a platform or tool for interaction (Kevin, 2014)

2.3.5 File Transfer Protocol (FTP)

File Transfer Protocol is a computer application that is used to transfer files from one computer to another over a Local Area Network (LAN) or a Wide Area Network (WAN) such as the internet. It was first proposed by engineers in 1971 and was developed for use on host computers at the Massachusetts institute of technology, file transfer protocol allows for reliable and swift exchange of information between computers with different operating systems and machine architectures (Parker, 2005).

File transfer protocol advanced along with computer technology throughout the 1970’s and 80’s, thereby becoming an international standard in 1985. In the 1990’s, the World Wide Web transfer hypertext transfer protocol (HTTP) began to take over as the chief means of exchanging smaller text and image files between computers over the internet. However, FTP remained the primary way of transferring larger and more complex files such as database files programs, music and videos. Many organizations also use the file transfer protocol because it can be run automatically, requiring no user input. This is useful for the transfer of files at regular times without having to wait for business hours. File transfer protocol is extensively used by web

designers and developers to upload web pages and graphics into web servers, which is the particular thing that a standard web browser cannot do.

The open design of file transfer protocol even though revolutionarily, poses a security risk that was not considered important in the 1970s when users were on LAN's with one organization. FTP sends all information as plain text which means that users' names, password and command sent over the particular network can be intercepted, read and exploited by cyber-criminals. Currently, most security experts recommend switching to secure FTP (SFTP) for transferring files (Encyclopedia Britannica, 2012).

2.3.6 Internet Service Provider (ISP)

This is a company that provides internet connections and services to individuals and organizations. In addition to providing access to the internet, ISPsmay also provide software packages such as browsers, e-mail accounts and a personal Website or homepage. ISPs can also host websites for businesses and build the websites themselves. The ISPs are all connected to each other through network access points and public network facilities on the internet backbone.

The rise of commercial internet services and application helped fuel rapid commercialization of the internet and also led to several other factors like the introduction of the personal computer (PC) and the work station in the early 1980's which is acknowledged to be a development that in turn fuelled unprecedented progress in integrated circuit technology and an attendant rapid decline in the prices of computers in the world. Other factors like the emergence of the Ethernet and other local area network (LANs) to link personal computers and the restructuring of the AT&T cooperation in 1984, prompted the U.S National Science foundation

to take advantage of the various new options for the development of its national level digital backbone service, known as NSFNET (NSFNET, 2007)

In 1988, the U.S Corporation for National research initiatives received approval to conduct an experiment linking a commercial e-mail service (MCI Mail) to the internet. This application was the first internet connection to a commercial provider that was not also part of the research community. The approval quickly followed to allow other e-mail providers access, and the internet began its first explosion in the traffic of the globe thenceforth (Encyclopedia Britannica, 2012).

2.3.7 Social Gaming

One to one or too many communications is only the most elementary form of internet social life. The very nature of the internet makes special distances largely irrelevant for social interactions. Online gaming has moved gaming from simply playing a game with friends to a rather complex form of social life in which games of virtual reality spills over into the physical world. An example is the case a very popular game known as Ever- Quest, a popular electronic game with several hundreds of thousands of players. Properties that have been acquired in the online game have been severally sold on the online auction site, e-Bay, and characters with particularly special skills sets are also available for sale. This has led economists to begin the study of such virtual economies, some of which now exceeds the gross national products of countries in Africa and some parts of Asia.

Millions of other people have created online game characters for entertainment purposes. Gaming has created online communities, but it has also allowed for a blurring of the boundaries between the real word and the virtual one. It was reported that in Shanghai, a gamer stabbed and

killed another person (gamer) in the real world over a virtual word used in Legend of Mir 3 (Rheingold, 2000).

In South Korea, violence surrounding online gaming happens often enough that the police do refer to such murders as “off-line PK”,a reference to player killing (PK), or player versus player lethal contests, which are allowed or encouraged in some games. By the year 2001, crimes related to lineage had forced the South Korean police to create special cybercrimes units to patrol both within the game and offline. Potential problems from such games are not limited to crime. Virtual life can be additive. Recent reports have it that most often players do neglect their families, school, work and even their health to the point of death, which have been very common (Encyclopedia Britannica, 2012).

McDermott (2008) viewed that playing online games and other general goofing around on the web is a legitimate path to computer mastery, although she stated that such games can make a lot of noise and attract crowds, the games monopolize public access terminals better used to help serious researchers to find information they need, that is, it invariably serves as a distracter from learning.

2.3.8 Internet News Group

The internet news group is a discussion forum or a type of bulletin board. Each “board” is dedicated to discussion on a particular topic. The difference between a news group and mailing list is that with a news group you can select the topics you want to read. These messages are stored on a news server which is a computer that contains the necessary news group software. It is known and acknowledged by all and sundry that the internet opened up new communication possibilities. The e-mail has already led to a substantial decline in the traditional “snail mail”,

(IM) or text messaging, and this continues to expand, especially among youths with the convergence of the internet and cellular telephone access to the web. Indeed, mail has become a particular problem in classrooms where students often surreptitiously exchange notes and messages via wireless communication devices from mailing lists to buddy lists. E-mails have been used to organize "smart mobs" that converge in the physical world. Examples includeprotests, organizing spontaneous performance art and shopping.

To note, people congregated before the internet existed, but the changes brought by mass e-mailings have been in the speed of assembling such events. For example in February 1999, activists began planning protest against the November 1999 world trade organization (WTO) Meetings in Seattle, Washington, using the internet, organizers mobilized more than 50,000 individuals from around the world to engage in the demonstrations that effectively altered the WTO agenda, in the wake of catastrophic disasters, citizens have used the internet to donate to charities in an unprecedented fashion. Others have used the internet to re- unite family members or to match lost pets with their owners. The role of internet in responding to disasters, both natural and or deliberate remains the topic of much discussion of people, as it is unclear whether the internet can actually function in a disaster area when much of the infrastructure is destroyed. Certainly during the September 11 2001 attacks, people found it easier to communicate with loved ones via the net in New York City than through the overwhelmed telephone network (Denis, 2012)

Rusins and Ambrose (2001), viewed that a World Wide Web networks of computers called USENET facilitates the transmission of messages among the news servers. The news servers utilize the Networks News Transport Protocol (NNTP) to connect with other USENET news servers. This protocol also makes it possible to distribute messages to anyone using the

news- reader. To find groups and participate in discussions that interest you, one needs a news-reader. This software enables one to read and post messages to a newsgroup. Many e-mail programs contain a news reader. If your email programs do not contain a news- reader or you want those with many features, many are available for download through the internet. There are over fifty thousand different newsgroups and their number is increasing by each day. These newsgroups are easy to navigate because they are organized by subject-matters into hierarchies. There are eight major subject- headings. Each subject heading is broken down into sub-categories and there are alternative hierarchies thereof (Rusins& Ambrose, 2001). The eight hierarchies are depicted in Table 2.3.8.1.

Table 2.3.8.1

TABLE OF HIERARCHIES

S/N	Hierarchies Abbreviation	Description	Examples
>	Comp.	Computer science and computer related topics	Comp. information systems
>	Humanities	Fine Arts, literature discussion.	Humanities, classics
>	Misc	Anything that doesn't fit within the other categories	Misc jobs.
>	News	USENET information	News announcement
>	Rec.	Recreational topics	Rec.music.info
>	Talk	Discussion and debates on Controversial subjects.	Talk environment
>	Sci.	Scientific discussions and research	Sci. energy.
>	Soc.	Social issues	Soc. culture.

Table 2.3.8.1 shows the hierarchies of internet news groups which are divided into eight main categories.

2.4 Theoretical Framework

2.4.1 Social Learning Theory

Albert Bandura propounded this theory in conformance withthe postulations of the behaviorist learning theories such as classical and operant conditioning, as well as adding that meditating processes occurs between stimuli and responses, while positing that behavior is learnt by individuals from the environment through observational learning, he strongly suggests that even when individuals have not yet executed a particular behavior they can still learn such by imitation, so learning takes place in a social context and occurs purely through direct observation or instruction even when there is no direct reinforcement. Albert Bandura also viewed that apart from Direct experience, learning may also occur through Observation of rewards and punishments which he referred to as "Vicarious Reinforcement" and also through Storage and processing of complex information via cognitive operations in the brain (Bandura Albert 1963 social learning and personality development. New York: Holt, Rinehart, and Winston).

Generally, social learning theory argues that individuals have the capacity of learning through imitation of others by observing the outcomes of such observed behaviors and currently, the use of internet by individuals have been observed to be on a high-rise due to the influence of peer groups and other agents of socialization, internet-usage is regarded with high esteemdue to the current status it carries within the elitist class, this is incontrovertible due to the fact that even the language and or courtesy of individuals change to a rather unusual format as well as their writing of words from their known spellings into slangs.

Users of internet are known to adopt a new style of communication by using unusual gestures, sounds, symbols and or slangs to convey information. For instance ROTFL, BRB, and

LOL are the shorthand for Rolling on The Floor Laughing (ROTFL), Be Right Back (BRB), and Laughing Out Loud (LOL), which may portend a grave danger to the language of the internet-user as well as may even increase the confusion between parties that are not used to such symbolic illustrations altogether, the abbreviations adopted during chatting or text messaging may eventually have a major impact on language generally (McGuigan, 2005). It is also worthy of note that users of internet go as far as being so used to chatting language and abbreviations that may in the long-run distort their mastery of the actual correct grammar or at worst interfere in their writing and or spelling ability during academic examinations.

The social learning theory is relevant to this study because it gives us a clue on why individuals aspire to acquire certain habits of their societal members such as those exhibited duringuse of internet through Modeling in order to be accepted and to belong to a particular class that they revere, even though there is no clear reinforcement given to the learner. So with the use of internet, learning environment has been significantly expanded from the usual cultural context that is known, to an unusual platform because learners are now able to expand the terrain of their learning or where they get new habits or behaviors either through Weblogs or blogs as they are now known or through websites which have been considered to be one of the most radical means by which learners are able to express themselves online currently (Thomas &Seely-Brown, 2011).

2.4.2 Temporal Motivation Theory

This theory is also known as the "Procrastination Equation", it is an integrative motivational theory developed by Piers Steel and CorlneliusKonig in the year 2006,and it represents the most recent developments attained in motivational research, whereby most other motivational theories can be derived therein, the theory emphasizes time as the most

criticalmotivational factor for any activity. The broad and integrative arguments laid down by this theory stems from the obvious fact that there is no single theory that can address motivation in its entirety, thereby leading to the incorporation of the most primary aspects of the multiple major theories, including expectancy theory, cumulative theory and prospect theory. Schmidt, Dollis &Tolli (2009) viewed that the Temporal Motivation Theory may further be of help to the understanding of the impact of time, and deadlines in particular, as well as dynamic attention allocation. This theory also suggests that the reason why people make any decision can be expressed using the following formula: Motivation= $\frac{\text{Expectancy x Value}}{\text{Impulsiveness x Delay}}$

The Motivation in the formula signals towards the drive, desire or preference for the course of the particular action, this may simply be regarded as the utility which Economists say "the higher the utility, the greater the preference, while the Expectancy and Value refers to the odds and challenges inherent vis-à-vis the rewarding outcome, Impulsiveness implies that the more impulsive one is in life, the less likely it is for such person to delay gratification and Delay implies that the longer the delay of an expected reward, the less motivated we may feel towards taking the action. The temporal motivation formula can be concurrently applied to the study of human behavior, the study of procrastination as well as to the study of goal- setting. The theory models the motivating power of approaching deadlines by arguing that the perceived utility of a given activity increases exponentially in as much as the deadline comes nearer, and so the applicability of the theory to the pervasive phenomenon of procrastination (Lord, Dienfendorff, Schmidt, Hall, 2010).

Temporal motivation theoryis relevant to this study because it gives us a clue on how or why learners or students in general appreciate learning, for instance we may find-out that a

student will deliberately not read for a forthcoming exams that he may be having within the next 8 weeks but will only continue to socialize via internet platforms either through the social media and or gaming sites or will as well continue to party or go to night clubs at the expense of his academics. Even though such a student wants to achieve good grades and has the option of choosing between socializing and studying, the student will prefer to socialize because he enjoys socialization better, as well as the fact that the reward for studying is not immediate, no wonder his motivation to study will be very low than his motivation to socialize, but as the period of study diminishes from many weeks to only some days remaining for his preparation towards the exam, the motivation of the student to study will surpass his motivation to socialize with friends. Essentially learners may be constantly caught in the dilemma of making a decision between various courses of action such as going to the gym, watching a TV program, cooking the next meal or reading or completing an assignment previously given by the Lecturer etc, certainly, moststudents are more likely to put off such difficult tasks that are tagged as havingnon-pleasurable outcomes for the more pleasurable and enjoyable outcomes, this is consequent to the fact that learners like their rewards not only to be large but to also be immediate, so most individuals will likely procrastinate any task that is unpleasant in the present and offers only rewards in the distant future only. The theory is also relevant to this study because it expatiates why and how students appreciate learning either through completing academic obligations or by procrastination of such obligations.

2.4.3 Uses and Gratification Theory

This theory was developed in 1974 by Blumler and Katz, it is also called “needs and gratifications theory”, Blumler and Katz suggested that media-users play an active role in choosing and using the media for specific gratifications and happiness, thereby rejecting the

hypodermic needle model that claims otherwise; that media-users have no input in how the media influences them; rather, media-users play an active role in the communication process and are goal-oriented in their choice of media use, so the needs serve as the motivation for the use of the particular media in question (internet or television). The theorists say that a media-user seeks out a media source that best fulfills the needs of the user, that is to say, rather than asking the question that what does media do to people as being questioned by other theories, Uses and Gratification theory focuses on asking the question of what do people do with the media. This theory also assumes that the user has the freedom of alternating between his choices in order to satisfy his needs, implying that if there is any effect consequent of choosing any other particular media by the consumer, such effects are consciously or at least actionably intended thus emphasizing that a human being is rational and active self-aware entity (Katz, Blumler&Gurevitch, 1975). To wit, the driving question of Uses and Gratification Theory is: "why do people use the media and what do they use them for? (Severin, Werner, Tankard, James, 2000)

Sorin Adam Matei (2010) viewed that Blumler& Katz who formulated this theory took a non-predictive perspective on media effects. They postulated that individuals only mix and match uses with goals, according to their specific context, needs, cultural and social backgrounds, he also viewed that the Uses and Gratifications are both connected to a set of human needs which are by necessity limited in number, they are Lasswellian communication needs, having to do with orientation, understanding or passing-on the tradition or the store of knowledge of any particular community. Thus, the explanatory power can only be grasped when accepting the postulate that given certain needs only, some particular media will be able to satisfy them. So Gratification can be predicted as far as the needs served by specific media

characteristics are known, this is because not all needs can be satisfied by just one medium. Theorists of Uses and Gratification have consistently argued that people's needs influence how they use and respond to any medium. Zillmann as cited by McQuail (1987) explained the influence of mood on choice of media; boredom encourages one to choose exciting contents the same way that stress encourages the choice of relaxing contents. The Internet is known to gratify different needs for different individuals; these needs may be associated to individual personalities, stages of maturation, backgrounds and social roles in life. Denis McQuail (1987) outlines the following as common reasons for media-use by different individuals:

- **Information-** This is a source for finding out about relevant events and conditions in the immediate surroundings or other societies in the world. People are able to satisfy their curiosity by seeking advice on practical matters for decision-making and other general interests through the use of the media, they also gain security through knowledge they learnt by self-education.

- **Personal Identity –** This is another reason for the use of the media, individuals use the media for seeking identity through finding modes of behavior, they try to identify with valued others in the media for exemplification.

- **Integration and Social Interaction** -The media is the best medium to gain insight into circumstantial conditions of others; social empathy through finding a basis for conversation and social interaction and having to carry-out ones social roles which enables one to connect with family, friends and societal members effortlessly.

- **Entertainment** –This is the best way of escaping or being diverted from imminent problems through emotional release, sexual arousal, getting intrinsic cultural or aesthetic enjoyment as well as through relaxation.

Blumler and Katz (1974) argue that the audience needs have a social and psychological origin which generates certain interests about the mass media which leads to differences in the pattern of exposure to the media by different audience which afterwards results to both gratification of needs and other unintended negative consequences but McQuail(1987) opines that an alternative stance on such statement by modern researchers is now that personal social circumstances and psychological dispositions together both influence the general habits of media–users as well as their beliefs and expectations about the benefits gained via the media, which is known to shape specific acts of media choice and consumption, which is afterwards followed by assessments of the value of the experience which consequentially leads to further media – use.

Uses and Gratification theory has been fingered to have a lot of limitations due to the impact of its use of retrospective self-report; this is because users of many media platforms such as the mass media, social media or the internet in general may not actually know why they choose to use the particular media, the reasons they may give for such aforementioned media-use may be the least important because individuals may only repeat reasons which they heard others give for their own use of any particular media, so the reasons they may give for engaging in the use of any media may actually be the least important to them since they may not be able to explain what impresses them about such media clearly (Ruggiero, 2000)

Even though there is some degree of selectivity of media and content which is clearly exercised by the audiences such as through deliberate skipping or avoidance of TV soap operas, however, instrumental accounts assume a rational choice of appropriate media for predetermined reasons. Such type of accounts over-stresses the informational value and rather ignores a great deal in how people engage with the media because there is ample evidence that suggest that media-use by individuals is often habitual, ritualistic and unselective (Barwise& Ehrenberg,

1988). But in a positive way the use of visual media can sometimes be intrinsically motivated due to the fact that it is assumed to be an aesthetic experience by users.

Uses and Gratification theory has been criticized for its show of indifference towards socio-cultural context because it foregrounds the individual psychological and personality factors and backgrounds the sociological interpretations of his media-use. The theory has also been antagonized for tending to exaggerate active and conscious choice, because it is possible for the media to be forced upon some individuals rather than being freely chosen by such persons.

Irrespective of the undisputable and trending reality that via internet, there are easier and better avenues which serves as easier routes for public awareness and for individuals to engage in community, social and humanitarian services which have positively influenced the moral consciousness of the present generation, the internet has also been largely accused as the major stakeholder for the continuous degeneration of societal, cultural and religious norms and values in our young, average, and adult population currently. Youths have been notably found to engage in acts of sexual perversions, sexual exploitation, intrusion in the privacy of other people through dubious acts such as hacking and scamming, engaging in the bully of others all-through the internet (internet bully),and at worst cases which is more prevalent now is prostitution (Tikumah, 2009).

However criticized the needs and gratifications theory has been, it is very significant to this study because it helps to give researchers clues on how and why individuals irrespective of their age, social status, culture or religion choose and stick to a particular media such as internet social media (Facebook, Watsapp, Twitter, Instagram and others)for the gratification of their desires and needs even when they are aware of the negative impact and wrong influences it portends to them and their overall success in life.

2.5 Empirical Studies

Research has shown that college students are at high risk of allowing internet to interfere with their academic work due to the numerous distractions that it causes for students, this is because nearly 70% of students procrastinate academic work due to excessive use of internet and eventually develop internet-addiction (Klassen&Kuzulu, 2009). Related studies were carried out by various researchers on internet-addiction and academic procrastination among students, whereby, most of the researchers gave hints, suggestions, and solutions on internet-addiction and academic procrastination. In a 2008 study, Chem and Peng examined the relationship between internet-usage and academic performance which they found out that participants spent an average of 17 hours online weekly and they only spent 4 hours or less for academic purposes. In the research, the differences between heavy internet-users and non-heavy internet-users were found in the quality of their academic work and grades. The results showed that students who used the internet excessively had a harder time completing assignments, studying, and even getting enough sleep due to internet-usage (Chem and Peng, 2008).

Garsallah in a study (2010/2011) investigated the prevalence and consequences of internet-addiction among adolescents in Tunisia, 1,330 participants were used from secondary schools. The number of participants that responded was 982 with a response rate of 74% and the results showed that the males used internet more frequently than the female students, the males were also found to be more addicted to internet than the females and there was a significant correlation between internet-addiction and neglect of house chores, sleep disorder, academic difficulties, behavior disorders as well as social isolation. Accordingly, Zawick and Stonebraker embarked on a study in 2009 in order to find reasons why students in college are more aligned to procrastination, through measuring of three potential outcomes of procrastination on exam

scores, assignments and project quality, alas it was reported that nearly half of all the respondents reported procrastination that affected at least one of the three outcomes. The results also indicated that those with lower G.P.A's were more likely to report lower project quality, late assignments and lower exam scores consequent to procrastination (Zawick&Stonebraker, 2009).

Akhter (2013) also embarked on a study to examine the relationship between Internet-Addiction and Academic Performance of 359 undergraduate students in the National University of Sciences and Technology, Islamabad Pakistan, after the students responded to the internet-addiction test, their GPA of the previous semester were collected and analyzed using Various statistical methods and it was thereafter found out that there was a negative relationship existing between their internet-addiction and academic performance, internet-addiction had negative impact on the academic performance of university undergraduates, as well as there was a significant gender difference on internet-addiction because the males were more addicted to internet than their female counterparts.

Even though there are immeasurable advantages that the internet has added to learning and human endeavors in recent times generally, it is undisputable by keen observers that its influence on motivation and behavior of students is certainly multifarious, multifaceted and embalmed with unquantifiable proximity to numerous disadvantages. To be precise, internet online gaming sites and or Social Networking Sites(SNS) have been fingered to be major sources of distractions to tertiary institution students, in the sense that their continuous patronization of these platforms of distractions has led to the continuous exhibition of numerous negative motivational and behavioral patterns such as multitasking; which means performing too many actions while visiting SNS, including chatting, instant messaging, playing online games, and searching for information all at the same time. Multitasking has also been described as the ability

of a student to carry out educational tasks with simultaneous SNS usage; it is in fact defined as the ability of a person to perform several activities at the same time interval. Recent investigations have suggested that despite the fact that the reading comprehensions of SNS users was nearly the same with that of non-users, the time-frame required for the former to complete the reading test was longer than that required by the latter category (Fox et al., as cited in kirschner&Karpinsiki, 2010). Also, the academic procrastination rate of students have been on a high rise ever since internet became accessible to all and sundry either through mobile Smartphones, tablets and or laptops, students delay compulsory academic activities till late hours of submission before embarking on them, either due to internet messaging (chatting), online gaming, video or music entertainment and or other trivial or malicious reasons. Thus, despite the fact that a relatively large number of SNSs including Facebook were initially created for learning purposes, there is some evidence to uphold the view that most users of SNS do not display any interest in getting intellectual or academic information through them (Sharma, 1997 & de Villiers, 2010). Due to such, internet developers have been accused to have placed internet users, especially students, at a high risk of procrastination, due to the singular fact that most students only consider SNSs mostly as an entertainment or social platform (Lampe, 2011).

Furthermore, in a survey study conducted by Pierce and Vaca (2007) to find out the differences on the academic performance between users and non-users of various communications technology among teens, 517 students of high school between the ages of 14-20 were sampled, the participants were composed of 201 males and 316 females, the results revealed that there is a difference in grades achieved between those that had cell phones that was used for calls and text from those that had accounts with Facebook, Twitter, Myspaceetc, this is because those that had social networking sites accounts reported a significantly lower grade than

those who did not have such social accounts, as well as those who had a phone reported a significant lower grade than those who did not have one. It was reported that almost half of the students with such accounts that had Smartphones used them in the class while lessons were ongoing.

Another study conducted by Anjugu (2013) on the impact of social media on students' academic performance whereby the sample size was 500 that had access to internet and social media via Smartphones and computers, the result of the study showed that the social media has a major negative influence on the academic performance of students because they spent more time chatting and socializing via the aforementioned smart gadgets. Notably, the resultant effect of procrastination through extensive usage of SNS is loss of motivation which is clearly widespread these days, particularly more apparently exhibited by internet-addicted students, thus, SNS users have been noted to experience more issues with their motivation, and that may possibly lead them to perform very low in their academics. In short, students indulge in numerous internet activities with so much investment of their time and energy in order to cope with the fast pace of online social networking, that they may begin to exhibit indifference towards the activities of the real world as well as feeling unmotivated always (Ishfag&Tehmina, 2011).

Stafford & Stafford (1996) suggested that in accordance with the results obtained with regards to the uses and gratification theory, people use the media for either the content carried by the medium which may either be information or entertainment or for simple experience and enjoyment of the actual usage process which maybe not unrelated to the use of internet technology for getting fun or through web-surfing.

Even though most initial research on Internet-Usage and gratifications indicates that most users are motivated by content considerations than by recreational values of that which they

engage on in the net through recognition of the values that users place in the availability of information online, (McDonald, 1997), yet only one internet uses and gratification study has constructed measures specific to internet use, as opposed to adapting scales for television research since the results of internet-uses and gratification studies based on scales from television research have subsequently not been very predictive of internet use Stafford et al., (2004). Stafford & Stafford (1996) identified social motivations as the major factor motivating people to use internet, and this social gratification has been construct-validated along with internet-specific process and content scales in specific internet contexts. No wonder Mylonopoulos&Doukidis (2003) both viewed that the social motivations for internet-usage arise from satisfactions gained through chatting, e-mailing and other communication functionality of the said mobile network. Kirschner and Karpinski (2010) conducted a study on the relationship between Facebook-usage and academic achievement; they both found out that there is a direct relationship between the usage of Facebook and academic achievements of students. This is because their study unveiled the fact that Facebook users not only had lower grades than non-users (3.5 against 3.0 out of 4), but their procrastination rates were higher than that of non – users.

Negussie and Ketema (2014) also examined the relationship between Facebook-usage and academic performance of students, from March 2012 to March 2013, a survey was conducted in Jimma University and 490 postgraduate students were participants to the research. The results indicated that there was no significant relationship between usage-time and the Frequency of Facebook login with the G.P.A of students.

Amazingly, a study conducted by Cohen (2007) found out that there was no relationship between the G.P.A of students and SNSs extensive usage. The significant variation in the result

of the studies undertaken on the role of internet-addiction on academic procrastination may presumably be explained under several factors; Firstly, culture may have played a role, as well as gender, social status and perhaps the personality of the individual. Secondly, educational settings of different countries also have a significant impact. That is why the researcher deems it necessary to conduct further research on the influence of internet-addiction on academic procrastination among students of Ahmadu Bello University Zaria, Kaduna State-Nigeria.

2.6 Summary

In this chapter, an overview of the contents in the whole chapter was discussed. The researcher thenceforth explained the concepts of internet, internet-addiction and academic procrastination, major domains of internet such as the World Wide Web, Electronic Mail, Telnet, Internet Relay Chat and its categories such as Web Chat, Propriety Chat, Buddy Lists, Virtual Worlds, File Transfer Protocol, Internet Service Provider, Social Gaming, Internet News Groupand their hierarchies as well as how the web works.

Furthermore, this chapter analyzed theories that unravel why learners procrastinate and constantly engage in the excessive use of internet such as the Social Learning theory by Albert Bandura, Temporal Motivation Theory by Piers Steel and Cornelius King as well as the Uses and Gratification Theory propounded by Blumler and Katz. Finally, the review of related studies on this study such as those executed by Anjugu, Nwabueze and Aduba and others were appraised.

Finally, the research work on "influence of internet-addiction on academic procrastination among students of Ahmadu Bello University, Zaria" is meant to bridge the gap of knowledge and empirical studies that has not been carried-out regarding gender, level and faculty of students

studies in Ahmadu Bello University, Zaria Nigeria, especially within the North-Western Universities, hence clarifying the need for this particular study.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter focuses on the procedural steps and methods adopted for the conduct of this study. These includes the research design, population, sample and sampling techniques, validation and reliability of the instrument, method of data collection, procedure for data collection and procedure for data analysis.

3.2 Research design

The research design adopted for this study is ex post-facto. Ex post facto is a Latin derivative that implies "after the fact" or retroactive design. This research design is a method of testing out the possible antecedents of events that happened which cannot be manipulated by the researcher. Ex-post facto design is a quasi-experimental study that examines how an independent variable that is present prior to the study in the participants affects a dependent variable.

Also, it explores the cause and effect relationship where a cause already exits (Lammers&Badia, 2005). Thus, the researcher examined retroactive effects of natural-occurring events (Internet-Addiction) on the subsequent outcome (Academic Procrastination) with a view of establishing a causal link between both. Ex post facto is deemed to be the best design for this study because it is used to designate actions taken to change the effects given to a set of circumstances, this action relates back to a prior time (Internet-Addiction) and imposes the new effects (Academic Procrastination) upon the same set of circumstance that exists at the time of occurrence.

Questionnaires were given to respondents in order to gather the report, it is also meant to enable the researcher to administer questions to many respondents at the same time

3.3.1 Population

The population for this research was the entire undergraduate students in Ahmadu Bello University Zaria, and this institution has a total of 12 faculties, the total number of Undergraduate students enrolled therein is thirty three thousand four hundred and seventy (33,470) for the year 2015/2016 academic year, but specifically, only six (6) faculties with a total of (23,541) was used as the population for this study, (Source: Management Information System Ahmadu Bello University Zaria, 2015). This University was chosen for this study because it is among the First Generation Universities of the Federal Republic of Nigeria, which has a free and unlimited internet service that is accessible to all registered students that are located within all of its campuses at all times, thus, justifying the necessity for this study in the institution.

3.4 Sample and Sampling Technique

The sample for this study were the Undergraduate students of two (2) Arts, two (2) Humanities and two (2) Science faculties within the University. The selected faculties are; Administration and Arts, Education and Social Sciences, and Medicine and Sciences only. In selecting the sample size from twenty three thousand five hundred and forty one students (23,541), the researcher adopted Krejcie and Morgan (1970) Table for determining sample size, which states that in a population of 33,470, the appropriate sample size should be at least 377, thus, justifying the stance of the researcher in using 380 with a distribution in accordance to the population of each Faculty.

In sampling the respondents, the stratified proportionate sampling technique was used among the undergraduate students in selecting samples from the population, which is intended towards achieving spread and proportion of commensurate percentages in the representation of

all parts of the population in accordance to their sizes. Detailed information can be obtained in table 3.1 below.

Table 3.1 Sample Distribution of Selected Students by Faculties in Ahmadu Bello University, Zaria.

S/No	Faculties	Population	Sample	Males	Females	Total Percentage %
1	Administration	3473	56	2350	1123	15 %
2	Arts	2778	45	1785	993	12%
3	Education	5516	89	3794	1722	23%
4	Medicine	1882	30	1012	870	8%
5	Science	6686	108	4266	2420	28%
6	Social Science	3206	52	2010	1196	14%
	TOTAL	**23,541**	**380**	**15217**	**8324**	**100%**

Source: Management Information System (M.I.S) Unit Ahmadu Bello University, Zaria, (2015).

3.5 Instrumentation

Two instruments were used for the collection of data for this study, they are the Internet Addition Test (IAT) and Procrastination Assessment Scale for Students (PASS), both were adopted by the researcher which were designed to inquire on the level of student's engagements and addictedness to internet through hi-tech gadgets such as computers, laptops and other mobile devices; Smartphones, I-Pads, IPods and or other tablets etc, and also, how does internet-addiction through such devices influence academic procrastination of students in Ahmadu Bello University Zaria. The two instruments have been divided into three core sections whereby Section A measures the Bio Data of the respondents; Section B is the adopted Internet-Addiction

Test (IAT) questionnaire, while Section C is the adopted Procrastination Assessment Scale for Students (PASS) questionnaire.

- **Internet-Addiction Test (IAT)**

The Internet-Addiction Test Questionnaire (IAT) 'Appendix A' was adopted from Young (1998), and was used for this study, it is the first validated measure of Internet -Addiction to measure Internet-usage of individuals in terms of mild, moderate, to severe levels of addiction to internet. It consists of twenty (20) question items related to internet-usage with a 0-5 points rating scale; not applicable, rarely, occasionally, frequently, often, and always which the respondents are required to choose from.

Scoring Procedure: Points will be allocated for each item to correspond with the magnitude of the scale and each point on the scale is assigned a worth or no value (0). Each item will be scored using the aforementioned procedure and to score the scale, the mean of items of each section will simply be computed thus;

0= Not applicable

1= Rarely

2= Occasionally

3= Frequently

4= Often

5= Always

After all the questions have been answered, the score of each response will be obtained and added to the others to determine the final score; the higher the score, the greater the level of

addiction and creation of problems resultant from such internet-addiction, thus the following depicts the scores;

0-30 points (no addiction)

31-49 points (mild addiction)

50-79 points (moderate addiction)

80-100 points (severe addiction).

Here if an internet-user is found to be within 80-100 points it means internet is causing significant problems in their life and such problems needs to be addressed in order for such person to make progress or at least withdraw from such addiction. But for this study a pass mark of 50 and above is the point for an internet-user to be adjudged as addicted by the researcher.

- **Procrastination Assessment Scale for Students (PASS)**

The Procrastination Assessment Scale for Students (PASS) 'Appendix B' was also adopted from Solomon &Rothblum (1984) for this study. This scale was designed to assess how individuals approach situations; specifically it focuses on the tendency of individuals to postpone decisions. The scale has 44 items to be answered using 5pointsLikert ratings. It is also sub-divided into two component sections, the first section measures the frequency of Procrastination while the second section measures the reasons why individuals Procrastinate;

Section one (1): This assesses the tendency of students to procrastinate in six (6) academic areas, thus respondents are asked to rate the degree to which they procrastinate with regards to the following:

A). Writing of a term paper

B). Studying for an exam

C). Keeping up with weekly reading assignments

D). Performing academic administrative tasks

E). Attending academic meetings

F). Performing academic tasks in general.

Section two (2): The respondents are given a procrastination scenario and asked to identify which of the thirteen (13) reasons that they would surely procrastinate on, thus:

A). Evaluation anxiety

B). Perfectionism

C). Difficulty in making decisions

D). Dependency and help-seeking

E). Aversiveness of tasks and low frustration tolerance

F). Lack of self-confidence

G). Laziness

H). Lack of assertion

I). Fear of success

J). Tendency of feeling overwhelmed and poor time management

K). Rebellion against control

L). Risk-taking

M). Peer influence

Scoring System For Section one (1) (Frequency of Procrastination):

The respondents are required to rate the degree of their procrastination from A-E (1-5 points score); low to high in relation to how often they procrastinate from question 1-19. The way of scoring this Instrument is by adding-up the first two questions of each section of the first 18 question (1+2+4+5+7+8+10+11+13+14+16+17) to get a total score. It is noteworthy that a higher score indicates a higher Procrastination from the individual self-reporting. It can be assumed that an average score of 4 is the average frequency of Procrastination.

Scoring System for Section two (2) (Reasons for Procrastination):

The respondents are required to rate the degree of their Procrastination from A-E (1-5points score); low to high in relation to why they Procrastinate from questions 19-44. The way of scoring individuals to know their reasons due to fear of failure is by adding only two (2) questions on Perfectionism, two (2) questions on evaluation anxiety and one (1) question on low self-esteem (19, 24, 33, 39, and 42).For reasons of procrastination, two (2) Questions will be added from task-aversiveness and one question will be added from Laziness (27, 34 and 35) to get the mean score.

3.6 Validity of the Instruments

Both instruments were validated by Lecturers and experts in the Department of Educational Psychology and Counseling in Ahmadu Bello University Zaria after they were contacted to establish the face, content and construct validity of the research instruments and after all necessary checks, modifications and corrections, content validity was attained with their approval. Both adopted scales of Internet Addiction Test (IAT) and Procrastination Assessment Scale for Students (PASS) questionnaires were approved after a thorough and in-depth review of

the research objectives, literatures and theories regarding internet-addiction and academic procrastination.

3.7 Reliability of the Instruments

The Internet Addiction Test (IAT) scale was constructed by Young (1998) and the reliability Coefficient Cronbach alpha was calculated as 0.90 and Spearman Brown value was calculated as 0.86. As a result of a factor analysis carried on it, it was determined that the 20 items of the scale be grouped into 4 different factors; Cronbach alpha internal consistency coefficient for the first factor was 0.91, second factor was 0.87, third factor was 0.89, fourth factor was 0.90 and for the whole scale was 0.90. Spearman Brown value for the scale was 0.86 as well as the Guttmann Split-half value was 0.85. All of these calculated coefficients were in acceptable range suggesting that each of the factors had internal reliability.

The Procrastination Assessment Scale for Students (PASS) was constructed by Solomon and Rothblum(1984) and it has a reliability test of 0.79 through Alpha Cronbach in a study by Deghan (2009). Solomon (1998) also reported 0.84 as the co-efficient for the test through internal consistency validity. Dehgan (2008) also reported 0.78 as the internal consistency validity for the instrument.

3.8 Procedure for Data Collection

A letter of introduction was given to me from Department of Educational Psychology and Counseling of Ahmadu Bello University Zaria, this is meant to convince all concerned individuals such as Deans, secretaries and participants of the selected faculties, to kindly assist by cooperating with the researcher. The students were met in their classes and lecture theaters in order to administer the questionnaires after establishing rapports with the Staff of the Faculties

involved as well as students. The researcher also engaged an assistant who helped in administering the questionnaire. The researcher distributed a total of 380questionnaire within a period of two weeks to the respondents but was able to retrieve 354 out of which only 160 of them were internet-addicted. The researcher strictly abided by the ethics of research, as there was no coercion of respondents, the privacy of respondents was also duly respected, as well as every of them was treated in strict confidence.

3.9 Procedure for Data Analysis

The data collected for this study was coded and subjected to various statistical analysis. The tool used for the analysis was the inferential statistics, which is further divided into Parametric and non-Parametric. But this study adopted the parametric statistical tools using T-test and ANOVA to test all of the three (3) hypotheses at 0.05 significant levels. Also, descriptive statistics was employed in analyzing the bio-data of the respondents such as gender faculty and level of study. The computer statistical package for Social Sciences (SPSS) was also used in analyzing the data.

CHAPTER FOUR

RESULTS AND DISCUSSIONS

4.1 Introduction

This study examined the influence of internet-addiction on academic procrastination among students of Ahmadu Bello University Zaria, Kaduna state-Nigeria**.** Three objectives were formulated; three research questions and three null hypotheses were also stipulated. The researcher distributed the questionnaire to a total of 380respondents but was only able to retrieve a total of 354 for the analysis; this is because the analysis consists of a total of 354 students of Ahmadu Bello University Zaria that were retrieved who were sampled for the study. However, only 160 respondents that were found to be internet-addicted were used in the analysis. This is because they scored at least fifty in their internet-usage, implying that they were already addicted. The statistical package of IBM version 23 was used for the analysis. The analysis is presented in sections; the first section presents the bio data variables of respondents' status, gender, course discipline, course department and level of study. The second section answers the research questions using the descriptive statistics of mean, standard deviations, standard errors, and the perception of respondents in all the items. While the third section tests the three null research hypotheses. Using the inferential statistics of independent t-test and ANOVA statistics, all the statistics were tested at 0.05 alpha level of significance. Summary of major findings are also provided in this chapter.

4.2 Descriptive Analysis of Bio-Data Variables

The bio-data variables used in this study are faculty, department, course, and level of study, department of study and gender of the respondents.

Table 4.1 : Distribution of Respondents by Internet-Addiction

Status	Frequency	Percentage
Addicted	160	45.2
Not addicted	194	54.8
Total	**354**	**100.0**

Source: SPSS Result and Author's Field Survey, 2016

Table 4.1 shows that 160 representing 45.2% of respondents are internet-addicted while the rest 194 representing 54.8% are not.

Table 4.2: Distribution of Respondents by Faculty

	Frequency	Percentage
Education	50	31.3
Arts	14	8.8
Admin	26	16.3
Social Sciences	19	11.9
Science	42	26.3
Medicine	9	5.6
Total	**160**	**100.0**

Source: SPSS Result and Author's Field Survey, 2016.

On respondents' faculty, 50 or 31.3% are In Education while14 or 8.8% are from Arts as against 26 or 16.3% from Administration,19 or 11.9% from Social Sciences while 42 or 26.3% are from Sciences and the remaining 9 or 5.6 % Ahmadu Bello University Zariaare from faculty of Medicine.

Table 4.3: Distribution of Respondents by Course of Study

Courses	Frequency	Percentage
Planning, Biology, Education	37	23.1
English ,literature ,drama	23	14.4
Public admin	21	13.1
Social science	23	14.4
Economics, Micro-biology	52	32.5
Medicine ,Anatomy	4	2.5
Total	**160**	**100**

Source: SPSS Result and Author's Field Survey 2016.

The students' courses of study presented above shows that 34 or 23.1% are from Admin &planning, Educational Biology as against 23 or 14.4% from English, literature, drama, while 21 or 13.1% are from Public Admin as against 23 or 14.4% are from Social sciences while 52 or 32.5% are from Economics and microbiology departments and the rest 4 or 2.5% from Medicine or Anatomy.

Table 4.4: Distribution of respondents by Level of Study

	Frequency	Percentage
100	20	12.5
200	22	13.8
300	65	40.6
400	40	25.0
500	13	8.1
Total	**160**	**100.0**

Source: SPSS Result and Author's Field Survey 2016.

Table 4.4 reveals the internet-addicted students' distribution by their level of study. It was observed that 20 or 12.5% are 100 level students, while 22 or 13.8% are 200 level students, as

against 65 or 40.6% that are 300 level students while 40 or 25.0% are 400 level students and the rest 13 or 8.1% are 500 level students.

Table 4.5: Distribution of respondents by Gender

Sex	Frequency	Percentage
Male	110	68.7
Female	50	31.3
Total	**160**	**100.0**

Table 4.5 shows that 110 or 68.7% are males and the rest 50 representing 31.3% are females. This implies that males are more internet-addicted than the females

4.3 Testing of Research Hypotheses

Research Hypothesis One: There is no significant difference between male and female internet-addicted students in their academic procrastinationinAhmadu Bello University Zaria.

Table 4.6: Difference between male and female internet-addicted students in their academic procrastination in Ahmadu Bello University Zaria

Variable	Sex	N	Mean	Std.dev	Std.ERR	Df	T calculated	T critical	P
Academic procrastination	Male	110	69. 31	12.81	1.073	158	3.427	1.96	0.004
	Female	50	59. 70	10.94	1.018				

Calculated $p < 0.05$, calculated $t > 1.96$ at df 350

Table 4.6 shows that there is significant difference between male and female internet-addicted students in their level of academic procrastination in Ahmadu Bello University Zaria. This is

according to the outcome of the table which shows that the calculated p value of 0.004 was found to be lower than the 0.05 alpha level of significance with the t calculated value of 3.427 higher than the 1.96 t critical 50. Their calculated mean internet addiction on academic procrastination are 69.31 and 59.70 by male and female students respectively implying a mean difference of 9.61 showing that the male students have significantly higher internet-addiction than their female counterparts This means that gender status of the students influence level of internet-addiction on academic procrastination. Therefore the null hypothesis which state that There is no significant difference between male and female internet-addicted students in their level of academic procrastination in Ahmadu Bello University Zaria, is hereby rejected.

Research HypothesisTwo: The null hypothesis state that There is no significant difference among internet-addicted students of different levels of study in their level of academic procrastination in Ahmadu Bello University Zaria.

Table4.7: Difference among internet-addicted students in their level of academic procrastination in Ahmadu Bello University Zaria.

INTERNET_ADDICTION							
Level of study	N	Mean	Std. Deviation	Std. Error	F	Critical	P
					12. 56	2.60	.000
100	20	56.82	9.46	1.76			
200	22	54.88	12.32	2.79			
300	65	57.91	12.27	1.26			
400	40	63.43	11.40	.966			
500	13	57.43	11.53	1.92			
Total	160	57.25	12.95	.74			

Post Hoc Tests

Table 4.8
Homogeneous Subsets

INTERNET_ADDICTION

Scheffe[a,b]

Level	N	Subset for alpha = 0.05	
		1	2
200	45	54.88	
500	30	57.44	
100	37	56.82	
300	128	57.91	
400	116		63.43
Sig.		1.000	.891

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 9.974.

b. The group sizes are unequal. The harmonic mean of the group sizes is used.

Type I error levels are not guaranteed.

Results of the Analysis of Variance and its descriptive statistics and Post hoc tests showed that significant differences exists among internet-addicted students of different levels of study in their level of academic procrastination in Ahmadu Bello University Zaria. The reasons being that The calculated p value of 0.000 was found to be lower than the 0..05 alpha level as the calculated F value of 12.56 was found to be higher than the F critical value of 2.60. The descriptive statistics showed that their computed mean internet-addiction on academic procrastinations were 56.82, 54.88, 57.91, 63.43 and 57.43 by 100, 200, 300, 400 and 500 level students respectively. The Post Hoc using scheffe test showed that the mean of 400 level students was placed in the significantly higher subset as compared with the means of other levels placed in the significantly lower subset 1. Implying that 400 students are more addicted to internet than other levels of students. Therefore the null hypothesis which states that There is no significant difference among internet-addicted students of different levels of study in their level of academic procrastination inAhmadu Bello University Zaria, is hereby rejected.

Research Hypothesis Three: There is no significant difference among internet-addicted students of different faculties of study in their level of academic procrastination in Ahmadu Bello University Zaria.

Table4.9: Difference among internet-addicted students of different faculties of study in their level of academic procrastination in Ahmadu Bello University

	N	Mean	Std. Deviation	Std. Error	F	F critical	Sig.
Education	50	52.33	16.44	1.93	5.173	2.60	.000
Arts	14	61.44	6.00	1.34			
Admin	26	62.43	11.32	1.43			
Social Sciences	19	62.22	11.25	1.44			
Science	42	55.18	11.14	1.11			
Medicine	9	57.00	10.33	1.22			
Total	160	52.33	12.11	.74			

Table 4.9 Post Hoc using the scheffe multiple comparison test of Analysis of variance statistics on significant difference among internet-addicted students of different faculties of study in their level of academic procrastination in Ahmadu Bello University

Table 4.10

Homogeneous Subsets

		Subset for alpha = 0.05	
Faculty	N	1	2
Education	90	52.33	
Science	85	55.18	
Medicine	30	57.00	
Arts	45		61.44
Admin	53		62.43
Social Sciences	51		62.22
Sig.		.085	.193

Results of the Analysis of Variance and its descriptive statistics and Post hoc tests showed that significant difference exists among internet-addicted students of different faculties of studies in their level of academic procrastination in Ahmadu Bello University Zaria. The reasons being that The calculated p value of 0.000 was found to be lower than 0.005 alpha level as the calculated F value of 5.173was found to be higher than the F critical value of 2.60. The descriptive statistics showed that their computed mean internet addiction on academic procrastinations were 52.33, 61.44, 62.43, 62.22, 55.18 and 57.00 by students from Education, Arts, Administration, Social Sciences, Sciences and Medicine respectively. The Post Hoc using scheffe test showed that the mean addiction level of students from Education, Sciences and Medicine were placed in the least subset 1 while students from faculties of Arts, Administration and Social Sciences were placed in the significantly higher subset 2, implying that students of Arts, Administration and Social Sciences had higher internet-addiction than those from faculties of Education, Sciences and Medicine.Therefore the null hypothesis which states that There is no significant difference among internet-addicted students of different faculties of study in their level of academic procrastination in Ahmadu Bello University Zaria, is hereby rejected.

4.4 Summary of major findings

The followings are the summary of the major findings:

1. Significant difference exists between male and female internet-addicted students in their level of academic procrastination in Ahmadu Bello University Zaria(t= 3.427, p= 0.004)
2. Significant difference exists among internet-addicted students of different levels of study in their level of academic procrastination in Ahmadu Bello University Zaria(f=12.56, p=0.000).
3. Significant difference exists among internet-addicted students of different faculties of study in their level of academic procrastination in Ahmadu Bello University Zaria (f=5.173, p=0.000).

4.5 Discussion of Findings

The main objective of this study was to investigate the influence of internet-addiction on academic procrastination among students of Ahmadu Bello University Zaria. On the basisof the existing literature it was hypothesized that gender would have influence on the internet-addiction and academic procrastination of students, as the result is in accordance with the stated hypotheses. The findings revealed that gender (male and female) internet-addiction significantly influences the academic procrastination of male University students as well as with significant negative impact on their academic work. This is supported by Nwabueze and Aduba (2014) in concordance with other results that had been stated by various studies (Scherer 1997, Frangos, 2009, & Tsai et al, 2009) that the greater the use of internet by students for entertainment, gaming and other non-academic purposes, the greater their probabilities of missing classes, inability to meet their personal obligations, non-completion of assignments, and lower grades or

scores inevitably (Scherer, 1997, Young, 1998). Frangos and Frangos (2009). The male gender is a significant predictor of internet-addiction which is clearly consistent with the findings of Scherer (1997), Lee, Ko,& Chou, (2015) and Siomos et al (2008. However, this findings may simply be due to the fact that more males use the internet than females in the entire globe, coupled with the fact that female students often receive much more family supervision and parental guidance which may prevent them from spending as much time that they wish on the internet (Tsai et al., 2009).

The findings of this study also revealed that level of study is significant on internet –addiction and academic procrastination among students of Ahmadu Bello University, Zaria. This is because the 400 levels students were found to be the highest addicted students with significant negative influence from internet in Ahmadu Bello University Zaria, this findings is supported by Dargahi (2007) that the level of students' internet-addiction was associated with their skill in the use of internet, educational level, field of study, and a number of related scientific works. Young and Rogers (1998) also suggested that University students are considered as high risk group for internet-addiction; the possible reasons might be that they have available free time; they are not monitored by anyone since they are far from their parents.

Furthermore the findings of this study showed that intensity of internet-addiction and procrastination is associated with faculty of study because the students in faculties of Education, Sciences and Medicine in Ahmadu Bello University Zaria were found to be less addicted than those of Arts, Administration and Social Sciences who were more addicted. This finding is also in line with that of Firouzeh and Jalil (2011); they both reported that faculty and field of study had impact on the internet-addiction rates of students, except that they concluded that students of technical and Foundation Science had higher addiction rates than those of Arts and Humanities

Students. The findings of this study has serious implications because students may have different results even though they are on the same level of study or still the same field of study; this may be due to the sophistication and or capability of accessories or gadgets that they possess for accessing the internet and their parental, cultural and or religious background altogether

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of this research work from chapter one to chapter five as well as the conclusions and recommendations of this study on influence of internet-addiction on academic procrastination among students of Ahmadu Bello University, Zaria, Kaduna-State Nigeria.

5.2 Summary

The study titled influence of internet-addiction on academic procrastination among students of Ahmadu Bello University Zaria, Kaduna State-Nigeria is presented in five chapters; the first chapter presented the background of the study, the objective of the study as well as research questions to be answered, and hypotheses to be tested. The statement of the problem dwelled on the serious implications of internet-addiction on ABU students that eventually results to varied exhibition of academic procrastination and its resultant effect on general academic success of students. Chapter two presented reviewed literature under these headings: Conceptual framework, Concept of Internet, Internet-Addiction, Concept of Academic Procrastination, Domains of Internet, World Wide Web, Electronic Mail, Telnet, Internet Relay Chat, File Transfer Protocol, Internet Service Provider, Social Gaming, Internet News Group, Theoretical framework, Social Learning Theory, Temporal Motivation theory, Uses and Gratification theory and review of Related Studies. Chapter three presented the research methodologies such as population and samples used for the study. The total population of undergraduate students in Ahmadu Bello University is 33,470 while a total of 354 were used as samples for this study.

Several questions on internet-addiction as well as on academic procrastination on major academic activities such as writing terminal papers, assignments, reading for exams, meeting with course advisor and administrative duties such as filling forms or getting ID card etc. were also covered.

Furthermore, Chapter four was the presentation, discussion and analysis of data obtained from the respondents among others, it was confirmed that male students are more addicted to internet than their female counterparts. It was also observed that the level of addiction of students varies significantly on the basis of their faculties or course of study in the university. Chapter five presented the study's summary, conclusions and recommendations, it was concluded among others that the main reasons why students procrastinate include having to wait until a classmate did his/her academic obligations so that he/she could give them some advice and also that they did not trust themselves to do a good job on their own. It was recommended among others that Procrastination towards academic activities by the students can be minimized if students who excel in any academic activities such as assignments, exam, and terminal papers can be motivated. For further studies, it was suggested that another study should be carried out on influence of internet-addiction on academic procrastination among students in other selected tertiary institutions in Kaduna state and Nigeria at large.

5.3 Conclusions

Based on the findings of this study, the following conclusions are hereby drawn that:

1. The gender of students is a major factor in their internet-addiction and academic procrastination. Male students have been noted to be highly addicted to internet while

their female counterparts were noted to have a significantly lower addiction and procrastination rates.

2. The level of students' internet-addiction is quite high especially as majority of students often stay online longer than they intended, chat and check their mails before embarking on any mandatory academic duty as well as make new relationships with fellow online users. Specifically, students of 400 level were noted to be having significantly higher addiction to internet and procrastination in their academic obligations.

3. The students'faculties of studies influence their rates of internet-addiction and academic procrastination. To note, Faculty of student's studies has been attributed to higher or lower internet- addiction and procrastination rates. Notably students of Arts Humanities and Social Sciences have higher rates of addiction and procrastination.

5.4 Recommendations

The following recommendations are suggested based on the findings of this study:

1. Parents should accord special attention to male students among their wards with regards to their internet-usage, they shouldbe advised and oriented on the dangers of internet-addiction on their personaland academic well-being. They shouldalso be guided properly and informed about the portending danger that internet social media sites constitutesto their overall academic and moral well-being if not moderated or used properly.

2. Students of 400 levelshould be given more help and attention by Counselors and Psychologists, they should be made to understand that internet-addiction is a danger to students of all levels of study which has adverse effects on students' academic

procrastination. They should particularly be engaged in educational forums through online group discussions and lessons rehearsals.

3. The University management should ensure a close monitoring on the internet-usage of students' of faculties of Arts, Social Sciences and Administration, they should also be given much more attention to know the dangers and problems associated with excessive internet-use which leads to academic procrastination through orientation programs and or groupcounseling.

5.5 Suggestions for Further Studies.

This study is by far not exhaustive, it has been able to compliment on the related works of other researchers to tell us that gender, level of study and faculty of students has influence on theiraddiction to internet and academic procrastination. Further studies should be carried out on the influenceoftheir age, parental background, and or their socio-economic status in relation to internet-addiction and academic procrastination selected tertiary and secondaryinstitutions in Kaduna state, Nigeria and the world at large.

References

Adamu.A.U. (2013) *E-learning: Resource Mobilization Management for Access and Quality Tertiary Education in Africa,* Zaria. Ahmadu Bello University Press.

Ahmad, I. &Qazi, and T. (2011): 'A look out for academic impacts of social networking sites (SNSs). A student-based perspective '.African Journal of Business management, 5 (12), 5022-5031.

Andrew, W. (2011): 'Dot-dash to Dot.com:' How modern Telecommunications Evolved from the Telegraph to the Internet. Springer.P.1&2.ISBN 9781441967596.

Anjugu, J.N. (2013). *Impact of Social Media on the student academic Performance*.Unpublished undergraduate project Caritas University Enugu.

Bandura, A. (1963). *Social Learning and Personality Development*. New York: Holt, Rinehart and Wiston.

Bandura, A. (1977b). *Social Learning Theory.* General Learning Press.

Blumler, J. E. Katz (1974), The Uses of Mass Communication. Sage, Thousand Oaks, California.

Cecilia Chang, Li Angel, Yee-Lam (2014). "*Internet-Addiction Prevalence and Quality of (Real) Life: A Meta-Analysis of 31 Nations Across Seven World Regions*". Cyber Psychology, Behavior and Social Networking (17).

Chen, Y.F., &Peng, S. (2008). *University Students' Internet Use and its Relationships with Academic Performance, Interpersonal Relationships, Psychosocial Adjustment, and Self Evaluation*.Cyber Psychology & Behavior, 11 (4).

Chu & Choi, J. (2005). *Rethinking Procrastination: Positive effects of "Active" Procrastination Behavior on Attitudes and Performance.* Journal of Social Psychology, 14, 245-264

Cohen, D.(2007). *Facebook for Scientists?British Medical Journal*.Retrieved January 26, 2012.

Comer, Douglas E. (2008)."Internet."Microsoft® Encarta® 2009 [DVD]. Redmond, WA: Microsoft Corporation,.

Chou, C. Condron, L. &Belland, J.C. (2005): 'A review of the research on internet addiction'. Educational Psychology Review, 17 (4), 363-366.

Christoph, M., Herald, S. (2013): 'Internetworking; *Technological Foundations and applications*. X media. Publishing.P.57. ISBN 3642353916'.

Dargahi H, Razavi SM (2007). *Internet Addiction Disorder and its Related Factors: A Study of an Iranian Population.* Payesh.6 265-267

De Villiers, R. (2010). *Proceedings of Informing Science and IT Education Conference: Academic use of a Group on Facebook Initial Findings and Perceptions*. Guaten: University of South Africa.

Eigghmey, J. and McCord, L. (1998).*Adding Value in the Information Age: Uses and Gratifications of Sites on the World Wide Web,* Journal of Business Research.

Essays, U.K.(2013). *The Academic Performance of Students .Psychology Essays*.Retrieved fromwww.ukessays.com\essays\psychol.

Firouzeh S, Jalil J.L., (2011). *The Rate of Prevalence in the Internet Addiction andIts Relationship with Anxiety and Students' Field of Study:* Australian Journal of Basic and Applied Sciences, 5 (10).

Fox, A. Rosen, J. and Crawford, M. (2008).*Distractions, Distractions: Does Instant Messaging Affect College Student's Performance on a Concurrent Reading Comprehension Task?*Cyber Psychology and Behavior.

Frangos C.C. Frangos CC (2009).*Internet Dependence in College Students from Greece.* Eur. Psychiatry. 24 (Suppl1).

Gao, K. (2014): '5 best practices for increasing sales with live chat software'. Sales force. Retrieved 23rd September 2014.

Griffith M.(2000). *Does Internet and Computer Addiction Exist?*Some Case Study Evidence. Cyber Psychol. Behav. (3).

Herzog, H. (1994) *What Do We Really Know About Day-Time Serial Listeners*? In P. Lazars Feld and F. Stanton (Eds.) Radio Research 1942-1943, Duel, Sloan and Pearce, New York.

Hill, J., &Hannafin, M. (2001). 'Teaching and learning in digital environments': The resurgence of resource-based learning. Educational Technology Research and Development,49 (3), 37-52.

Howard, R. (2000). *The Virtual Community:* Homesteading on the Electronic Frontiers, Rev Ed. Chicago, Encyclopedia Brittanica

Howell, A. & Watson, D. (2007).*Procrastination: Associations with Achievement Goal Orientation andLearning Strategies.* Personality and Individual Differences, 43, 167-178.

http://www.fns.usda.gov/fdd/processing HYPERLINK "http://www.fns.usda.gov/ fdd/ processing%20/info/sales/verificationTable" HYPERLINK "http://www. fns.usda.gov /fdd/processing%20/info/sales/verificationTable" HYPERLINK "http:// www.fns. usda. gov/fdd/processing%20/info/sales/verificationTable" /info/sales/verificationTable

Ilori, J.A.(2009). *Moral Philosophy in African Context for University and Colleges of Education*, Zaria, Ahmadu Bello University Press Limited.

Internet**.**(2012). EncyclopædiaBritannica.*Encyclopædia Britannica Ultimate Reference Suite.* Chicago: Encyclopædia Britannica.

Irene.McDermott (2008).*The Librarians Internet Survival Guide,* New Delhi, ESSESS Publications.

Ishfag, A. and Tehmina, F. (2011).*A Look Out for Academic Impacts of Social Networking Sites (SNS):* A Student's Based Perspective. African Journal of Business Management.

Islak, R. B. (2011): 'Academic Procrastination in relation to Gender among gifted and talented college students'. College of Education.University of Houston.

Johnstone, Megan-Jane(2008).*Bioethics: A Nursing Perspective*.Elsevier Health Sciences.

Jowker, B, Delavarpur M. A. (2006) *'Relationship Between**Procrastination and Goal Orientation of New Education Ideas.* Persian.

Katz, E. (1959) *Mass Communication Research and the Study of Popular Culture:* An Editorial Note on a Possible Future for this Journal, Studies in Public Communications.

Katz, E., Blumler, J.G. and Gurevitch, M. (1974) *'Utilization of Mass Communication by the Individual',* in Blumler ,J.G. and Katz, E. (Eds.):*The Uses of Mass Communications:* Current Perspectives on Gratifications Research , Sage, Beverly Hills, CA.

Kirschner, P. and Karpinski, A(2010). *Facebook and Academic Performance.* Computers in Human Behaviour..

Krejcie, R.V.& Morgan, D.W. (1970). *Determining Sample Size for Research Activities*, Educational and Psychological Measurement, retrieved July 28, 2010.

Lay, C.H. (1986). At Last, My Research Article on Procrastination. Journal of Research in Personality, 20, 474 - 499.

Lee, Y. H., Ko, C. H., & Chou, C. (2015). *Re-Visiting Internet Addiction among Taiwanese Students:* A Cross-Sectional Comparison of Students' Expectations, Online Gaming , and Online Social Interaction. J Abnorm Child Psychol, 43 (3).

Leung, L.; Wei, R. (2000). '*More than Just Talk on the Move: A Use-and-Gratifications Study of the Cellular Phone'*. Journalism & Mass Communication Quarterly(2).

Lin, C. (1999) *Online Service Adoption Likelihood*, Journal of Advertising Research.

Lord, R.G.; Diefendorff, J.M.; Schmidt, A.M.; Hall, R.J. (2010). *'Self-Regulation at Work'.* Annual Review of Psychology 6:543-5.

MangalS.K. (2013).*Advanced Educational Psychology* (2nd ed.), Delhi: RajkamalElectric Press.

McCombs, B.L (2001). *What do we know about Learners and Learning?*The Learner-Centered Framework. Paper Presented at the Meeting of the American Educational Research Association.

McDonald, S.C. (1997). *The Once and Future Web: Scenarios For Advertisers,* Journal of Advertising Research, 37.

McGuigan, J. (2005). *Towards a Sociology of the Mobile Phone.*In:Saarilouma, P. (2005). Human.*An Interdisciplinary Journal on Humans in ICT Environments.* Volume 1, Number 1 Agora Center, University of Jyvaskla.

Micheal A. Dennis (2012). *Internet*;Chicago; Encyclopedia Britannica.

Missaoul S.G., Brahim T., Bouriga W., Abdelaziz A.B., (2015). *Prevalence and Consequences of Internet-Addiction in a Cohort of Tunisian Adolescents:* A Pilot Study. Journal of Child Adolescent Behavior 3 (257).

Moreno M.A, Jelen Chock L.A, Christakis D.A (2013).*"Problematic Internet-Use among Older Adolescents:* A conceptual framework. Computers and Human Behavior.

Mylonopoulos, N.A. and Doukidis, G.I. (2003) *Mobile Business:* Technological Pluralism, Social Assimilation and Growth, International Journal of Electronic Commerce, 8, 1, 5-22.

Marelene, F. (2006): 'Computer/Internet Addiction, Symptoms, Causes& E'. Journals/Literature Features. Retrieved on 20th March 2017 from Deviantart.com.

Nalwa, K. and Anand, A. (2003): ' Internet addiction in students': A cause of concern. CyberPsychology and Behavior.

Noreen A, (2013). *Relationship Between Internet-Addiction and Academic Performance among University Undergraduates*. Academic Journals vol 8 (19) 1793-1796.

NSFNET (2007): 'The partnership that changed the world'. Website for an event held to celebrate the NSFNET, November 2007.

Nwabueze, U.A. and Aduba, E.D. (2014) Journal of Applied Information Science and Technology, vol. 7:1

Parker, D. (2005): 'Understanding the FTP protocol. Windowsnetworking.com.

Ruggiero, T.E. (2002): 'Uses and gratification theory in the 21st century'. Mass communications &society, 3(1), 3-37.

Ruggiero, T.E. (2000) *Uses and Gratifications Theory in the 21st Century,* Mass Communication & Society, 3, 1, 3-37.

Scherer, K. (1997). *College Life On-Line: Healthy and Unhealthy Internet-Use.*Journal of College Student Development, 38 (6).

Schmidt, A.; Dolis, C.M.; Tolli, A.P. (2009).'*A Matter of Time*: Individual Differences, Contextual Dynamics and Goal Progress Effects on Multiple-Goal Self-Regulation'. Journal of Applied Psychology 94 (3): 692-709.

Schulman, M.(2002). *How we Become Moral.InC.RSynder and J.Lopez (Eds.),* Handbook of Positive Psychology 499-512, Oxford University: University Press.

Severin, Werner J., Tankard Jr., James W.(2000). *"2nd:New Media Theory". Communication Theories:* Origins, Methods and Uses in the Mass Media. Addison Wesley. Longman.

Sharma, M. (1997).*Task Procrastination and its Determinants.* Indian Journal of Industrial Relations, Retrieved from JSTOR database in January.

Sharma.M. (1997).*Task procrastination and its Determinants.*Indian Journal of Industrial Relations.Retrieved from JSTOR Database.

Siomos, K. E., Dafouli, E. D., Braimiotis, D. A., Mouzas, O.D., & Angelopoulos, N.V. (2008), *Internet Addiction among Greek adolescent Students*, Cyber Psychology & Behavior, 11.

Sirois.F.(2007). *'I Will Look after my Health Later'. A Replication and Extension of the Procrastination Health Model with Community-Dwelling Adults.*Personality and Individual Differences.

Solomon, L.J., &Rothblum, E. D. (1984).*Academic Procrastination: Frequency and Cognitive Behavioral Correlates*. Journal of Counseling Psychology. 31, 503-509.

Solomon, L.J., &Rothblum, E. D. (1984).*Academic Procrastination: Frequency and Cognitive-Behavioral Correlates.* Journal of Counseling Psychology.

Stafford, M.R., and Stafford, T.F. (1996) *Mechanical Commercial Avoidance: A Uses and Gratifications Perspective,* Journal of Current Issues and Research in Advertising, 18, 27-38.

Stafford, Thomas F.; Marla Royne Stafford, Lawrence L. Schkade (Spring 2004).*'Deterring Uses and Gratifications for the Internet'*. Decisions Sciences35 (2):259-288.

Thomas, D., &Seely Brown, J. (2011).*A New Culture of Learning: Cultivating the Imagination for a World of Constant Change.* Polarized Light.

Tikumah,I.H. (2009). *An Introduction to the Problems in Society for Tertiary Students in Nigeria.*Zaria. Ahmadu Bello University Press Limited.

Tsai HF, Cheng SH, Yeh TL, Shih CC, Chen KC, Yang YC,, Yang YK (2009). *The Risk Factors of Internet Addiction*- A Survey of University Freshmen.Psychiatry Res.

UNESCO(2005) *Information and Communication Technologies in Schools*. A Handbook for Teachers. Paris: UNESCO.

Wang, Wallace (2004) *'Instant Messaging and Online chat Rooms: Internet Relay Chat(IRC). Steal this File-Sharing* Book (1st ed.) San Francisco, California: No Starch Press.

Whang Sang-Min, Lee., Chang S., Geungyoung (2003). *"Internet Over-Users. Psychological Profiles: A Behavior Sampling Analysis on Internet-Addiction". Cyber Psychology & Behavior (6).*

Wigfield, A., Eccles, J.S., Schiefele, U., Roeser, R. & Davis-Kean, P. (2006).*Development of Achievement Motivation:* in-W.Damon& R. Lermer (Eds.).Handbook of Child Psychology (6th ed.) New York :Wiley.

Young K (1998). "*The Relationship Between Depression and Internet-Addiction*". Cyber Psychology & Behavior.

Young, K.S. (2009). *Internet Addiction: The Emergence of a New Clinical Disorder*. 1 (3) CYBERPSYCOL&BEHAV 237-244.

Young, K. (2009): 'Understanding online gaming addiction and treatment issues for adolescents '. The American Journal of Family Therapy. 37 (5) 355-356.

Young, K. (1999): 'Internet Addiction: Symptoms, Evaluation & Treatment '. In L Vande Creek; T. Jackson innovations.

Young, Kimberley. S. (2008): 'Internet Sex-addiction: Risk factors, stages of development & treatment'. American Behaviour Scientists.52, (1). 21-37. Retrieved 2nd April 2013.

Answers to Research Questions

Research Question One: What is the difference between male and female internet-addicted students in their level of academic procrastination in Ahmadu Bello University Zaria?

Table 4.3: Descriptive mean and standard deviation on the significant difference between male and female internet-addicted students in their level of academic procrastination in Ahmadu Bello University Zaria.

Variable	Sex	N	Mean	Std.dev	Std.ERR	Mean Difference	Remarks	
Academic procrastination	Male	110	69.31	12.81	1.073	9.61	Difference exists on the basis of gender	
	Female	50	59.70	10.94	1.018			

From the above result analysis, the respondents revealed that difference exists on the influence of internet-addiction on academic procrastination between male and female students in Ahmadu Bello University Zaria. Their calculated mean internet-addiction on academic procrastination is 69.31 and 59.70 by male and female students respectively, implying a mean difference of 9.61 showing that the male students have significantly higher internet-addiction than their female counterparts. This means that gender status of the students has influence on their level of internet- addiction and academic procrastination.

Research QuestionTwo: What is the difference among internet-addicted students of different levels of study in their level ofacademic procrastination among students in Ahmadu Bello University Zaria?

Table 4.2.2:Mean and Standard deviation statistics on differenceamong internet-addicted students of different levels of study in their level of academic procrastination among students in Ahmadu Bello University Zaria.

INTERNET_ADDICTION					
Level of study	N	Mean	Std. Deviation	Std. Error	Remarks
100	20	52.82	10.46	1.76	Differences exist on the basis of their level of study
200	22	51.34	18.32	2.79	
300	65	53.78	14.27	1.26	
400	40	58.43	10.40	.96	
500	13	52.43	10.53	1.92	
Total	160	56.28	13.95	.74	

Results of the Table above showed thatdifference exists among internet-addicted students of different levels of study in their level of academic procrastination among students in Ahmadu Bello University Zaria. The descriptive statistics showed that their computed mean internet-addiction on academic procrastinations were 53.82 , 51.34 , 53.78 , 58.43 and 52.43 by 100, 200, 300, 400 and 500 level students respectively. The 400 students were more addicted to internet and had higher procrastination than the students of other levels.

Research Question Three: What is the difference among internet-addicted students of different faculties of study in their level of academic procrastination inAhmadu Bello University Zaria?

Table 4.2.3: Descriptive statistics on difference among internet-addicted students of different faculties of study in their level of academic procrastination among students in Ahmadu Bello University

	N	Mean	Std. Deviation	Std. Error	Remarks .
Education	50	52.33	16.44	1.93	Differences exist
Arts	14	61.44	6.00	1.34	
Admin	26	62.43	11.32	1.43	
Social Sciences	19	62.22	11.25	1.44	
Science	42	55.18	11.14	1.11	
Medicine	9	57.00	10.33	1.22	
Total	160	57. 25	12.11	.74	

The descriptive statistics above showed that differences exist in the influence of academic discipline (faculties) on internet-addiction and academic procrastination among students in Ahmadu Bello University Zaria. The descriptive statistics showed that their computed mean internet addiction on academic procrastinations were 52.33, 61.44, 62.43, 62.22, 55.18 and 57.00 by students from Education, Arts, Administration, Social Sciences, Sciences and Medicine respectively students of Arts, Administration and Social Sciences had higher internet addiction than those from faculties of Education, Sciences and Medicine

APPENDIX I

STUDENT'S QUESTIONNAIRE

INFLUENCE OF INTERNET-ADDICTION ON ACADEMIC PROCRASTINATION AMONG STUDENTS OF AHMADU BELLO UNIVERSITY ZARIA, KADUNA STATE-NIGERIA.

SECTION A: - PERSONAL DATA

PLEASE FILL IN GAPS WITH THE APPROPRIATE TO YOU

- FACULTY [ ]
- DEPARTMENT [ ]
- COURSE [ ]
- LEVEL [ ]
- GENDER [ ]

KEY TO RESPONSES

- NOT APPLICABLE (0)
- RARELY (1)
- OCCASIONALLY (2)
- FREQUENTLY (3)
- OFTEN (4)
- ALWAYS (5)

SECTION B

INTERNET ADDICTION TEST (IAT)

NOTE: Use either of the following options to answer the questions below;

1). How often do you stay online longer than you intended?	(0) Not applicable (1) Rarely (2) Occasionally (3) Frequently (4) Often (5) Always
2). How often do you neglect household chores to spend more time online?	(0) Not applicable (1) Rarely (2) Occasionally (3) Frequently (4) Often (5) Always
3). How often do you prefer the excitement of the Internet to intimacy with your partner?	(0) Not applicable (1) Rarely (2) Occasionally (3) Frequently (4) Often (5) Always
4). How often do you form new relationships with fellow online users?	(0) Not applicable (1) Rarely (2) Occasionally (3) Frequently (4) Often (5) Always
5). How often do others in your life complain to you about the amount of time you spend online?	(0) Not applicable (1) Rarely (2) Occasionally (3) Frequently (4) Often (5) Always
6). How often do your grades or school work suffer because of the amount of time you spend online?	(0) Not applicable (1) Rarely (2) Occasionally (3) Frequently (4) Often (5) Always
7). How often do you check your e-mail or chat before something else that you need to do?	(0) Not applicable (1) Rarely (2) Occasionally (3) Frequently (4) Often (5) Always
8). How often does your job performance or productivity suffer because of the internet?	(0) Not applicable (1) Rarely (2) Occasionally (3) Frequently (4) Often (5) Always
9). How often do you become defensive or secretive when anyone asks you what you do online?	(0) Not applicable (1) Rarely (2) Occasionally (3) Frequently (4) Often (5) Always
10). How often do you block out disturbing thoughts about your life with soothing thoughts of the internet?	(0) Not applicable (1) Rarely (2) Occasionally (3) Frequently (4) Often (5) Always
11). How often do you find yourself anticipating when you will go online again?	(0) Not applicable (1) Rarely (2) Occasionally (3) Frequently (4) Often (5) Always
12). How often do you fear that life without the internet would be boring, empty, and joyless?	(0) Not applicable (1) Rarely (2) Occasionally (3) Frequently (4) Often (5) Always
13). How often do you snap, yell, or act annoyed if someone bothers you while you are online?	(0) Not applicable (1) Rarely (2) Occasionally (3) Frequently (4) Often (5) Always
15). How often do you feel preoccupied with the Internet when off-line, or fantasize about being	(0) Not applicable (1) Rarely (2) Occasionally (3) Frequently (4) Often (5) Always

online?	
16). How often do you find yourself saying "just a few more minutes" when online?	(1) Not applicable (2) Rarely (3) Occasionally (4) Frequently (5) Often (6) Always
17). How often do you try to cut down the amount of time you spend online and fail?	(0) Not applicable (1) Rarely (2) Occasionally (3) Frequently (4) Often (5) Always
18). How often do you try to hide how long you have been online?	(0) Not applicable (1) Rarely (2) Occasionally (3) Frequently (4) Often (5) Always
19). How often do you choose to spend more time online over going out with others?	(0) Not applicable (1) Rarely (2) Occasionally (3) Frequently (4) Often (5) Always
20). How often do you feel depressed, moody, or nervous when you are off-line, which goes away once you are back online?	(0) Not applicable (1) Rarely (2) Occasionally (3) Frequently (4) Often (5) Always

SECTION C

PROCRASTINATION ASSESSMENT SCALE FOR STUDENTS (PASS)

Procrastination is the deliberate delay of Academic obligations such as completion of assignments, projects and reading for exams that are supposed to be accomplished within a particular time-frame, to the deadline before embarking on them.

NOTE: Answer the questions by choosing any of the options which follows afterwards.

- **WRITING A TERMINAL PAPER**

1. To what degree do you procrastinate on this task?	(1)Never (2) Almost (3)Sometimes (4) Nearly always (5) Always
2. To what degree is procrastination on this task a problem for you?	(1)Never (2) Almost (3)Sometimes (4) Nearly always (5) Always
3. To what extent do you want to decrease your tendency to procrastinate on this task?	(1) Do not want to decrease (2) Somehow (3) Definitely want to decrease

- **STUDYING FOR EXAMS**

4. To what degree do you procrastinate on this task?	(1)Never (2) Almost (3)Sometimes (4) Nearly always (5) Always
5. To what degree is procrastination on this task a problem for you?	(1)Never (2) Almost (3)Sometimes (4) Nearly always (5) Always
6. To what extent do you want to decrease your tendency to procrastinate on this task?	(1) Do not want to decrease (2) Somehow (3) Definitely want to decrease

- **KEEPING UP WITH WEEKLY READING ASSIGNMENTS**

7. To what degree do you procrastinate on this task?	(1)Never (2) Almost (3)Sometimes (4) Nearly always (5) Always
8. To what degree is procrastination on this task a problem for you?	(1)Do not want to decrease (2)Somehow (3) Definitely want to decrease

- **ACADEMIC ADMINISTRATIVE TASKS SUCH AS FILLING-OUT FORMS, REGISTERING FOR CLASSES, GETTING ID CARD**

10. To what degree do you procrastinate on this task?	(1)Never (2) Almost (3)Sometimes (4) Nearly always (5) Always
11. To what degree is procrastination on this task a problem for you?	(1)Never (2) Almost (3)Sometimes (4) Nearly always (5) Always
12. To what extent do you want to decrease your tendency to procrastinate on this task?	(1) Do not want to decrease (2) Somehow (3) Definitely want to decrease

(E) ATTENDANCE TASKS; MEETING WITH YOUR COURSE ADVISOR AND MAKING AN APPOINTMENT WITH A LECTURER

13 To what degree do you procrastinate on this task?	(1)Never (2) Almost (3)Sometimes (4) Nearly always (5) Always
14. To what degree is procrastination on this task a problem for you?	(1)Never (2) Almost (3)Sometimes (4) Nearly always (5) Always
15. To what extent do you want to decrease your tendency to procrastinate on this task?	(1) Do not want to decrease (2) Somehow (3) Definitely want to decrease

(F) SCHOOL ACTIVITIES IN GENERAL

16. To what degree do you procrastinate on this task?	(1)Never (2) Almost (3)Sometimes (4) Nearly always (5) Always
17. To what degree is procrastination on this task a problem for you?	(1)Never (2) Almost (3)Sometimes (4) Nearly always (5) Always
18. To what extent do you want to decrease your tendency to procrastinate on this task?	(1) Do not want to decrease (2) Somehow (3) Definitely want to decrease

APPENDIX II

T-Test

APPENDIX D

T-Test

Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
INTERNET_ADDICTION	Male	191	59.0314	14.84123	1.07387
	Female	161	56.6708	12.92419	1.01857

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
INTERNET_ADDICTION	Equal variances assumed	.749	.387	3.427	350	.004	2.6399	1.49759	-3.58479	2.30601
	Equal variances not assumed			3.432	349.619	.004	2.3939	1.48010	-3.55041	2.27162

ONEWAYINTERNET_ADDICTION BY V3

/STATISTICS DESCRIPTIVES

/MISSING ANALYSIS

/POSTHOC=SCHEFFEALPHA(0.05).

Hyp2

Oneway

Descriptives

INTERNET_ADDICTION

Level	N	Mean	Std. Deviation	Std. Error
100 Level	37	54.8286	10.46418	1.76877
200	43	52.3488	18.32366	2.79433
300	128	55.7891	14.27439	1.26169
400	116	60.4310	10.40587	.96616
500	30	53.4333	10.53298	1.92305
Total	354	56.2825	13.95234	.74156

ANOVA

INTERNET_ADDICTION

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	9345.893	5	1869.179	10.956	.000
Within Groups	59371.859	348	170.609		
Total	68717.751	353			

Post Hoc Tests

Homogeneous Subsets

INTERNET_ADDICTION

Scheffe[a,b]

Level	N	Subset for alpha = 0.05	
		1	2
200	45	52.3488	
500	30	53.4333	
100 Level	37	54.8286	
300	128	55.7891	
400	116		60.4310
Sig.		1.000	.861

Oneway

Descriptives

INTERNET_ADDICTION

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Education	90	51.7333	18.39932	1.93946	47.8797	55.5870	.00	81.00
Arts	45	59.0444	9.04774	1.34876	56.3262	61.7627	44.00	82.00
Admin	53	60.0943	10.45920	1.43668	57.2114	62.9773	26.00	87.00
Social Sciences	51	61.3922	13.66467	1.91344	57.5489	65.2354	14.00	86.00
Science	85	54.0118	12.17579	1.32065	51.3855	56.6380	23.00	94.00
Medicine	30	56.8000	9.74644	1.77945	53.1606	60.4394	35.00	76.00
Total	354	56.2825	13.95234	.74156	54.8241	57.7409	.00	94.00

ANOVA

INTERNET_ADDICTION

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	4753.767	5	950.753	5.173	.000
Within Groups	63963.985	348	183.805		
Total	68717.751	353			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: INTERNET_ADDICTION

Scheffe

(I) Faculty	(J) Faculty	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Education	Arts	-7.31111	2.47524	.124	-15.5947	.9725
	Admin	-8.36101*	2.34740	.028	-16.2168	-.5052
	Social Sciences	-9.65882*	2.37619	.006	-17.6109	-1.7067
	Science	-2.27843	2.05053	.941	-9.1407	4.5838
	Medicine	-5.06667	2.85816	.678	-14.6317	4.4984
Arts	Education	7.31111	2.47524	.124	-.9725	15.5947
	Admin	-1.04990	2.74819	1.000	-10.2470	8.1472
	Social Sciences	-2.34771	2.77282	.982	-11.6272	6.9318
	Science	5.03268	2.49939	.542	-3.3317	13.3971
	Medicine	2.24444	3.19552	.992	-8.4496	12.9385
Admin	Education	8.36101*	2.34740	.028	.5052	16.2168
	Arts	1.04990	2.74819	1.000	-8.1472	10.2470
	SOCIALSciences	-1.29782	2.65933	.999	-10.1975	7.6018
	Science	6.08257	2.37285	.257	-1.8584	14.0235
	Medicine	3.29434	3.09755	.951	-7.0719	13.6606
Social	Education	9.65882*	2.37619	.006	1.7067	17.6109

Sciences	Arts	2.34771	2.77282	.982	-6.9318	11.6272
	Admin	1.29782	2.65933	.999	-7.6018	10.1975
	Science	7.38039	2.40134	.096	-.6559	15.4167
	Medicine	4.59216	3.11943	.825	-5.8473	15.0316
Science	Education	2.27843	2.05053	.941	-4.5838	9.1407
	Arts	-5.03268	2.49939	.542	-13.3971	3.3317
	Admin	-6.08257	2.37285	.257	-14.0235	1.8584
	Social Sciences	-7.38039	2.40134	.096	-15.4167	.6559
	Medicine	-2.78824	2.87910	.967	-12.4234	6.8469
Medicine	Education	5.06667	2.85816	.678	-4.4984	14.6317
	Arts	-2.24444	3.19552	.992	-12.9385	8.4496
	Admin	-3.29434	3.09755	.951	-13.6606	7.0719
	Social Sciences	-4.59216	3.11943	.825	-15.0316	5.8473
	Science	2.78824	2.87910	.967	-6.8469	12.4234

*. The mean difference is significant at the 0.05 level.

Homogeneous Subsets

INTERNET_ADDICTION

Scheffe[a,b]

Faculty	N	Subset for alpha = 0.05	
		1	2
Education	90	51.7333	
Science	85	54.0118	54.0118
Medicine	30	56.8000	56.8000
Arts	45	59.0444	59.0444
Admin	53	60.0943	60.0943
Social Sciences	51		61.3922
Sig.		.085	.183

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 51.323.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

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FREQUENCIES
VARIABLES=V5V6V7V8V9V10V11V12V13V14V15V16V17V18V19V20V21V22V23V24
  /STATISTICS=MEAN
  /ORDER=ANALYSIS.
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