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Gender Inequality in the Usage of ICT Facilities in Academic Libraries: A Case Study of Presbyterian University College Library (PUCL), Ghana

♣***Frank Afoakwa Boateng***: *Presbyterian University College, Ghana (PUCG), Asante Akyem Campus, Ghana.*

Samuel Ameyaw: *Valley View University (VVU), Oyibi - Accra, Ghana.*

ABSTRACT: *The purpose of the study was to find out gender inequality in the use of ICT facilities in the library among male and female students in the Presbyterian University College of Ghana-Asante Akyem Campus-Ghana. It was a case study which adopted the survey approach with questionnaires as the data collection instrument to solicit the opinions of both genders. The findings disclosed that ICT facilities are available in the library and a significant number of both genders have access to the facilities. However, there were slight variations in the use of the facilities in some domain.Poor internet services, as well as inadequate power supply, were identified as significant challenges that impeded the use of ICT facilities in the library; therefore, it is recommended that measures should be put in place to avoid persistent power failure in the library. Lastly, management of the university should acquire bigger broadband to improve the internet service in the library.*

Key words: *Asante Akyem, Gender, Ghana, ICT facilities, Inequality, Presbyterian, Students, University College.*

1. Introduction

Education has always been trumpeted as an instrument that prepares both male and female students to face the challenges ahead of them in all spheres of life including their environment. The issue of gender inequality is not limited to labour market discrimination when male and female with the same qualification, experience, and training apply for a position, but as a result of gender discrimination, the male is selected during recruitment.

Similarly, the story is not restricted to only labour market but has spread throughout all the educational institutions where male and female students consider themselves that some programmes are meant for only males and these courses are the no-go area for female students.

The emergence and introduction of the use of ICT facilities in educational institutions globally did not escape from this perception in various academic institutions which Presbyterian University College; Ghana (PUCG) is no exception. The academic institutions have consistently been dedicated to making teaching, learning, and research easier for lecturers and students through the use of ICT facilities. Currently, no academic institution can survive without the application of ICT facilities in their learning and teaching activities. The adoption of ICT facilities in educational institutions has brought dynamic changes in all sectors of education since ICT has become a potential tool for teaching and learning. Ono and Zavodny (2007) defined information and communication technologies (ICTs) as a digital technology used for communication or information gathering, for instance, mobile phones and computers. Wilson, Ayebi-Arthur, and Tenkorang (2011) were of the view that

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information and communication technology (ICT) comprises computer hardware and digital/analogue devices and software applications.

Edumadze and Owusu (2013) added that the adoption of Information and Communication Technology (ICT) into the institution of higher learning had enhanced teaching and learning processes as well as students' performance.

Dukić, Dukić, and Kozina (2012) hinted that the constant application of ICT in universities had transformed all academic activities as well as a society into a knowledge economy.

Sosin, Blecha, Agawal, Bartlett, and Daniel (2004)"observed that there has been a large-scale development, and use of technology in every area of human activities, including the educational field and this has led to a dramatic change in the methods of instruction for education at all levels, especially the higher education level".

1.1. Statement of the Problem

The fight for gender equality has gained prominent attention for the past two decades be it social, political, cultural and educational sector. The role and benefits of ICT adoption in academic institutions cannot be over- emphasized. Regrettably, management of Presbyterian University College, Ghana (PUCG) has invested heavily in the purchase of ICT facilities to enhance learning and research in the library, from the preliminary observation by the researchers, it appears that there is disparity between male and female students' concerning the use of these facilities in the library; others also expressed their dissatisfaction about the facilities. This observation confirmed the studies of Adetimirin (2012), Reffell and Whitworth (2002) which reported that the use of ICT facilities in most of the university library in developing nations is far below expectation. Again, there has not been any similar study on gender inequality concerning the use of ICT facilities by students, particularly at the Presbyterian University College, Ghana. However, few studies were carried out elsewhere by Goswami and Dutta (2016), Efuwape and Aremu (2013), Kay (2006), Mahmood (2009) , and in Ghana by Owusu-Ansah (2013), Amenyedzi, Lartey, and Dzomeku (2011). It is against this background that the current study was carried to investigate gender inequality in the use of ICT facilities in the library and fill in the gap created.

1.2. Objectives of the Study

The research seeks to:

i. Determine the type of ICT facilities available in the library.
ii. Find out which gender access ICT facilities in the library.
iii. Ascertain gender levels of skills in the use of ICT facilities in the library.
iv. Determine which gender uses ICT facilities frequently in the library.
v. Find out the challenges associated with the use of ICT facilities in the library.

2. Literature Review

2.1. Type of ICT Facilities Available in the Library

The availability of ICT facilities in the academic environment is one of the motivational forces that attract students to use the facilities for learning and research purposes; it also goes a long way to enhance students' performance. In view of this, it is therefore imperative for every academic institution to provide and make ICT facilities available to all students without discrimination.

In support of making ICT facilities available in academic institutions, the study of Kinengyere (2006) reported that the "available resources were not utilized by both male and female users of the library because they were not aware of the resources." Aryatuha (2007) pointed out that the availability of computer hardware and software should go together with the training facilities of the learners as well as continuous technical support. A similar study by Ojeniyi and Adetimirin (2013) on gender influence in ICT use by undergraduates in two University Libraries in Nigeria, enumerated ICT facilities that were available for students as computers system, printers, and photocopiers. The rest are scanners, CD-ROM, internet facilities and online resources. In some cases, the readiness to use the facilities is there, but the difficulty in getting access hinders usage; therefore, it is crucial for managers and university authority to consider accessibility rather than availability. The findings of Khan, Bhatti,

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and Khan (2011) on ICT use by students of faculty of education at IUB asserted that ICT facilities were available to students in the main library and departmental computer laboratory as well as the university hostel(s).

In a similar study conducted by Adeniji, Adeniji, and Oguniyi (2011), Etebu (2010), Abubakar (2010) disclosed that computers, CD-ROMS, internet, printers were available in the university libraries for use.

A study on internet availability to postgraduate students at the University of Nigeria, Nsuka concluded that 100% of the students use the internet for their studies (Audu, 2006). Emojorho and Nwalo (2009) confirmed in their studies that ICT facilities are available in the Nigerian universities' libraries and indicated that the facilities are utilized properly for the intended purpose. The study of Ikolo and Okiyi (2012) established that "females use the internet more than males in their study on gender differences in computer literacy among medical students in selected southern Nigerian Universities."

2.2. Students Access to ICT Facilities

Students' access to ICT facilities plays a central role in their learning since the necessary resources may be available alright; getting access to such essential facilities to support academic activities sometimes take a different direction which does not support access. Easy access to ICT facilities in the academic library influence both genders to become knowledgeable in searching for relevant information.

It is, therefore, crucial for academic institutions to make sure that their ICT facilities are available and accessible to their users without any restrictions or frustrations to their usage.

Mattheos, Nattestad, Schittek, and Attström (2002) findings reported that out of 590 students of 16 European dental schools from 9 countries revealed that 60% of students use computers for their education, while 72% have access to the internet.Uribe and Mariño (2006) conducted a similar study with162 student at the School of Dentistry, University of Valparaiso, Chile on the use of ICT. Their results highlighted that all the respondents had access to a computer, while 96.4% used the internet. According to the study, the majority of the students' access the internet from home while 73.4% used internet weekly, 92.2% used it for email, followed by 88.3% who used it for search engines. It was reported from the study that 21.1% used the internet to search for dental information for their studies. The findings of Khan et al. (2011) on the use of ICT by students hinted that out of 164 respondents, 80 (48.8%) indicated that, they access ICT at their departmental computer laboratory while 52 (31.7%) respondents said they access the internet at their classroom, 15(9.1%) respondents access it from the library, 5 respondents (3.0%) said they access it at their university hostel, 6 (3.7%) respondents also indicated that they access it from the café while 4 (2.4%) of the respondents access it at their friends' homes.

In a similar study by Anunobi (2006) on internet use at the Federal University of Technology, Owerri reported that 87.41% of the students use the internet while 4.67% expressed that, they do not use the internet. According to Fatoki (2004) study on the impact of library resources and the internet among undergraduate students in Ibadan reported that 72% of the students access the internet from the university library's internet services, followed by 35% who access it from the cybercafé, and 5% stated neither. The study of Egbo, Okoyeuzu, Ifeanacho, and Onwumere (2011) revealed that "female students tended to accept the use of ICT more than their male counterparts." In a related study by Tella and Mutula (2008), on gender difference in computer literacy disclosed that "students with higher computer background were mostly males and were more inclined to access and make good use of library resources than their female counterpart."

2.3. Gender Levels of Skills in the use of ICT Facilities

The acquisition of basic computer skills is significant in this era of the technological age where the flow of information is uncontrollable due to the advancement of technology.

The level of ICT skills is no more optional rather, compulsory for every student to be able to apply these skills in their search for relevant information that would enhance their performance. Otokunefor (2005) "explained computer literacy as the level of computer knowledge of an individual and the degree to which such knowledge can be used in problem-solving." The majority of researchers reported that,

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males owned, use computers and the internet more than females, they also spend a lot of time online, do more technology courses, and exhibit more motivation to study digital skill than the females (Cooper, 2006; Correa, 2010; Fallows, 2005; Livingstone & Helsper, 2007; Losh, 2004; Pinkard, 2005; Wilson, Wallin, & Reiser, 2003). According to the study of Van Deursen and Van Dijk (2015) indicated that men recorded higher than women in all the skill domains such as saving files, downloading programs and searching for information. Interestingly, Ritzhaupt, Liu, Dawson, and Barron (2013) reported that female students perform better than their male counterparts in all technology literacy domains such as creating new files, locating and opening files, selecting the best device to complete a given assignment.

The rest are selecting the correct printer, setting page margins within a word processing document, editing images, communication and collaboration as well as practical keyboard skills, using e-mail, creating new slides within presentation software, using print preview, deleting data in a spreadsheet, creating concept maps, maintaining password security and identifying security risks. On the contrary, the study of Blankson (2015) reported that "there was no significant difference between male and female students competence in ICT usage, male students demonstrated more competence in the use of ICT than their female counterparts." In a related study by Lau and Yuen (2014) established that female student's perceived internet literacy such as; searching information, using instant messaging, downloading files as well as setting headers in word processing software, plotting a graph with a spreadsheet, editing a photo with image processing software than their male counterparts. The study of Hew and Leong (2011) on gender difference among pre-university students in Malaysia reported that, there were no significant gender disparities in eight out of nine ICT competencies; however, the male students were slightly ahead in mean score in all the ICT competencies except for word processing competency where female students had a higher mean score. The study stressed further that, females were perceived as better typists and tended to use more word processing applications than their male counterparts. In a related study by Hakkarainen et al. (2000) reported that the ICT skills of male students were found to be higher than their female counterparts. Jorge, Jorge, Gutiérrez, García, and Díaz (2003) also revealed that there was “no significant differences between male and female students' in the use of technologies such as mobile telephones or computers usage.” The study of Zin et al. (2000) at Kebangsaan University, Malaysia disclosed that there was a significant disparity in computer literacy level between male and female students. It was revealed that male students had greater computer experience and used the computer more frequently than female students. According to Sajjad and Sumayyah (2009) study in Kuwait, indicated that 11th-grade female governorate high students lacked the skills to formulate search strategies and therefore; do not make good use of the school library. Bassi and Camble (2011) reported that male university students in Adamawa State in Nigeria acquired search skills through library instruction and orientation.

2.4. Frequency of ICT Facilities use by Gender

The adage “practice makes a man perfect" implies to every human activity under the sun, to become perfect in any new system, there should be a constant practice for new ideas. The habit of constant practice would not only advance one's ideas but would rather improve one's skills towards the use of the new system and also expose the early challenges of the system.

Fallows (2005), Hargittai and Walejko (2008) reported in their study that male students use the internet frequently than their females counterparts for various purposes such as searching for a job, electronic-posting, and uploading of material. Moe (2004) added that male students use library computers more frequently than female students. According to the findings of the study, 54% of males use computers more than once a week as against 43% of female students. Steinerová and Šušol (2007) expressed that female’s use the internet slightly less than their male counterparts; they also exhibit a greater proportion of rare use and non-use of electronic resources and a lower proportion of frequent use. Interestingly, a study by Ofcom (2008) revealed that females use technology more often than males for social networking and creative purposes such as setting up their website or creating an online photo album.

Amkpa (2007) echoed that male and female student vary significantly in their attitudes towards computer applications which eventually have a negative effect on their job opportunities after completion of school.

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Looker and Thiessen (2003) asserted that male students use computers more frequently than their female counterparts. According to the study male students were also more knowledgeable in using various computer applications than their female counterparts. Valentine, Marsh, and Pattie (2005) disclosed that male students have greater access to hardware and spend more time using computers outside the school for leisure purposes, while females are significantly more likely to use computers for academic activities than their male counterparts. Jones, Johnson-Yale, Millermaier, and Pérez (2009)) reiterated in their studies that males spent more time online searching for information and were more likely to go online overnight than females. Nwezeh (2010) and Rodríguez (2006) on undergraduates' frequency of ICT use indicated that students use computers daily. In a similar study by Fabunmi (2012) on undergraduates' perception of the effectiveness of ICT use in Ekiti State University, Nigeria confirmed that 70(35%) of the respondents used the computer once a week, 140(70%) used CD-ROM occasionally. Sahin, Balta, and Ercan (2010) conducted a study on the use of internet resources by university students. According to the study, university students use email and forum chat-line frequently in their daily activities. Surprisingly, the study revealed that students do not use internet resources for their studies. Akande and Bamise (2017) added that male students use the internet frequently than their female counterparts. Similarly, Ellore, Niranjan, and Brown (2014) confirmed in their study that male students spend adequate time on the internet as compared to their female colleagues. Ibegwam (2004) took a study on the use of the internet by students of the College of Medicine, University of Lagos, Nigeria. The findings revealed that all the 200 respondents who took part in the study, used the internet facilities, according to the study, most of the students used the internet to look for academic information and also visit other university websites.

2.5. Challenges Associated with the use of ICT Facilities

There is no complete set of a system without challenges surrounding its usage. The only antidote to such difficulties is one's readiness/preparedness, attitude and perception towards the system.

In an attempt to use a new system, people should be ready to accept challenges that will confront them in their course of using or learning how to use the ICT facilities in their studies.

Enochsson (2005) hinted that the socio-cultural background plays a key role leading to computer anxiety and feelings of low esteem among females in the use of technology. In a related study by Martey (2004) highlighted that the acceptance of ICT by libraries from 1996-2004, witnessed the slow application of ICT.

The findings of the study accredited to a slow pace in the acceptance of ICT to the high cost of ICT infrastructure as well as lack of technical know-how. Tella and Mutula (2008) added that one of the causes of low use of technology by females is lack of relevant competencies which affects them more than males.

Ford, Miller, and Moss (2001) reiterated that females find it tough to use technology when it comes to searching for information online than males. Salako and Tiamiyu (2007), Corbett and Williams (2002)s did a study on undergraduates students in developing and developed countries and enumerated some factors that hinder ICT usage as; gender, age, accessibility, academic discipline and lack of ICT skills. Luambano and Nawe (2004) also carried out a similar study on internet use by students of the University of Dar es Salaam. According to the survey, the majority of the students did not use the internet because of insufficient computers, lack of skills in internet use and slow speed of computers. In a related study by Amenyedzi et al. (2011) on the use of computers and internet as a supplementary source of educational material in three Senior High Schools in Ghana also enumerated similar challenges as; insufficient computers in the computer laboratories as well as poor internet services. The study of Hennessy, Harrison, and Wamakote (2010) also revealed that the majority of the students in the developing nations lack sufficient searching skills when using ICT facilities for their learning purpose. Nwokedi (2007) supports the views of other authors that lack of adequate skills in searching for information is still hindering the use of ICT / internet facilities in some academic institutions. Salaam and Adegbore (2010) affirmed that one of the key problems facing the use of internet facilities is the unstable power supply in the university environment in some African countries.

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Okiki and Asiru (2011) expressed that "slow internet connectivity and incessant power outage are some of the challenges that affect the use of electronic resources." In a related study by Ojokoh and Asaolu (2005) also hinted that poor internet services, as well as an inconsistent power supply in Nigeria, are the major challenges confronting the use of electronic resources.

3. Methodology

The study adopted the survey design approach with the use of the questionnaire as the instrument to gather data from the respondents. The population for the study comprised of all male and female students in the University. The total population of the students at the time of conducting this study was one thousand four hundred and thirty-eight (1,438). The simple random sampling technique was used to sample two hundred and eighty-eight

(288) from the population. Nwana (1981) recommended that "if the population is a few hundred, a 40% or more sample will suffice, if many hundreds, a 20% sample will do, if a few thousands, a 10% sample will do; and if several thousand, a 5% or less sample will be representative of the population". Based on the Nwana's recommendations, 20% of the population was considered an appropriate sample size, thus, (288) was selected. Two hundred and eighty-eight (288) questionnaires were administered to the participants and out of this number; two hundred and sixty-seven (267) were filled correctly, hence, representing 92.71% response rates. The statistical package for social sciences (SPSS 17.0) was employed to analyze the data.

4. Analysis of Data and Discussions

According to Thanuskodi (2012), the analysis of data is the final point in the research process, and it is the link between raw data and significant results leading to conclusions. Data was collected through the use of a structured questionnaire. The Statistical Package for Social Sciences (SPSS, 17.0) was used to analyse the quantitative data.

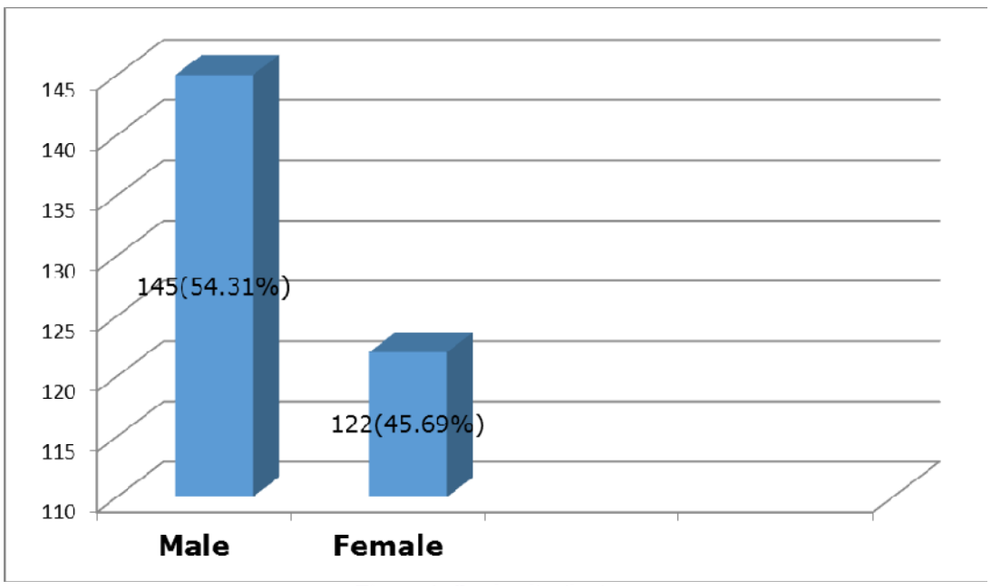


Figure-1. Gender distribution.

Sources: Field Data, 2018.

From Figure 1, it was reported that out of 267 respondents who participated in the study 122(45.69%) were female whereas 145(54.31%) were male.

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4.1. ICT Facilities Available in the Library

The availability of ICT facilities in the academic libraries promotes constant usage by both genders irrespective of their educational levels and skills. The researchers sought to find out the availability and use of ICT facilities by both genders; the responses are displayed in Table 4.1 below.

Table-4.1. ICT Facilities Available in the Library.

ICT facilities Available in the University							
Option		**Available Frequency**	**(%)**	**Unavailable Frequency**	**(%)**	**Undecided Frequency**	(%)
Computers	Male	128	(88.27%)	6	(4.14%)	11	(7.59%)
	Female	98	(80.3%)	16	(13.1%)	8	(6.6%)
Internet	Male	129	(89%)	7	(4.8%)	9	(6.2%)
	Female	109	(89.3%)	9	(7.4%)	4	(3.3%)
Scanners	Male	39	(26.9%)	80	(55.2%)	26	(17.9%)
	Female	31	(25.4%)	72	(59%)	19	(15.6%)
Photocopiers	Male	120	(82.76%)	11	(7.59%)	14	(9.65%)
	Female	99	(81.15%)	13	(10.66%)	10	(8.19%)
Printers	Male	110	(75.9%)	24	(16.5%)	11	(7.6%)
	Female	91	(74.6%)	12	(9.8%)	19	(15.6%)

Source: Field Data, 2018.

The results from Table 4.1 reported that out of 145 male respondents, 128 (88.27%) indicated that there are computers available for use, while 6 (4.14%) of the respondents indicated unavailable to the statement and 11(7.5%) remain undecided. Similarly, on the part of the female respondents, 98 (80.3%) of the respondents hinted that there are computers available to the statement, followed by 6 (13.1%) who said unavailable to the assertion and 11 (6.6%) remain undecided. Again, to ascertain whether internet facilities are available in the library, 129 (89%) of the male respondents said internet facilities are available in the library, while 7 (4.8%) indicated unavailable. In the same way, female respondents 109 (89.3%) said internet facilities are available in the library, followed by 9 (7.4%) who indicated unavailable to the statement. The findings of internet availability and use gave an interesting revelation that female respondents were slightly ahead of their male counterparts. To find out whether photocopiers are available for students, 120 (82.76%) of the male respondents said photocopiers are available for use, only 11(7.59%) said unavailable. Equally, 99 (81.15%) of the female respondents also indicated that photocopiers are available for use, on the contrary, 13 (10.66%) reported on unavailable to the question. It is seen from the findings that regarding photocopiers availability, male respondents were ahead of their female counterparts.

4.2. Gender Access to ICT Facilities

The provision of access to ICT facilities in the library is very paramount since availability does not mean accessibility. The learning facilities may be available for students, but then, getting access to these facilities takes too much time, and in some cases, students abandoned its patronage due to difficulties and frustrations. The below table sought the views of the respondents whether they have access to the ICT facilities in the university.

Table-4.2. Gender Access to ICT Facilities.

Responses	**Male**		**Female**	
	Frequency	Percentage (%)	Frequency	Percentage(%)
Yes	131	(90.34%)	112	(91.80%)
No	14	(9.66%)	10	(8.19 %)
Total	**145**	**100**	**122**	**100**

Source: Field Data, 2018.

The findings from Table 4.2 indicated that out of 145, 131 (90.34%) of the male respondents reported that they have access to ICT facilities in the library, while 14 (9.66%) indicated “No” to the

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statement. On the part of the female, out of 122 respondents, 112 (91.80%) said that ICT facilities are accessible. It can be concluded from the findings that the majority of the female students were slightly ahead of their male counterparts concerning the accessibility of ICT facilities.

This can be ascribed to their positive attitude and perception towards ICT facilities in the library.

4.3. Gender Levels of Skills in the Use of ICT Facilities

ICT skills include the competence to use the facilities and control all the devices to obtain the desired results. Otokunefor. (2005) "explained computer literacy as the level of computer knowledge of an individual and the degree to which such knowledge can be used in problem-solving."

Table-3. Gender Levels of Skills in the Use of ICT Facilities.

Skills in the Use of ICT	Male		Female	
	Frequency	Percentage (%)	Frequency	Percentage (%)
Using Computer to type	21	(14.48%)	27	(22.13%)
Scanning of documents	11	(7.59%)	10	(8.20%)
Uploading /Downloading of files	103	(71.03%)	77	(63.11%)
Navigating on the internet	10	(6.90%)	8	(6.56%)
Total	**145**	**100**	**122**	**100**

Source: Field Data, 2018.

Table 4.3 sought to find out gender levels of skills in the use of ICT facilities. It was revealed that out of 145 males, 101 (69.66%) of the respondents used ICT facilities to upload/download files, while 21 (14.48%) used the computers to type their assignments. On the side of the female, out of 122, 77 (63.11%) of the female respondents used ICT facilities to upload/download files while 27 (22.13%) used the computers to type their assignments. Strangely, when it comes to uploading/downloading of files, male respondents were ahead of their female counterparts, while the majority of the female students were ahead of their male counterparts when it comes to using computers to type an assignment.

4.4. Frequency use of ICT Facilities by Gender

The study examined the frequency of use of ICT facilities by respondents to find out how often they use the facilities. This statement represents one of the main objectives the study sought to find answers to.

Table-4.4. Frequency use of ICT Facilities by Gender.

Frequency of Usage	Male		Female	
	Frequency	Percentage (%)	Frequency	Percentage (%)
Daily	107	(73.79%)	67	(54.92%)
Once a week	11	(7.59%)	14	(11.48%)
Two weeks	15	(10.34%)	33	(27.04%)
Once a month	12	(8.28%)	8	(6.56%)
Total	145	100	122	100

Source: Field Data, 2018.

From Table 4.4, the results revealed that the majority of the respondents, that is, 107(73.79%) and 67(54.92%) of male and female respondents respectively, indicated that they use ICT facilities daily, while 11(7.59%) of the male respondents use the facilities once in a week, followed by 14 (11.48%) female respondents who said they use the facilities once in a week. On the other hand, 15(10.34%) and 33(27.04%) of male and female reported using ICT for two weeks. The findings stressed further that 12 (8.28%) and 8 (6.56%) of the male and female respondents use them once in a month respectively. From the findings, it implies that male students use the facilities daily than their female counterparts.

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4.5. Challenges Associated with the Use of ICT Facilities by Gender

The issue of challenges faced by both genders in an institution of higher learning when using ICT facilities is a critical factor that needs to be looked at. The researchers sought to find out the challenges associated with the use of ICT facilities by both genders; the responses are displayed in Table 4.5 below.

Table-4.5. Challenges Associated with the Use of ICT Facilities by Gender.

ICT Challenges	Male		Female	
	Frequency	Percentage (%)	Frequency	Percentage (%)
Lack of ICT staff	4	(2.76%)	2	(1.64%)
Inadequate computers	11	(7.59%)	13	(10.66%)
Poor power supply	49	(33.79%)	48	(39.34%)
Slow internet speed	81	(55.86%)	59	(48.36%)
Total	14	100	122	100

Source: Field Data, 2018.

The results presented in Table 4.5 above revealed that 81 (55.86%) and 59 (48.36%) for male and female respondents respectively admitted that slow internet speed was a key challenge.

The next main concern of both genders was the inadequate power supply with male 49 (33.79%) and female 48(39.34%) respectively. From the results, both male and female respondents admitted that slow internet speed was their biggest challenge.

5. Discussion, Conclusion, and Recommendations

The gender difference has become one of the critical subjects of late. Majority of the public and private institutions, as well as individuals, have been advocating for gender equality in educational institutions. This present study examined gender inequality in the use of ICT facilities at the Presbyterian University College- Asante Akyem Campus, Ghana.

5.1. Availability and use of ICT Facilities by Both Genders

The findings of the study revealed that a significant number of both genders admitted that there are computers, internet, scanners, photocopiers and printers in the university library. This result of the present study is not in contrast with Khan et al. (2011) whose study affirmed that ICT facilities were available to students in their main library. The finding is also in line with Adeniji et al. (2011), Etebu (2010), Abubakar (2010) whose studies established that computers, CD-ROMS, internet, and printers were available in the libraries.

The findings of the availability and use of ICT facilities by both genders revealed that female respondents were a little ahead of their male counterparts regarding internet use. The results of this study confirmed that of Ikolo and Okiyi (2012) which reported that "females' students use the internet more than males in their study on gender differences in computer literacy among medical students in selected southern Nigerian Universities."

5.2. Gender Access to ICT Facilities in the Library

Accessibility and availability are twins that always join hands together. This implies that when the facilities are available, students can access them for all their academic needs.

The findings revealed that the majority of female respondents have access to ICT facilities which is slightly ahead of their male counterparts. This is also in line with the study of Egbo et al. (2011) that "female students tended to accept the use of ICT facilities more than their male counterparts."

5.3. Gender Levels of Skills in the Use of ICT Facilities

Another interesting result from this study is gender levels of skills in the use of ICT facilities in the university. Surprisingly, it was established that when it comes to uploading/downloading of files, male students were ahead of their female counterparts, while the majority of the female students were ahead of their male counterparts, regarding using computers to type assignments. This finding did not

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affirm the study of Jorge et al. (2003) which reported that there were no significant differences between male and female students' in the use of technologies.

5.4. Frequency use of ICT Facilities by Gender

The findings on the frequent use of ICT facilities revealed that male respondents use the ICT facilities daily than their female counterparts. This can be ascribed to their readiness, willingness, and skills to use the ICT facilities. This finding is in line with the study of Looker and Thiessen (2003) on gender differences and computer usage in Canada which reported that male students use computer facilities more frequently than female counterparts.

5.5. Challenges Associated with the Use of ICT Facilities

The findings on challenges associated with the use of ICT facilities in the university did not give any divergent view by both genders. Both male and female respondents respectively admitted that slow internet speed was a key challenge. The next main concern of both genders was the poor power supply. This finding supported the study of Okiki and Asiru (2011), Ojokoh and Asaolu (2005) whose study reported on slow internet connectivity and persistent power outage as some of the challenges confronting students of the Federal University of Technology, Akure, all in Nigeria**.**

6. Conclusion

The findings of the study established that both genders admitted that there are ICT facilities available in the university library, and overwhelming numbers of students have access to the facilities in the library.

The study also found out that male and female respondents have basic skills in computing and this helps them to use the ICT facilities in the library to upload /download files as well as typing. It was also reported that the gap between male and female respondents on ICT facilities use is not significant since both genders perform differently concerning each one of the questions. The findings of the study discovered that the major challenge impeding the use of ICT facilities in the library by both male and female is the slow speed of the internet and inconsistent power supply.

7. Recommendations

Based on the findings of the study, the following recommendations were made to the university authority:

The university authorities should have a compulsory ICT course in their curricula for all students; this will help students to acquire basic and practical skills required of them in this era of information and communication technology. There should be a regular capacity building process such as seminars and workshops for students in the university irrespective of their level and skills in ICT use.

The university authority should purchase new broadband that has a higher capacity to increase the speed of the internet in the university library, thereby saving the time of students who use the ICT facilities.

The use of ICT facilities cannot be accomplished without the appropriate and reliable power supply in the university environment, it is, therefore, recommended that the university authority should improve upon power supply in the university campus to ensure that there is an uninterrupted flow of power in the library. To maximize the use of ICT facilities in the library, library management should provide adequate ICT infrastructure as well as a standby generator for the university library.

Lastly, both genders should be given an equal opportunity to attend ICT workshops, seminars, orientations as well as any other training that would be organized by the university management.

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