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Utilization of Internet Services among Students of Polytechnic Institutions in Kwara State

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A B S T R A C T S

Internet services had made the entire world a global village. But the utilization of Internet services have been jeopardized by major problems and one of the problems is security which is one of the greatest threat. This study investigated the utilization of internet services among students of the polytechnic institutions in Kwara state. The descriptive method of the survey type was used to gather accurate information on the assessment of the utilization of the Internet among students. The findings established that chat, entertainment, and social networking are the most disturbing activities associated with the utilization of Internet services. Also, few students showed the problem of sleeplessness at night and decline in academic performance due to internet usage and there was a significant difference between male and female utilization of Internet services. The study concluded that it can be concluded that social activities were seen as the most activities students carry out on the internet. It was thus recommended that students should be encouraged in their usage of Internet services to boost their academic performance in school and for social networking purposes.

A R T I C L E   I N F O

1. INTRODUCTION

The term Internet is a short form for Interconnected Network which implies that the Internet is a network of computers. In view of Sharma and Mohanty, (2020) Internet, sometimes called simply "the Net," is a worldwide system of computer networks a network of networks in which users at any one computer can, if they have permission, get information from any other computer and sometimes talk directly to users at other computers. This implies that the Internet is composed of many interconnected computer networks which enable information sharing among its users. The Internet has become an unlimited space for information exchange, social networking; carries an extensive range of educational material at all levels from pre-school to post-doctoral. Hence, the Internet is a wired or wireless mode of communication through which one can receive and transmit information that can be used for single or multiple purposes (Ofole & Babatunde, 2015).

The Internet has changed the way people interact. The internet has changed human relationships. Online relationships involving communication and collaboration adopt Computer-Mediated Communication (CMC) for information sharing. (Carlson *et al.,* 2016). Computer-Mediated Communication is the application of computer-based tools to transfer information among people over computer networks, involving many different forms of synchronous and asynchronous or real-time interaction Eun-Ju, (2020). Computer-Mediated Communication (CMC) decreased the risks of being criticized, rejected, and disapproved which were the usual characteristics of face-to-face relationships. The use of the Internet is not only about communication through emails but is also a platform on which people interact. It is possible to attend a classroom being taught abroad while seated somewhere in other parts of the world or give evidence directly to an international court in real-time with no need to travel.

The Internet can be defined as an international network or an information superhighway which connects computers from different geographic and locations to share information and resources using hypertext transfer protocol (HTTP) and electronic mail that is e-mail services (Bolu-Steve *et al.,* 2015). Most of the computer systems are configured to run stand-alone, this means that they can run offline without connecting to the Internet until a modem is connected. A particular computer can access the Internet when it is operated within a particular wireless hotspot. A hotspot is used to grant Internet to those systems that are installed within any defined connectivity.

Internet browsers such as Mozilla Firefox, Internet Explorer, Safari, Opera are software that can be used to access the content of the Internet on geographic user inter-phase via a particular Internet search engine. An Internet search engine is an Internet facility or a software system designed to carry out web search and assists information seekers to find the required information on the Web, which means searching the World Wide Web in a systematic way for particular information. Typical examples of Internet search engines are google, yahoo, bing, ask.com, ping.com, aol.com.

The Internet is one of the main parts of students' daily lives for satisfying their academic, social, and recreational needs. This technology has reshaped the tertiary educational practice in terms of improving academic learning (Apuke & Iyendo, 2017). The Internet has been an essential tool for facilitating academic activities in tertiary institutions in Nigeria, for a number of years now, the managers of these tertiary institutions of learning have invested heavily in establishing Internet services in their schools. The services provided by Internet have had a major impact in the university context, in the organization, and in teaching and learning methods. The Internet has made computers across the globe interconnected.

Internet usage also differs in males and females, they have different interests in what they do on the Internet. Gender is an important variable in terms of Internet addiction, researchers have done different studies on internet addiction in males and females, most of them conclude that the male gender is Internet addicts, they use the Internet for online gaming, communication, and entertainment while the female use the Internet for social interactions and entertainment (Gunduz et al., 2017). Concerning the kind of use, gender differences have been described in the literature, with males being the ones who spend most hours per week on e-mail, playing online games, and browsing in web pages while females are the ones who mostly use chats or social networks (Fernández-Villa, 2015).

Hussain, (2012) reported that the Internet and its usage in higher education have improved educational development and research and have encouraged virtual interactions for sharing research findings. Students use the Internet more than other people do to meet their educational or research needs (Emeka & Nyeche, 2016). The usage of the Internet for academic purposes, the Internet has also been shown to accelerate new forms of human interactions among people through instant messaging, Internet forums, and social networking. The Internet has become a stable means of student interaction and information dissemination in universities. In addition, Amaoge and Igwebuike, (2016) believed that the Internet has increasingly become an invariable asset in education in terms of learning, teaching, and research. The use of the Internet in tertiary institutions has contributed immensely to academic activities.

Anderson et al., (2016) noted that Internet technology and computers have made it possible for students to be active learners and allowed instructors to be facilitators. Jackson, et al. (2011) remarked that the Internet will level the educational playing field due to its availability to everyone, everywhere, and any time, irrespective of gender, race/ethnicity, income, or other socio-demographic characteristics. Thus, the Internet is a vital tool that will propel University education to greater heights as the world moves further into the knowledge-based economy. Polytechnics worldwide now invest a lot in internet access because it reduces the time between the production and utilization of knowledge; improves cooperation and exchange of ideas with fellow researchers in other institutions, regions, or countries, furthers the sharing of information; and promotes multidisciplinary research.

Internet can substitute for expensive hardcopy libraries, by availing students' access to scholarly information resources. Today, survival in academics without the Internet is hardly imaginable. The Internet has found useful applications in online data repositories, library catalogs, journals, news services, student and financial administration systems, online supported or solely online conducted teaching, as well as in digital communication with fellow students and lecturers. The investigation of how the Internet fits into the daily life of staff and students at educational institutions is worthwhile when one considers the ubiquitous and all-pervasive communications tool features of the Internet. Consequently, studies have been carried out in many places to understand how Polytechnic students use the Internet, the purposes for which the students use the Internet, the search engines used, their Internet skills as well as problems that hinder efficient Internet use.

The Internet has been defined as the communication superhighway that links, hooks, and transforms the entire world into a global village where different individuals can easily get in touch, see, or speak to one another, as well as exchange information instantaneously from one point of the globe to another (Shitta, 2002). This technology has reshaped the tertiary educational practice in terms of improving academic learning (Apuke & Iyendo, 2017) and will be more feasible in the future. Hussain, (2012) reported that the internet and its usage in

higher education have improved educational development and research and have encouraged virtual interactions for sharing research findings.

The rationale for Internet utilization for academic and research purposes stems from the benefits derived, such as free access to online journals, magazines, and other information resources. It has been theorized Technology acceptance model which is explained as an information systems theory that models how users come to accept and use a technology that the perceived usefulness or perceived utility is the major rationale for the acceptance of technological devices such as the internet. The perceived usefulness (PU) is described as the extent to which a person perceived that utilizing a particular technological device will improve given job performance. Whilst perceived ease of use (PEOU) is the extent a person feels that utilizing a particular technological device would require less effort, or how well a technological device can fasten a work without necessarily putting much effort (Tezer & Soykan, 2017).

In this regard, Sahin *et al*. (2010) pointed out that the use of the Internet in the educational setting has enabled easy access to many resources and information sharing. Bashir *et al.*, (2008) noted that educators who advocated for technology integration into the learning process had the impression that it will improve learning and prepare students to effectively participate in the twenty-first-century workplace. The new digital technologies have been widely used in higher education institutions and this efficiently helps students to carry out substantial research work (Devi & Roy, 2012). Despite these possible benefits of the internet for learning, instructing, and research, there is a limited provision of efficient Internet services in most tertiary institutions in developing countries. Muniandy, (2010) comments that the adoption of the Internet would be meaningless in educational settings without appropriate internet facilities.

Like in any other higher institution of learning around the globe, Kwara State Polytechnic students are often required to conduct diverse research work as they progress through their final year. The qualities of a student's research and learning are largely dependent on the quality, quantity, and current Internet resources. This has attracted research debate on the use of the Internet in contemporary educational contexts in developing countries such as Nigeria.

However, most of these studies predominantly highlight its impact on academic performance (grades), communication, and general educational purposes (Ifinedo, 2017; Oduwole, 2004). This indicates that detailed studies that try to interpret student perspectives on internet access and usefulness for research and academic learning are still in their embryonic phase (Emeka & Nyeche, 2016; Adekunmisi *et al*., 2013).

It is worthwhile to mention that most of these documented researches based merely on students within Southern, Eastern and Western regions (Afolabi, 2015; Agboola, 2010; Ani, 2010; Omotayo, 2006). This strong focus has led to limited research conducted among students in the North-Eastern part which is amid slower technological change (Ahmed & Bukar, 2016; Emeka & Nyeche, 2016).

Though, there is evidence to show that a limited proportion of the population has access to the Internet at home, yet, little is known if students in this region incorporate this technology into their research and learning (Navaretti & Tarr, 2017). Technological development in Universities within this region is not much advanced and very little research in the implementation of information and communication technology (ICT) has been undertaken as compared to research in universities in other regions of Nigeria.

This backdrop provides scope for in-depth research into the students' experience and perspective on the access and utility of electronic sources for academic research and learning.

Thus, it is pertinent to research how these students find ways to make use of the Internet to facilitate their academic research and learning. This also calls for exploring the challenges facing the students in this region as it relates to internet usage for academic research and learning. It is believed that the outcomes of this current study will contribute to enhancing the empirical research results that are beneficial for informing teaching and learning practice in higher education. This will also provide an understanding of the application and appreciation of internet resources by students residing in this overlooked region.

The Internet is very useful to Polytechnic students and staff in Nigeria because it enables them to have access to timely, accurate, and relevant information that cannot be obtained from library shelves. Internet searching helps polytechnic students to boost their intellectual development and job preparation. Due to the endless nature of information resources on the Internet, libraries are increasingly investing in the provision of Internet services and resources to enable their clients to have better access to information.

Internet connections now constitute a highly visible service in every library and that the librarians and their clients have embraced it in their daily work. Academic libraries now run information literacy courses to educate faculty members and students on skills to access, retrieve and evaluate information resources from the Internet. The Internet as 'a a large encyclopedia' or 'a library without walls' for its abundant information. The research intends to assess the utilization of internet services among students of the polytechnic institutions in Kwara State.

Studies to be conducted on students will show that utilization of Internet services can be accompanied by major problems and one of the problems is security which is one of the greatest threats to Internet utilization which comes from the strain put on the global system of information exchange that the Internet relies upon. The Global Risks Report of 2018 highlights the menace of cyber-attacks and the danger to all interconnected enterprises if the Internet is compromised as a result of internal weaknesses. Clouds will be the first to be compromised as security regulations are still not fully developed given how severe the issue is.

Furthermore, rapid growth in technology has resulted in a limited understanding of Internet uses. For students to make use of the Internet and all that the Internet has to offer, it is essential to work upon their awareness of the changes taking place within Internet usage to make it more efficient. Not only will the comprehension empower them.

Internet companies have learned to expect a kind of ebb and flow to internet use. Late at night and early in the morning, few people are accessing content online, but during peak working hours and primetime, people stream large volumes. This is not problematic when you know what to anticipate; the problem comes with unexpected fluctuations, which can pop up at any time—for unpredictable reasons. Companies like 10Gbps.io are attempting to resolve this by using unmetered bandwidth dedicated servers with high uplink potential to provide ample reserve for their users.

Another common cause of Internet connection problems is a lack of bandwidth. Bandwidth is a measure of how much data can be transmitted through your internet "pipeline" per second according to Carlson, (2016). This means that if you have a small pipeline and are trying to stream a video in hybrid digital (an activity that requires a lot of data), your internet speeds may slow down because your pipeline is not big enough to funnel all that data at once. A larger Internet pipeline would allow more data to funnel through at one time, resulting in a faster connection.

Hence, this study intended to study the utilization of Internet services among students of polytechnic in Kwara State, it will prepare them mentally and they will possibly be able to find solutions on how to take caution from any of the mentioned problems.

The main purpose of this work was to primarily examine factors associated with the assessment of the utilization of Internet services for learning among students in polytechnic in Kwara State. However, specifically, the study is focused on

(i)   assessing Internet utilization among students of Polytechnic institutions in Kwara State;
(ii) determining the nature of Internet services among students of Polytechnic institution in Kwara State;
(iii) determining the problems in accessing Internet services among students of Polytechnic institutions in Kwara State, and
(iv) appraising the significant difference between male and female utilization of Internet services in Polytechnic institutions in Kwara State.

The following research questions were answered in this study:

(i)   What is the level of Internet usage among undergraduates in Polytechnics in Kwara?
(ii) What is the nature of Internet services among undergraduates in Polytechnics in Kwara?
(iii) What are the problems in accessing Internet services among undergraduates in Polytechnic in Kwara state?
(iv) What is the significant difference between male and female utilization of Internet service among undergraduates in Polytechnics in Kwara?

The following null hypothesis will be tested in this study: H01: There is no significant difference between male and female undergraduates' level utilization of Internet services in Polytechnics in Kwara State.

2. METHODS

This section presents the methods and procedures that were used in this study to gather and analyze the data that was collected for the research. It was presented under the following subheadings: research design; population, sample, and sampling techniques; research instrument; validation of the research instrument; procedure for data collection and data analysis techniques.

2.1. Research Design

The research design adopted was a descriptive research of the survey type, since the data that was collected was qualitative and quantitative, it gives a holistic understanding of the research topic The descriptive method of the survey type was used to gather accurate information on the assessment of the utilization of Internet among students of Federal Polytechnics Offa and Kwara State Polytechnic, in Kwara State, Nigeria.

2.2. Population, Sample, and Sampling Techniques

Table 1 shows the sample of student in this research. The respondents involved in this study were the students of Federal Polytechnic Offa and Kwara State Polytechnic, in Kwara State, Nigeria. 150 students were from the Faculty of Art, Faculty of Social science, and Faculty of Communication and Information Science, with a total of one hundred and fifty respondents over a period of fourteen days. However, a questionnaire will be conducted physically for 150 students and their responses were collected immediately for further collation. Hence the researcher used 150 students for the research.

Table 1. Sample of students.

Faculty	Frequency
Faculty of Science	50
Faculty of Financial and Management studies	50
Faculty of Business and Communication Studies	50

2.3. Research Instrument

The research instrument is a researcher-designed e-form questionnaire titled Assessment of the Utilization of Internet among students in Kwara State". The questionnaire was administered to students of Federal Polytechnic Offa and Kwara State Polytechnic from the Faculty of Science, Faculty of Financial and management studies, and Faculty of Business and Communication Studies in the institution via physical contact. The items that were used to assess the level of Utilization of the Internet among students.

The instrument consists of sections; section A contains items on demographic data the students are expected to tick appropriate scale that is applicable for them. Section B seeks information on the Utilization of Internet services among undergraduates, the students are expected to tick the appropriate scale that is applicable to them. Section C has items assessing respondents' nature of internet services, the students are expected to tick the appropriate scale that is applicable to them. Section items seek information on the problem in accessing Internet Services of internet usage the students are expected to tick the appropriate scale that is applicable to them. Section E items seek information on the relevance of Internet services the students are expected to tick the appropriate scale that is applicable to them.

2.4. Validation of Research Instrument

The instrument was to be perused by the researcher's supervisor for its suitability and appropriateness to the purpose of the study and adequacy of items in addressing the problem of the study and validated by our supervisor and other three (3) experts from the Department of Educational Technology to examine in other to establish both face and content validity of the instrument. The draft of the questionnaire was subjected to scrutiny and constructive criticism. Their advice and suggestion were used to modify the items in the instrument and also prepare the final draft of the questionnaire.

The reliability of the survey instrument was determined by administering 150 copies of the questionnaire to students in Polytechnics in Kwara State, Nigeria. Cronbach Alpha was used to measure the reliability coefficient of the instrument section at a 0.05 level of significance.

2.5. Procedure for Data Collection

The researcher visited the students in their respective faculties through the influence of the faculty president to seek their cooperation and sincere participation in the study. The researcher will ensure that the respondents are not forced to participate in the study. The questionnaire will be completed and made available for collation the same day.

Based on research ethics and to ensure a high standard of professionalism, students' consent was sought through a research consent form that was presented to them. The respondents voluntarily participated in the study and there was no coercion of any sort. Also, confidentiality was not compromised to prevent insecurity that could have been felt by the participants. The researcher honestly was responsible for the distribution and collection of the research instrument.

2.6. Data Analysis Techniques

Data that was collected via the instrument (questionnaire) was analyzed using both descriptive and inferential statistical tools. Descriptive tools of frequency count and the percentage were used to present the demographic variables while the mean was used to answer research questions. On the other hand, the inferential statistical tool of t-test was used to test and analyze the hypothesis as well as determine the result.

3. RESULTS

Table 2 shows the demographic information of the respondents where majority, 86 (57.3%) of the respondents were male and 64 representing 42.6% were females. This study showed that there were more male than female in the study area.

Table 3 shows the demographic information of the respondents from the three faculties sampled from where the majority 53 (35.3%) of the respondents were from Business & Communication Studies, 42 (28%) representing Financial and Management Studies, and 55 (42.6%) representing Sciences respectively. This study showed that the hierarchy of the respondents from each Faculty in the study area is Sciences, Business & Communication Studies, and Financial and Management Studies respectively.

Table 2. Gender distribution of the respondents.

Variables	Frequency	Percentage (%)
Gender		
Male	86	57.3
Female	64	42.6
Total	**150**	**100**

Table 3. Distribution of respondent by faculty.

Faculties	Frequency	Percentage (%)
Business & Communication Studies	53	35.3
Financial & Management Studies	42	28
Sciences	55	36.6
Total	**150**	**100**

3.1. Research Question 1: What is the degree of access to the level of usage of internet services by students in Polytechnics in Kwara State?

In **Table 4**, items are: How often do you use the internet services, using 2.50 as the benchmark, any of the provided options which are equal or greater than 2.71 is an agreement so we can assume that most of the participants agree on the item. How often do you spend time accessing the internet? and the mean score is 2.41 which is lower than the benchmark is a disagreement. How often do you relate with other students to assess the internet and observed that the mean score is 2.40 which is lower than the benchmark is a disagreement, how often do you go online on the internet to search for materials related to your course and observed that the mean score is 2.24 which is lower than the benchmark is a disagreement.

Table 4. Accessing level of usage of internet services by students.

S/N	ITEMS	D.N.A 4	R 3	O 2	A 1	TOTAL	X	DECISION
1	How often do you use internet services?	48 192	37 111	39 78	26 26	150	2.71	Accepted
2	How often do you spend time accessing the internet?	45 180	29 87	19 38	57 57	150	2.41	Reject
3	How often do you relate with other students to assess the internet?	30 120	36 108	49 98	35 35	150	2.40	Reject
4	How often do you go online on the internet to search for materials related to your course?	26 104	24 72	61 122	39 39	150	2.24	Reject
5	How often do you perform better in your grades or school work because of the assessment of the internet service?	23 92	49 147	55 110	23 23	150	2.48	Reject
6	How often do you use the internet per day?	23 92	57 171	44 88	26 26	150	2.51	Accepted
7	How often do you find yourself anticipating when you to assess the internet again?	19 76	41 123	62 124	28 28	150	2.34	Reject
8	How often do you fear that life without the assess to the internet would be boring, empty, and joyless?	19 76	45 135	53 106	33 33	150	2.33	Reject
9	How often do you act annoyingly if someone bothers you while you are using the internet service?	18 72	38 114	58 116	36 36	150	2.25	Reject
10	How often do you lose sleep due to night browsing on the internet?	18 72	34 102	60 120	38 38	150	2.21	Reject
11	How often do you find yourself saying "just a few more minutes" when online?	15 60	45 135	52 104	38 38	150	2.24	Reject
12	How often do you try to cut down the amount of time you spend online?	15 60	37 111	46 92	52 52	150	2.10	Reject
13	How often do you try to assess material online?	15 60	26 78	66 132	43 43	150	2.08	Reject
14	How often do you choose to spend more time assessing the internet over going out with others?	13 54	41 123	57 114	39 39	150	2.20	Reject
15	How often do you feel depressed when you are unable to assess the internet service?	11 44	34 102	48 96	57 57	150	1.99	Reject

How often do you perform better in your grades or school work because of your assessment to the internet service and observed that the mean is 2.48 which is lower than the benchmark is a disagreement, How often do you use the internet per day and observed that the mean score is 2.51 which is higher than the benchmark is an agreement, so we can assume that most of the participants agree on the item, How often do you find yourself anticipating when you to assess the internet again and observed that the mean score is 2.34 which is lower than the benchmark is a disagreement, How often do you fear that life without the assess to the internet would be boring, empty and joyless and observed that the mean score is 2.33 which is a lower than the benchmark is a disagreement.

How often do you act annoyingly if someone bothers you while you are using the internet service and observed that the mean score is 2.25 which is lower than the benchmark is a disagreement, How often do you lose sleep due to night browsing on the internet and observed that the mean score is 2.21, How often do you find yourself saying "just a few more

minutes" when online and observed that the mean score is 2.24, How often do you try to cut down the amount of time you spend online and observed that the mean score is 2.10.

How often do you try to assess material online and observed that the mean score is 2.08, How often do you choose to spend more time to assess internet over going out with others and observed that the mean score is 2.20, How often do you feel depressed when you are unable to assess the internet service and observed that the mean score is 1.99, which 13 out of 15 are below the acceptable mean of 2.50. Based on the question asked, the researcher observed that the level of usage of internet services is low.

3.2. Research Question 2: What is the nature of Internet services to Students in polytechnics in Kwara State?

From **Table 5**, the items are: Are there data limit when you are using the Internet, using 2.50 as the benchmark, any of the provided options which are equal or greater than the mean score which is 1.96 which is a disagreement, How often do you experience speed when using the internet and observed that the mean score is 2.22 which is lower than the benchmark is a disagreement, Do you use Internet Digital Subscriber line (DSL) and observed that the is 1.87, which is lower than the benchmark is a disagreement, Does your usage of internet services determine your speed options and observed that the mean score is 2.12 which is lower than the benchmark is a disagreement.

The question regarding "Do you use cable broadband for your internet services" observed that the mean score is 1.76 which is lower than the benchmark is a disagreement, Do you use cable broadband for your internet services and observe that the mean score is 1.76 which is lower than the benchmark is a disagreement, Do you use fiber optic broadband for your internet services and observed that the mean is 2.01 which is lower than the benchmark is a disagreement, Do you use wireless or Wi-Fi broadband for your internet services and observed that the mean score is 2.05 which is lower than the benchmark is a disagreement.

Also, do you use satellite or mobile broadband for your internet services and observed the mean score is 1.96 which is lower than the benchmark is a disagreement, Do your internet provider often provide any special promotion and observed that the mean score is 2.30 which is lower than the benchmark is a disagreement, Do you pay any additional fee to the internet provider you use and observed that the mean score is 2.07 which is lower than the benchmark is a disagreement., Does your department have any free internet connection and observed that the mean score is 2.19 which is lower than the benchmark is a disagreement. This is below the acceptable mean of 2.50. which are below the acceptable mean of 2.50. Based on the question asked, the researcher observed that the nature of the internet series used is low.

3.3. Research Question 3: What is the problem faced by Students in Polytechnics in Kwara State when accessing Internet services?

From **Table 6**, the items are: How many times in a week do you encounter problems in accessing the internet, using 3.50 as the benchmark, any of the provided options which are equal or greater than the mean which is 3.92 which is an agreement, How many times in a week do you encounter problem concerning your data limit and observed that the mean is 4.14 which is an agreement, This is above the acceptable mean of 3.50. Based on the question asked, the researcher observed that the users encounter problems in accessing internet services.

Table 5. Nature of internet services to students.

S/N	ITEMS	D.N.A 4	R 3	O 2	A 1	TOTAL	x	DECISION
1	Is there a data limit when you are using the internet?	15 60	27 81	45 90	63 63	150	1.96	Rejected
2	How often do you experience speed when using the internet?	9 36	46 138	64 128	31 31	150	2.22	Rejected
3	Do you use the Internet Digital Subscriber line (DSL)?	7 28	34 102	42 84	67 67	150	1.87	Rejected
4	Does your usage of internet services determine your speed options?	17 68	33 99	52 104	48 48	150	2.12	Rejected
5	Do you use cable broadband for your internet services?	5 20	22 66	55 110	68 68	150	1.76	Rejected
6	Do you use fiber optic broadband for your internet services?	9 36	38 114	49 98	54 54	150	2.01	Rejected
7	Do you use wireless or Wi-Fi broadband for your internet services?	12 48	36 108	50 100	52 52	150	2.05	Rejected
8	Do you use satellite or mobile broadband for your internet services?	14 56	26 78	50 100	60 60	150	1.96	Rejected
9	Does your internet provider often provide any special promotions?	20 80	38 114	60 120	32 32	150	2.30	Rejected
10	Do you pay any additional fee to the internet provider you use?	6 24	41 123	61 122	42 42	150	2.07	Rejected
11	Does your department have any free internet connection?	21 84	36 108	44 88	49 49	150	2.19	Rejected

From **Table 7**, items are: How many hours do you have problem with the internet services in a day, using 4.0 as the benchmark, any of the provided options which are equal or greater than the mean 5.01 is an agreement, How many hours do you have problem with the internet connection in a day and observed that the mean is 5.16 which is greater than the benchmark is an agreement, This is above the acceptable mean of 4.0. Based on the question asked, the researcher observed that the users encounter problems in accessing internet services.

Table 6. The problem faced by students in polytechnics in Kwara State.

S/N	ITEMS	One 6	Two 5	Three 4	More Than Four 3	Everyday 2	Not At All 1	Total	X	Decision
D1	How many times in a week do you encounter problems in accessing the internet?	32 192	39 195	27 108	11 33	19 38	22 22	150	3.92	Accept
D4	How many times in a week do you encounter problems concerning your data limit?	25 150	55 275	32 128	7 21	16 32	15 15	150	4.14	Accept

Table 7. The problem faced by students in polytechnics in Kwara State.

S/N	ITEMS	One 7	Two 6	Three 5	Four 4	Five 3	More Than Six 2	Not At All 1	Total	X	Decision
D2	How many hours do you have a problem with the internet services in a day?	43 301	43 258	15 75	17 68	5 15	8 16	19 19	150	5.01	Accept
D3	How many hours do you have a problem with the internet connection in a day?	54 378	28 168	24 120	18 72	3 9	5 10	18 18	150	5.16	Accept

3.4. Research Hypothesis HO$_1$: There is no significant difference between male and female undergraduates' level of utilization of Internet services in Polytechnics in Kwara state.

As shown in **Table 8**, since the mean score of female teachers is 2.4479 which is greater than the mean score of the male teachers which is 2.1916, the researcher rejected the null hypothesis and claim that there is a significant difference between male and female undergraduates level of utilization of internet services in Polytechnics in Kwara State.

Table 8. The significant difference between male and female Students' level of utilization of Internet Services in Polytechnics in Kwara State.

Group Statistics					
Gender	N	Mean	Std. Deviation	Std. Error Mean	Decision
male	87	2.1916	.51155	.05484	Reject
female	64	2.4479	.46180	.05772	

4. DISCUSSIONS

Results from the data analysis state that, chat, entertainment, and social networking are the most disturbing activities associated with the utilization of Internet services. The study on male/female differences in web searching materials by focusing on the online reading environment shows that there is a significant difference between genders in which female readers have a strong preference for paper as a reading medium than male readers. On the other hand, male readers have a greater sense of satisfaction with online reading and this study has established the fact that there is a significant difference between male and female utilization of Internet services.

Similar to the findings of this study, students see a clear association between being able to access information through IT and their achievement in research assignments and projects. Attitudes of students towards the Internet raise their motivation and interest in internet-based learning environments. Additionally, the findings of this study regarding chatting are consistent with the findings of prior studies which indicates that young adult dependency on the use of the internet is a result of spending an excessive amount of time starting and maintaining online friendships in chat rooms, which replace real-life friends and family.

Few students showed the problem of sleeplessness at night and decline in academic performance due to internet usage. This study reported that 26.7% of young people with internet addiction have had sleep-related difficulties. Internet addiction is associated with sleep delays and irregular sleeping patterns. Also, pointed at the low academic performance due to internet addiction. In contrast, Bolu-Steve *et al.,* 2015 in their study on internet usage and academic performance at the University of Ilorin, Nigeria revealed that the use of the internet promotes students' academic performance.

Undergraduates are constantly influenced by the use of the internet positively and negatively according to this study. Most undergraduates study with the internet, which contributes to their academic performance. Bolu-Steve *et al.,* 2015 support this assertion of the use of the internet and its positive influence on academic performance. On the contrary, all found out that the addiction of undergraduates to the internet negatively influences their academic performance, daily activities relationship with people. This assertion is also justified by this study on internet addiction among undergraduates, showing that undergraduates are negatively influenced by internet addiction. Internet usage positively influenced their academic performance.

This study is in contrast to the findings of Bolu-Steve *et al.,* 2015 revealing that both male and female students did not differ in their perception of the influence of internet usage. Bolu-Steve *et al.,* 2015 showed that gender plays a significant role in the utilization of Internet

services just as the findings of this current study also indicated that there was a significant role in the utilization of Internet services of students based on gender.

4. CONCLUSION

On the findings of this research work, it can be concluded that social activities were seen as the most activities students carry out on the internet. That is, activities such as Downloading from the internet, chatting with friends, picture uploads, YouTube streaming, shopping, and internet games were the activities undergraduates involve in most, with the Internet which affects their academic performance. The access is similar for both genders probably because both genders have high exposure to the technology through their educational experience. However, utilization of Internet services by Polytechnic student in Kwara State differ by gender because there is a significant difference between male and female in the utilization of Internet services among students in the institution in favor of male students.

Based on the findings, the following recommendations were drawn:
(i) Students should be encouraged in their usage of Internet services to boost their academic performance in school and for social networking purposes.
(ii) Students should be encouraged to use the Internet for activities that will improve them academically and spend lesser time on the internet for socializing only.
(iii) The students should be informed about the problems associated with the wrong usage of Internet services and the negative effect it could have on their academic performances in school
(iv) Female students should be encouraged to use Internet services majorly for educational purposes to boost their academic performance like their male counterparts.

5. AUTHORS' NOTE

The authors declare that there is no conflict of interest regarding the publication of this article. Authors confirmed that the paper was free of plagiarism.

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